Kinesthetic Approach to Word Study

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Kinesthetic Approach to Word Study

By
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A thesis submitted to the Department of Education and Human Development of the State University of New York at Brockport in partial fulfillment for the degree of Master in Science in Education
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Chapter One: Introduction

Statement of the Problem

A beautiful silence takes over room 108 each morning. Small groups of second grade students are engaged in a plethora of literacy based activities that incorporate all aspects of a comprehensive based literacy approach. When sitting with several of my students in writing conferences, I took notice of the many previously learned words that my students were spelling incorrectly. My exchange with the students was always the same.

“Jason, we’ve learned about this word feature before. Please listen to me say the word ‘shape’.

Now what beginning digraphs do you hear?

“That’s that –sh digraph, Miss Lewis!”

“You’ve got it. Now what vowel sound do you hear next?”

“Yes an A, okay and what letter at the end of the word would make the vowel say ‘A’, yes an ‘E’.

After several of these similar exchanges with my students, I became frustrated that my students were not able to complete this process independently. They know the word feature rules, we’ve studied them, worked with them for weeks at a time, and they’ve mastered assessments. So why then are they not able to transfer the correct spelling into their own independent writing?

I know my students take note of word features, as they love to make mention of a focus skill at any point they see it. They always say something to the effect of, “Look, Miss Lewis! That sign has two different long vowel O words in it”. They are wonderful at noticing the patterns in words that are provided for them, or if coached through the word. Why is it that they
revert back to invented spelling at any time they are asked to complete an independent writing for an extended period of time?

Twenty second grade students, two different *Words Their Way* (Bear, Invernizzi, Templeton & Johnson 2008) word study groups, and many different instructional approaches complete our weekly spelling instruction program. The two word study groups encompass Letter-Name and Within Word stages. The Letter-Name stage students are considered to be in the beginning corresponding stage of reading and writing, meaning that reading and writing are still quite labor-intensive processes that require much effort. The Within Word pattern spellers are in the transitional stage of reading and writing, where advances in both reading and writing have allowed for a more fluent process. Students in this stage have a heightened awareness of how words work. The students show success on Developmental Spelling Assessments (DSA) (Ganske, 2000) and therefore I struggle to understand why the students struggle to spell correctly when the context changes from the single word assessment to their own independent writing. The students prove they have the ability to correctly spell given words when in isolation, however, when put into the context of narrative form they frequently do not use pattern knowledge. More interestingly, when prompted to return to the writing to revise for these frequent spelling errors, the students are unable to independently identify their own errors.

I witness pencil in hands of twenty motivated second grade students, eager and excited to write, ready to embark on a personal narrative. However, these second grade students, full of word feature knowledge will not transfer this knowledge into the context of their independent work. Although engaging in a variety of research based instructional methods, the students are not forming generalizations about specific spelling patterns while applying them to their independent work, as mentioned in the work of Bear, Invernizzi, Templeton and Johnson (2008).
Therefore, I can conclude that a different spelling instructional approach should be implemented, as I want my students to not only learn and use correct spelling features but also generalize these features to help them understand the English language system.

**Significance of the Problem**

I believe that children should properly learn and use appropriate conventions of spelling, not only to grow as readers and writers in the classroom but also to live a meaningfully rich life. Proper spelling conventions not only assist in the successful completion of higher education, they also are an integral part of most careers. Furthermore, in today’s education system, with the push for developing college and career ready individuals, it is of no surprise that developing children’s orthographic knowledge would also be of great importance (Sharp, Sinatra, & Reynolds, 2008). Orthographic knowledge, or knowledge representing spoken language in written form, is of great significance in the overall scheme of developing students for college and career ready paths in life (Sharp, Sinatra, & Reynolds, 2008). The strong development of orthographic understanding is gained in primary classrooms through appropriate and relevant instructional techniques with beginning writers. This development should occur within a comprehensive and balanced literacy approach, strongly integrated and interrelated into both reading and writing activities. Because young children’s early writing development is strongly related to their later literacy success, it is vital that educators identify and utilize the best proven instructional approaches and techniques that are effective with beginning writers (Williams & Lundstrom, 2007).

**Purpose of the Study**

The main purpose of this study, then, was to engage a class of twenty second grade students (while taking particular note of six individual students) in a new instructional approach, the Making Words program (Cunningham & Hall, 2009) to teaching and learning of weekly
spelling words, monitor their independent transfer of word knowledge into their individual writing samples, and observe any changes. As exemplified in my own work as well as in the work of other researchers (Sharp, Sinatra, & Reynolds, 2008), developing primary students require the assistance of explicit and direct instructional techniques in order to ensure proper and useful gains in the area of spelling development. Recently, the approach to word study and phonics programs for instructional purposes has been one of the most exciting areas of study in the world of education. Word study, in theory, allows students the opportunity to investigate and self-explore spelling patterns following the guidance and explicit teaching of word patterns (McMurray, 2006). Those who support a word study approach discuss the fact that this approach builds overall word knowledge that can be transferred and applied to both reading and writing (McMurray, 2006).

The English language uses a letter system, in which the relationships between letters and sounds are sometimes arbitrary. There is a lack of one to one matching between phonics relationships and spelling patterns. Arndt and Foorman (2010) point out that spelling is a linguistic skill, as is the visual representation of spoken language, and relies on one’s knowledge of the phonological, morphological, and orthographic structure of the English language (as cited in Perfetti, 1997). Therefore, this makes the teaching and learning of spelling patterns quite difficult. To overcome or assist in this difficulty, there are positive benefits from a more hands-on and kinesthetic approach to the teaching of phonological and orthographic skills. A new and upcoming instructional method for primary word study lessons has integrated the use of kinesthetic, hands-on methods. There have been several proponents of a kinesthetic approach to word study programs in primary classrooms as a means to increasing student achievement in the acquisition of orthographic knowledge (Dilorenzo, Rody, Bucholzand, & Brady, 2011; Larson,
In addition, current research has shown the positive effects in student achievement from incorporating hands-on kinesthetic activities for the instructional practices of teaching phonics (Dilorenzo, Rody, Bucholzand, & Brady, 2011).

In understanding how to appropriately plan and execute proper instructional techniques for primary word study lessons, one has to understand the process one undergoes when learning how to conventionally spell. Learning to spell words in the English alphabetic language requires young students to acquire knowledge of phonological properties as well as relate those to orthographic representations while being cognizant of the specific strategies being utilized (Hilte & Reitsma, 2011; Sharp et al., 2008; Williams & Lundstrom, 2007). There are three major factors to learning to spell in the English language: phonology, meaning, and orthographic information (Hilte & Reitsma, 2011). Due to this connection between processing systems, it is now understood that reading and spelling influence each other (Ness, 2010; Williams et al., 2007). Therefore, through finding appropriate and meaningful instructional methods for the teaching of spelling, there will also be increased academic gains in the area of reading. The interconnectedness between phonology, meaning, and orthographic information show the importance of proper instructional methods in a comprehensive literacy approach.

Therefore, through six weeks of research study, I sought to answer the following question:

*How might the Making Words program, a kinesthetic approach to spelling instruction, influence the transfer of word knowledge in independent writing tasks of second grade students?*
I designed this study to extend the bank of research on the effects of kinesthetic, hands-on approaches to the learning and development of spelling skills in primary students, through the use of the *Making Words* program. In addition, I feel very strongly that this research has benefited the literacy development of my past students, and also helped guide my instruction for future students. This research helped assist my developing skills in the field of educational research and it will serve as a stepping stone to future work in this same topic area.

**Study Approach**

This research followed an action research study design. Within the frame of the study, I served the role as teacher-researcher and have therefore designed the study to inform my own instructional methods, as a current practicing primary educator. I was interested in determining the impact a kinesthetic hands-on approach to teaching spelling would have on the transfer of students’ spelling knowledge in independent writing tasks, through the use of the *Making Words* instructional program. I planned to focus my research on the implementation of a new kinesthetic instructional approach, while I continued to give weekly spelling assessments, and looked closely at individual student writing samples for an improvement in independent spelling success. Independent spelling success in independent writing specifically addresses the concerns for students to rely less on invented spelling and more on spelling strategies previous taught.

The participants in this study came from a large, suburban school district in Western New York. The six participants involved in this research all came from the same second grade class within the school district. Together, they took part in making up the class of twenty students, 12 male and 8 female. The students were usually very social and enthusiastic toward learning. I had one student who had an IEP for speech/language disabilities and who was also going through her second consecutive year in second grade. This student received much of the same day-to-day
routines and instructional approaches as the rest of the class; however, worked one-on-one with a speech/language pathologist on a daily basis for thirty minutes at a time.

Their current spelling instruction, at the time, followed the *Words Their Way* program (Bear, Invernizzi, Templeton & Johnson 2008). There were a total of three different spelling groups, the first was the blue group who was the lowest achieving group and was working in the Letter Name stage. Within the Letter Name stage the students were, at the time, in the later portion of the stage. Here, the students relied heavily on alphabetic spelling, particularly the conventional spellings of short and long vowel phonemes. The following two groups were both working in the Within Word developmental stage. The purple group began the school year in the Within Word stage and therefore was far more advanced in it, while the green group had just advanced to this stage at the start of the 2013 year. Within this stage, the students generally have a strong understanding of initial and final consonants, including both blends and digraphs. This developmental stage of spellers do not yet consistently use conventional patterns such as consonant doubling and vowel in an unaccented syllable form. The three groups therefore had different word features that they worked with on a daily basis and also had different word lists.

The five participants in the study all came from varying spelling groups; this helped to see the impact the new instructional approach will have at various developmental levels.

I intended to have the students participate in the *Making Words* program as a kinesthetic hands-on instructional approach to the learning of various spelling features. Through the program, the students manipulated letter cards to form various words, based on teacher-directed prompts. The prompts were designed for each spelling group, regardless of developmental stage and therefore were all conducive to the specific spelling feature that they were working on for that week. For example, the blue group received prompts focused more on initial blends, while
the more advanced purple group received prompts that focused on a more advanced long vowel pattern. After participating in the kinesthetic approach, the students were prompted and reminded to think of their experiences with the program, when struggling on spelling words during their independent writing work time. The data reflected whether they were able to remember specific spelling features based on the new instructional strategy.

I gathered data on the impact of kinesthetic hands-on instructional approaches to spelling curriculum through comparing students’ independent spelling assessments and individual writing samples, and also took into account the information provided from student interviews. The initial data collection included past and current individual student assessment data and writing samples to show a disconnect between weekly study words and independent writing transfer. In addition, I conducted initial student interviews to retrieve student feelings toward what was their current instructional approach to spelling, as well as their feelings on how those approaches helped or hindered their ability to recall spelling features when writing on an independent basis. I used these same interview questions, following several weeks of research. I then compared the answers from the post-interview to the pre-interview to find how the new kinesthetic instructional approach impacted the independent transfer of word knowledge, as perceived by second grade students.

I copied and collected specific writing samples from each participating student, which I then analyzed and coded their work for signs of specific spelling word application. More specifically, I compared their initial writing samples to the samples following the implementation of the kinesthetic instructional approach to look for signs of improvement. I also observed the students independently writing once a week and recorded observations of their efforts and habits in the form of anecdotal notes.
Rationale

I chose this particular class for this topic area due to the overwhelmingly frequent occurrences of misspellings on words in independent writing that students spelled conventionally on previous assessments. My decision to incorporate a kinesthetic approach came directly from the body of current research (Dilorenzo, Rody, Bucholzand, & Brady, 2011; Larson, 2001; Rule, Dockstader, & Stewart, 2006) that suggested the positive effects of such instructional practices, through various hands on methods called word work. Furthermore, is the research stated that it was vital that educators identify and utilize the best instructional approaches and techniques that are effective with beginning writers (Williams & Lundstrom, 2007).

I engaged the students in a kinesthetic instructional approach called Making Words, within the integration of word work through small homogenous groups, as opposed to whole group instruction. A homogenous small-group approach to instruction is considered to be one of the most effective teaching methods of word study. Williams, Phillips-Birdsong, Hufnagel, Hungler, and Lundstrom (2009) have suggested for example, implementing word study in the context of an already establish guided reading group, or even separating word study lessons by spelling development levels. In addition, research conducted by Pinnell and Fountas (2009) also shows strong support in that they suggest utilizing hands-on activities within a variety of instructional grouping combinations, after participating in mini-lessons, as this allows for the application of previously taught skills. Finally, through using small homogenous groups in kinesthetic hands on instructional approaches, the students benefited from the spelling curriculum in multiple ways. It had positively influenced the participating students’ spelling development, independent transfer of knowledge to authentic writing situations, and finally increased overall enjoyment and engagement in learning.
Summary

Upon reflecting on my own many multi-grade level teaching experiences as well as daily encounters with my current primary class, my significant concern with their inconsistent independent ability to transfer previously learned spelling features finally inspired me to look at this situation more deeply. Although my students take part in daily spelling instruction and activities as well as authentic writing experiences, I took notice of the distinct disconnection between the two. Recently, there has been a dramatic increase in the number of educators both using and enjoying kinesthetic hands-on approaches to spelling instruction. The proponents of a kinesthetic approach, such as word study programs, in primary classrooms, state that the use of this instructional approach can be used as a means to increasing student achievement in the acquisition of orthographic knowledge (Dilorenzo, Rody, Bucholzand, & Brady, 2011; Larson, 2001; Rule, Dockstader, & Stewart, 2006). In keeping in mind the three major factors to learning to spell: phonology, meaning, and orthographic information (Hilte & Reitsma, 2011), it is vital to find positive instructional methods to help make the needed connections between the three factors. This is especially beneficial due to the known connection between processing systems. It is well understood that how a child spells a word also influences how they read that particular word (Ness, 2010; Williams et al., 2007). I strongly believe in the purposeful research of integrating kinesthetic hands on approach to spelling instruction. I believe this research is necessary in order to see the impact it has on primary students’ authentic writing abilities.
Chapter 2: Literature Review

The purpose of this chapter is to present a synthesis of multiple research articles related to word study and the impact on spelling development in a comprehensive literacy approach in the primary grade level, with a focus on the kinesthetic aspect. The following research will be reviewed and evaluated: the overall characteristics in developing orthographic knowledge, including the presence of invented and approximate spelling in developing word study knowledge; a comprehensive literacy instructional approach to the development of a successful word study program; and finally spelling instructional approaches, including engaging spelling activities, the effects of integrating a more hands-on, kinesthetic approach to the teaching of spelling development though word study, such as the Making Words program.

Development of Orthographic Knowledge

There is a large bank of existing research regarding the development of children’s orthographic knowledge. Martin, Claydon, Morton, Binns, & Pratt (2003) define orthographic knowledge as the understanding that the sounds in a language system are represented by written or printed symbols. Developing children’s orthographic knowledge is of great significance in the overall scheme of developing students for college and career ready paths in life (Sharp, Sinatra, & Reynolds, 2008). Frith (1985) recognized through research that knowledge of orthographic systems and strategies develop in children first through reading and then eventually transfer to spelling once they are used in abundance (as cited in Martin et.al. 2006). When developing this knowledge, children first integrate their existing knowledge of spoken language, through phonological and morphological knowledge. As development continues, children then integrate their knowledge about print, defined as orthographic knowledge. This study and its findings are
directly in line with the research of Dixon, Stuart, and Masterson (2002), who found similar results with the relationship between phonology and orthographic development. Kindergarten children involved in this study were observed having more success spelling words after learning to read them. The study summarized the findings by stating that children who had previous letter-sound knowledge were found to have increased success in developing their orthographic representation. Therefore, it is widely accepted that orthographic knowledge is developed after having some letter-sound knowledge to build from.

In understanding how to appropriately plan and execute proper instructional techniques for primary word study lessons, one has to understand the process that occurs when learning how to conventionally spell. Learning to spell words in the English alphabetic language requires young students to acquire, in part, knowledge of phonological properties as well as relate those to orthographic representations (Bourne & Whiting, 2004; Hilte & Reitsma, 2011). There are three major processes involved in learning to spell in the English language: phonology, meaning, and orthographic information (Hilte & Reitsma, 2011). Numerous researchers have identified the importance of establishing a stable word identity in which all three lexical properties, semantics, phonology, and orthography are well integrated (Bourne & Whiting, 2004; Hilte & Reitsma, 2011). Using semantics, phonology, and orthography in a well-integrated word study program will bring about the most success for developing primary students.

Numerous researchers have found that there is a connection between the different literacies. That is to say, there is a direct relationship between the ability to read, write, and spell various words (Cunningham & Cunningham, 1992; Ness, 2010; Williams et al., 2007). Hall (1991) points this out by studying the correlation between second graders’ ability to spell words
correctly and their ability to also read them. He found that the two processes are near-perfect predictors of each other (as cited in Cunningham & Cunningham, 1992).

**Invented and Approximate Spelling**

A great deal of information is gained from the invented and approximate spelling of developing readers and writers (Cunningham & Cunningham, 1992; He & Wang, 2009; Montésinos-Gelet & Morin, 2005). Invented spelling occurs when children write words by applying internalized principles of grapheme-phoneme associations to the spelling of words that they have not mastered. This occurrence can reveal a lot of information regarding the developing speller’s orthographic knowledge. The invented spelling will reveal the student’s understanding and awareness of the relationships between speech-sounds, graphemes, and phonemes (He & Wang, 2009). In addition, invented spellings can be used as powerful indicators of students’ developing phonemic awareness in relation to their knowledge bank of sound-letter relationships (Cunningham & Cunningham, 1992).

Likewise, in today’s primary classrooms, a lot of focus centers around the role of approximate spelling and the effect it has on the development of conventional spelling. Approximate spelling is the term used to define the unconventional writing produced by young children prior to the development of systematic or conventional writing (Montésinos-Gelet & Morin, 2005). This process of approximating spelling patterns in order to develop words is a great indicator to discover the amount of prior knowledge children hold and the steps that are needed to bring children through the remaining developmental stages of spelling (Montésinos-Gelet & Morin, 2005). The following paragraphs will discuss the definition, beneficial aspects and three different studies discussing the role of invented and approximate spelling in developing primary students’ orthographic knowledge.
Both approximate and invented spelling approaches are beneficial in developing primary classrooms as a means to a word study program. Approximate spelling approaches are a great indication when seeking to discover the amount of prior knowledge children hold and the steps that are needed to bring children through the remaining developmental stages of spelling (Montésinos-Gelet & Morin, 2005; ). Similarly, researchers of invented spelling have found a distinct relationship between invented spelling and phonological development; and also went as far as to identify grapheme-phoneme principles that have a strong ability to inform and guide instruction (He & Wang, 2009; Cunningham & Cunningham, 1992). The main difference between approximate and invented spelling lays in the actual name. According to Besse (2000), the proposed term of approximate spelling was developed to use more precise language that showcases what children can actually do (as cited in Montésinos-Gelet & Morin, 2005). The word approximation implies that the children have a bank of knowledge and are moving towards adopting increasingly conventional spelling, using what they already know. Whereas the word invented involves creating something that does not exist, implying that children do not have any prior knowledge that allows them to work towards conventional spelling.

Multiple studies have demonstrated the overarching positive theme of utilizing a word study approach when developing approximate and invented spelling. Three studies (Cunningham & Cunningham, 1992; He & Wang, 2009; Montésinos-Gelet & Morin, 2005) use qualitative and quantitative measures to study the effect of word study programs on orthographic knowledge development. All studies provide research that shows positive results with invented and approximate spelling developments when instruction takes place in environments that adhere to a word study approach to instruction. Cunningham & Cunningham (1992) explored this relationship through the use of the Making Words program. This particular program is a hands
on, multilevel activity for primary students. The program is designed to benefit all primary students, both for phonemic awareness, letter-sound correspondences and insights about decoding and spelling phonetically regular words.

He and Wang (2009) explored this phenomenon through studying a population of English as a foreign language (EFL) students and the effect invented spelling had on their understanding of grapheme-phoneme principles in order to spell words. The findings were used to help support teachers’ ability to design and execute instruction that would allow their beginning writers to become more able to spell standard words. This study was a first attempt to collect qualitative evidence to illustrate the process of invented spelling in beginning writers. He and Wang (2009) identified the following characteristics as beneficial instructional effects of invented spelling knowledge: the 30 grapheme-phoneme principles identified in the study can illustrate how EFL writers develop nonconventional spellings, which allows teachers to focus their instruction on certain principles.

In a similar study, Montésinos-Gelet and Morin (2005) sought to study the influence that social interactions among peers have on the approximation of spelling in kindergarten children. The researchers identified the following as beneficial finding regarding the relationship between cooperative learning and approximate spelling: cooperation among children lends itself to increased approximate spelling successes. The researchers used their finding to suggest a possible relationship between social relationships and approximate spelling productions in kindergarten students. Both studies provide crucial instructional planning data for educators. Each study suggests similar instructional recommendations for invented and approximate spelling, such as cooperation among children in a social realm and knowledge of grapheme-phoneme principles (He & Wang, 2009; Montésinos-Gelet & Morin, 2005).
These three particular studies are directly in line with each other, by seeking to discover the commonalities with invented and approximate spelling in a word study program and the impact it has on conventional spelling development. It is important to note the choice in sample population for both studies, as they cannot be generalized for all primary aged students. The four participants involved in the He and Wang (2009) study were all English as second language students, whose first language was Taiwan Mandarin. Therefore, although the results of the study shed great light into the instructional benefits of invented spelling in terms of pedagogical implications, the study never explored the effect on English speaking students. If the researchers chose to include English speaking primary students in the study, there would have been a greater ability for comparisons of invented spelling tendencies and therefore would have provided more instructional data for educators. In a similar study, Montésinos-Gelet and Morin (2005) also had a questionable sample population. The overall sample size of the participants was relatively low. There were 20 children involved in the study, all between the ages of five and six years old. All students were in the same grade level as well. In addition, it should be noted that the researchers did not mention whether or not the participating students were enrolled in any kind of a preschool program and if so, for how long. The level of education prior to coming to a formal kindergarten setting could most certainly influence the ability level of approximate spelling and therefore also influence the outcome of the study. Together these results imply that with a larger, more diverse sample population, the results could be more valuable to the overall word study research base.
Comprehensive Literacy Instructional Approach

It appears that the push for increased student achievement, based on new standards and standardized tests, is becoming more prominent. Based on this fact, more teachers are asked to develop and use a comprehensive literacy approach. Within the comprehensive literacy approach, the focus on word study and orthographic knowledge is especially highlighted. Acknowledging the new push for spelling development, researchers have looked into synchronicities between spelling and reading (Ness, 2010), the acquisition of knowledge of phonological properties as well as relation of those to orthographic representations (Hilte & Reitsma, 2011) and comprehensive spelling programs that adhere to the developmental spelling stages (McMurray, 2006; Tompkins, 2010). The following paragraphs will discuss these major themes identified in four different studies.

Definition of Comprehensive Spelling Approach

Researchers have defined a comprehensive spelling program to be one in which all areas of literacy are interconnected in order to increase letter-sound relationship understanding (McMurray, 2006; Ness 2010; Hilte & Reitsma 2011; Sharp et al., 2008). This idea is similar and in fact a subsection of a balanced literacy approach, which Tompkins (2010), defines as essential to developing spelling. Tompkins (2010) discusses that when children are learning to spell they are also learning to ‘crack the code’, meaning they are attempting to understand and apply what they’ve learned through authentic reading and writing situations. Therefore, children who are involved in an environment in which all areas of literacy: reading, writing, and spelling are all interconnected; increased spelling achievement and development is likely.
Activating all Lexical Properties

Researchers have demonstrated the effect a comprehensive spelling program approach has on developing and strengthening young children’s phonological and orthographic understandings (McMurray, 2006; Ness 2010; Hilte & Reitsma 2011; Sharp et al., 2008). Within a developmentally beneficial spelling program, the students in the study completed by McMurray (2006) showed that if implemented properly, when all processes involved in the act of spelling are activated, while ensuring that the interaction among them is facilitated, there are positive results for conventional spelling occurrences. Hilte and Reitsma (2011) found a similar effect with a comprehensive spelling approach, in that, when activating meaning on establishing phonological-orthographic associations, all processes, meaning, phonology, and orthography, are involved and activated for the student. However, the researchers of this study sought to study more. The researchers were actively searching to discover what leads to a fully specified orthographic lexical representation, meaning a conventional spelling that also involves the process of meaning or semantics, which can be easily remembered and retrieved at a later time. Hilte and Reitsma (2011) saw this possibility for a connection and through their research found that when the process of meaning or semantics was activated, conventional spelling occurrences increased. In addition, the researchers found that meaning is considered to help children focus attention on specific word identity when all lexical properties (semantics, phonology, and orthography) activated. Therefore, using semantics, phonology, and orthography in a well-integrated comprehensive instructional program will bring about the most success for our developing primary students (Hilte & Reitsma, 2011; McMurray, 2006; Ness, 2010; Sharp et al., 2008).
Developmental Spelling Stages

Within a comprehensive spelling instructional approach, it is imperative that teachers remember to scaffold the spelling development in direct relation to each developmentally appropriate stage. Many researchers have identified that specific stages lead up to the occurrence of conventional spelling. Researchers have identified five stages that students tend to move through as they progress toward becoming conventional spellers (Tompkins, 2010; Bear, Invernizzi, Templeton, & Johnston, 2008; Sharp, Sinatra, & Reynolds, 2008). Within each specific stage, the developing speller is focusing on a particular aspect of spelling. The major five stages of spelling development include: emergent spelling, letter name-alphabetic spelling, within-word pattern spelling, syllables and affixes spelling, and derivational relations spelling.

Many previous researchers in the field of word study and orthographic knowledge acquisition have found there to be a distinct relationship between the various stages of spelling development and the advancement of the alphabetic principle (Ness, 2010). Therefore, if students are making instructional gains in spelling development, in a systematic developmentally appropriate stage structure, teachers should be therefore teaching in a similar structure. McMurray’s (2006) study is supportive in terms of a systematic teaching of orthographic knowledge, in order to develop learning strategies and effective processing. Sharp et al.’s (2008) study made a suggestion of a reciprocal relationship between spelling strategy use and developing orthographic knowledge. If students are applying distinctive strategies to their appropriate spelling development stage, teachers need to be mindful of this and teach to the appropriate level. In addition, Hilden and Jones (2012), point out the benefit of using the spelling developmental stages to guide instruction versus using the tradition uniform weekly spelling lists. The authors of this study discuss the fact that if each student uses the same spelling list,
teachers are missing instructional opportunities to teacher to each individual student’s ability level. Authors of another study support this same claim that moving away from the tradition weekly spelling assessment is necessary is today’s classrooms, in order to differentiate spelling instruction and guide children towards greater success (Alderman & Green, 2011).

The overall findings from the studies mentioned above are largely in line with each other in this area of word study and appropriate instructional approaches in a comprehensive literacy approach. The researchers actively contribute to past research by demonstrating a more complex view of spelling development. The researchers discuss the importance of learning to spell conventionally through taking part in a comprehensive spelling approach utilized in a balanced literacy environment, in which all areas of literacy are activated. Furthermore, acknowledging the need for semantics in word study and spelling development is especially important, as the researchers involved in this study acknowledge the often lacking attention of this process (Hilte & Reitsma, 2011). Finally, understanding the five stages of spelling development will assist teachers greatly when planning and executing spelling instruction. Knowing which stage a student is in will allow teachers to focus their instruction on meaningful and developmentally appropriate objectives.

**Approaches to Teaching Spelling**

The strong development of orthographic understanding is gained in primary classrooms through appropriate and relevant instructional techniques with beginning readers and writers. Because young children’s early writing development is strongly related to their later literacy success, it is vital that educators implement the best research-based instructional approaches and techniques that are effective with beginning writers (Williams & Lundstrom, 2007; Cunningham & Cunningham, 1992). It is understood that spelling instruction for primary grades should be
carefully chosen as it will be the backbone for phonemic understanding, which later supports letter and sound recognition (Maat, 2008). There have been positive results found with the use of a kinesthetic approach to spelling instruction, the Making Words program, in addition to the systematic and thoughtful choosing of weekly spelling words.

**Engaging Activities**

There have been several recent studies completed to illustrate the importance of engaging students in meaningful experiences that help build and develop spelling and word pattern knowledge. In a study completed by Gary Alderman and Susan Green (2011), the authors study the effect non-engaging spelling instruction has on student motivation. The authors cite the impact the Achievement Goal Theory has on student motivation to succeed in the classroom. The authors found three key elements for addressing this theory and helping students find a successful balance in their learning: meaningful and challenging tasks, evaluation and meaningful activities to stress effort over ability, and finally involving students in decision making. The authors recognize one of the most important factors in spelling instruction is meaningful activities that spark interest and motivation. The author of another study supports this claim in her own body of research, where she investigates how the developmental stages of spelling correspond nicely to specific spelling activities (2007). She points out that assessing student to find current developmental spelling stages can help teachers identify not only specific spelling stages but also corresponding activities that are appropriate and meaningful for individual students.

An author of another study described engaging games that can be used in the classroom to help students’ development engagement and motivation in their own spelling development. Jessica E. Rosevear (2009) discussed five educational games to help students build spelling
pattern knowledge. The game titles are: Flyswatter, Review Obstacle Course, Group Spelling Bee, Slap that Desk, and Review Basketball. All five games can be played at any and all spelling development stage and can serve as an excellent way to engage learners into familiarizing themselves with different spelling patterns.

**Kinesthetic Approach**

There have been several proponents of a kinesthetic approach to word study programs in primary classrooms as a means to increasing student achievement in the acquisition of orthographic knowledge (Dilorenzo, Rody, Bucholzand, & Brady, 2011; Larson, 2001; Rule, Dockstader, & Stewart, 2006; Maat, 2008; Rogers, 1999). Research by Dilorenzo, Rody, Bucholzand Brady (2011) shows the positive effects from incorporating picture mnemonics and hands-on kinesthetic activities for the instructional practices of teaching phonics. Due to the complexity of the English language system with the use of a letter system and the sometimes complex association between letters and sounds, the need for purposeful instructional methods in primary grades is important. To overcome or assist in this difficulty, there are positive benefits from a more hands-on and kinesthetic approach to the teaching of phonological and orthographic skills.

Picture mnemonics has proven beneficial to phonological acquisition in the primary grade levels (Dilorenzo et al., 2011). In addition to the use of picture mnemonics for phonics knowledge acquisition, several programs have been developed based on the positive effects picture mnemonics have had on phonological development. One particular program, *Itchy’s Alphabet*, focuses on the instruction of letter-shape-sound connection through the use of pictures (Larson, 2001). Specifically, “*Itchy’s Alphabet* provides materials and lessons that promote a unique multimodality process for learning letter-sound associations and letter formation, as well
as developing phonological awareness skills. The program introduces letters in systematic logical letter formations that allow children the opportunity to develop schema from one letter to the other. This gives children the opportunity to develop knowledge of pattern relationships. In addition to the tactile movement of picture mnemonics, the effectiveness of a hands-on kinesthetic approach to the teaching of phonics has also been favored as of recently (Larson, 2011; Maat, 2008). The following paragraphs will present the findings from four studies that have quantitatively examined the effect kinesthetic approaches have on phonological development in the primary grade level (Dilorenzo et al., 2011; Larson, 2011; Rule et al., 2006; Matt, 2008; Rogers, 1999).

One of the studies previously described, by Dilorenzo et al. (2011), closely evaluated the effect of picture mnemonics on phonological development. This study found a positive correlation between the two variables. The study found that primary grade readers who were taught letter-sound associations through integrated picture mnemonics learned more letter-sound associations than did their peers who were not exposed to the mnemonics (Dilorenzo et al., 2011). In the same study, the researchers evaluated a specific marketed program developed, which was based on the work of Larson’s (2001) *Itchy’s Alphabet*, adopted in Houghton Mifflin products. This focuses on the instruction of letter-shape-sound connection through the use of pictures. The study found that the program provides materials and lessons that promote a unique multimodality process for learning letter-sound associations and letter formation, as well as developing phonological awareness skills.

Other researchers have conducted quantitative case studies to evaluate the relationship between hands-on kinesthetic instructional approaches to phonological development with similar findings. Rule et al. (2006) found the kinesthetic/tactile methods used may supplement and
reinforce phonological awareness material. The study examined three different groups: a kinesthetic group, tactile group, and a control group. The participants involved in the study included 34 students in grades first through third at risk of reading failure.

An additional researcher who studied the impact a kinesthetic approach to word study has on primary aged students spelling development was Maat (2008). Matt found that her first graders scores had all increased following a trial kinesthetic approach to spelling instruction. The study examined her first grade students with eighteen students total participating in the study. Of the eighteen students, six students received Title I reading support.

Rogers (1999) explored the impact large body kinesthetic movements have when integrated into a primary spelling instruction block. The study explored the teaching and practicing of ‘Spelling Cheerleading”. Within this strategy, students spell words by chanting and moving to each letter that makes up each spelling word. In the work of Fernald (1943) there is mention of various elements of the VAKT multisensory approach to word learning. Within Fernald’s VAKT approach, the emphasis is placed on incorporating the physical with the auditory, verbal, and visual elements of reading instruction. The acronym VAKT stands for visual, auditory, kinesthetic, and tactile. Spelling Cheerleading incorporates three out of four of these elements: visual, auditory, and kinesthetic (as cited in Rogers, 1999).

The methodologies used to collect data were very similar. Each study used quantitative research within the primary classroom settings and primary-aged student populations to document specific phonological gains through a kinesthetic approach to phonics instruction (Dilorenzo et al., 2011; Larson, 2011; Rule et al., 2006; Maat, 2008; Rogers, 1999). Dilorenzo et al. (2011) and Larson (2011) focused on small tactile approaches while Rule et al. (2006), Maat (2008), and Rogers (1999) focused more on large body kinesthetic approaches to increase
phonological knowledge. The results of each of these studies provide recommendations for instructional practices in primary classrooms that will assist in the development of word study programs and approaches.

There is a great deal of current research that shows the positive connection between kinesthetic instructional approaches and phonological awareness gains. Norman and Calfee (2004) discuss the benefits that come from both instructing as well as assessing student knowledge of letter-sound correspondences, with kinesthetic approaches. Norman and Calfee (2004) discuss how the hands on manipulation of letter tiles, for example, is an excellent indicator that reveals a student’s actual ability to represent and identify phonemes as well as their application, decoding and spelling strategies. Therefore, the information that teachers can reveal regarding student understanding of phonological concepts through the use of kinesthetic approaches, sheds great light into the power these approaches can also have on overall spelling development. This is due to the fact that the physical manipulation of words breaks them apart into phonemes, onsets, rimes, and syllables, thus showing a great deal of information. It is the physical separation that highlights the phonemes. Rule et al. (2006), discusses this idea of linking phonological awareness to phonics through the use of kinesthetic instructional methods.

Making Words

A particular popular instructional method being used in many primary classrooms currently involves the Making Words (Cunningham & Hall, 2009) program. Making Words is an instructional approach to the teaching of spelling though weekly lesson plans designed to increase self-discovery of letter-sound relationships and the individual awareness of patterns in words (Cunningham, 1992). It has been shown that those who take part in the Making Words lessons have increased phonemic awareness, letter-sound correspondences, and greater insights
about spelling and decoding phonetically regular words (Cunningham, 1992). Researchers believe the reason why Making Words works is due to the fact that the program is designed to be engaging, hands-on, fast paced, exciting, and fun in the eyes of children (Cunningham, 1992 & Cunningham & Hall, 2009).

According to Cunningham and Hall (2009), the authors of the Making Words program, the Making Words lesson plans are an example of guided instruction. Guided instruction theory believes that children retain and remember more information when they discover the ideas on an individual basis, through the gentle guidance of their teacher (Cunningham & Hall, 2009). The programs’ lessons guide children through the building of different words, so they can see firsthand how certain letter patterns can change the meaning and structure of various words. This process eventually takes part in assisting in the development of phonemic awareness, as the participants are stretching out words and listening attentively for the sounds they hear, in order to transfer those sounds into an appropriate order with letters (Cunningham & Hall, 2009).

Each Making Words lesson plan is composed of three parts. The first portion of the lesson allows the children the opportunity to manipulate the letters to actually make words. This portioning is both teaching and guiding the learning of letter sounds and the ways to go about segmenting words and blend letters (Cunningham & Hall, 2009). The second part of the lesson involved children sorting words according to rhyming patterns. Finally, each lesson ends by assisting children in transferring what they have learned from the lesson to reading and spelling new words.

The Making Words program is one in which authors and developers agree is multilevel. Each Making Words lesson plan provides multiple opportunities for children to develop a plethora of vital literacy skills. The Making Words program has been shown to help develop
phonemic awareness, learn different phonics programs, and transfer their new learning and understanding to new spelling words (Cunningham, 1992; Cunningham & Hall, 2009).

There is great discussion in terms of choosing appropriate spelling words to use in word study activities. It is now widely understood that students’ spelling knowledge is developmental and progresses through specific stages and therefore careful consideration should be placed in the choosing of weekly spelling words (Rogers, 1999). In both the work of Rogers (1999) and Maat (2008) the mention of careful consideration of spelling words is highlighted. Weekly spelling words that are used in a word study practice should include both high-frequency words as well as words used in children’s own writing (Maat, 2008; Rogers, 1999). Other beneficial strategies for the choosing of words could be: words with common patterns and rime, words that are spelled phonetically, sight words, words taken from current literature, and words that are commonly misspelled in their everyday writing (Maat, 2008; Rogers, 1999).

Conclusion

This chapter presented a synthesis of numerous articles relating to the necessary factors in developing and implementing a successful word study approach to the development of orthographic understanding in the primary grade levels. The chapter evaluated the effect of integrating a more hands-on, kinesthetic approach to the teaching of spelling development though word study, a comprehensive literacy instructional approach to the development of a successful word study program, the presence of invented and approximate spelling in developing word study knowledge, the overall characteristics in developing orthographic knowledge, and the choosing of spelling words. When utilized correctly, strong word study approaches have a dramatic effect on developing orthographic knowledge. It is common understanding that a strong word study approach in the primary grade levels will not only benefit spelling development but
also has a direct link to the development of both reading and writing skill sets, as mentioned in the comprehensive literacy approach (Hilte & Reitsma, 2011; McMurray, 2006; Ness, 2010; Sharp et al., 2008). Due to the sensitive age range of the target population of this investigation, it is vital that future research look into the specific instructional approaches educators should take in diverse classrooms in order to ensure successful word study programs. Through doing so, research will guide the instructional approaches occurring in modern day classrooms to strengthen developing orthographic knowledge and ensure literacy rich experiences as the primary student population grows into college and career ready young adults.
Chapter 3: Methods and Procedures

The main purpose of this study was to engage a class of twenty second grade students (while taking particular note of six individual students) in a new instructional approach to teaching and learning of weekly spelling words, monitor their independent transfer of word knowledge into their individual writing samples, and observe the impact, if any, the hands on approach to teaching had on knowledge acquisition.

Research Question

How might the Making Words program, a kinesthetic approach to spelling instruction, influence the transfer of second grade students’ word knowledge to their independent writing tasks?

Proposed Participants

The six participants were chosen from a class of twenty second grade students. The twenty students participated in the word study instructional program entitled, *Words Their Way*. There were a total of three different word study groups within my classroom following the same program. My lowest group was in the Letter Name Stage. I then had two different groups within the Within Word stage, who were simply at different points of progression within the school year.

The ‘blue’ word study group was in the Letter Name stage of the *Words Their Way* program. According to Ganske (2000), spellers within this developmental stage rely heavily on the names of letters to spell words. As they approach words by individual sounds they seek to find the letter name that matches most closely with the sound they are trying to reproduce. My particular students who were in this stage, often times would struggle with using word feature knowledge to apply to other unknown words. In addition, they also were struggling to retrain
basic sight word spelling knowledge. They generally tended to rely heavily on classroom visual resources, such as the word wall or verbal cues from myself.

The ‘green’ word study group was working in the Within Word developmental stage. There was also another word study group working within this same developmental stage; however, the green group, at the time was within the beginning stages. Therefore, according to Ganske (2000), the spellers within this stage of development were growing in orthographic knowledge and therefore had a more developed sight word vocabulary which allows for a heightened awareness of how words work and leads to more conventional spelling. Long vowel marking is at the heart of this developmental stage. The members of the green group were just recently exited from the Letter Name stage and therefore started this study in the very beginning stages of the Within Word group. The participants within this stage, at the time, were still learning the importance of vowel markings, and therefore this was not yet a salient feature in their own writing experiences and they did not yet use them on a consistent basis. The students within this stage did however have a strong developed sight word vocabulary that had allowed them to begin to truly read and write patterned or familiar texts without the assistance. They understood the importance of vowels and had mostly mastered the presence of short vowels and had ceased the once ever-occurring short vowel substitutions. The students, at this point, did not yet understand and use long vowel markers conventionally and therefore were headed towards understanding within this developmental stage of learning.

The ‘purple’ word study group was working in the Within Word developmental stage. This group started the school year in this developmental stage and progressed further into it at this point in the school year, when the study took place. The students involved in this word study group had a strong sight word vocabulary. In addition, they showed a great developing
knowledge of pattern, sound, and meaning relationships, which caused great interest and engagement in the learning of multi-meaning words. The students in this group had great knowledge of common word features and patterns within words. They showed a solid understanding of how and when to apply this knowledge to new and interesting words (Ganske, 2000). The students within this group, at the time, were still actively working to learn to apply certain uncommon vowels or diphthongs.

I chose two students from each group in order to gain a clearer picture of how the new instructional technique would influence students in each developmental stage. The process of choosing student participants from each group was thoughtful and systematic. I used two participants from each developmental stage to gain a clearer picture of how the instructional intervention impacted the students’ learning. In addition, though using two students from each group, it allowed me to analyze for any common characteristics or changes in student behavior. I was interested in using one student from each group who possessed higher level skills (in the context of the developmental stage) as well as one student who possessed lower level skills (also within the context of the developmental stage). I looked for the skill level difference in terms of both academic success in spelling assessments as well as independent writing tasks. Therefore, I chose one student from each group (blue, green, and purple) who showed great strength on word study assessments and writing tasks, as well as one student who struggled with these two tasks. Together these six students became the participants within the study.
Context of the Study

There were six participants within the context of this study, all of whom came from an affluent suburban district located near a midsize city in Western New York. This district covers nearly 50 square miles, including sections of six towns. The district serves approximately 4,600 students in grades K-12 at its six schools. The particular elementary building involved in this study hosts children from kindergarten through fifth grade. According to the School District’s website (2013), in the district wide approach, students are encouraged to pursue their learning through investigation, inquiry, and reflection, while teachers provide structure and guidance. According to the New York State Department of Education (2012), the district is made up of 86 percent Caucasian students who come from working, middle class homes, 4 percent black, 5 percent Hispanic, 3 percent Asian or Native American, and 2 percent multiracial. In addition, this particular school has been listed as a school in good standing for the last three consecutive years, with high state test scores across all grade levels as well as content areas.

This particular study took place in a second grade classroom. The school district where the study took place follows a strict word study approach, where they utilized the *Words Their Way* program (Bear, Invernizzi, Templeton & Johnson 2008). In the program, the developmental progression of spelling and word feature knowledge is especially highlighted. At the second grade level, the students are typically involved in the late letter name and within word stages.

Within the classroom, the students participated in a daily schedule that provided consistent expectations both in terms of workload as well as environment. The students engaged in English Language Arts activities throughout the course of their morning. Through engaging in these types of activities, the students rotated through four prearranged groupings. The students
took part in twenty minute rotations consisting of independent language based work, literacy based skills through technology incorporation, independent reading and writing time, and finally a guided reading station with myself as the instructor. The Making Words program and corresponding research activities occurred when the students came to my guided reading group for twenty minutes at a time.

**Positionality as the Researcher**

I am a middle-class Caucasian female who was raised in a middle working-class family. I attended school in a suburban school district with high success and graduation rates. I went on to complete my undergraduate work at The College at Brockport where I attained my Bachelor of Science in Health Science as well as three teaching certifications. Currently, I am actively pursuing my Master of Science in Education in Childhood Literacy at The College of Brockport. I currently hold initial certification in Childhood education, grades one through six, Students with Special Needs, grades one through six, Early Childhood Education, grades birth through second, and upon completing graduation will hold certification in Childhood Literacy, birth through grade six.

My first teaching position came in a very small, rural school district in Western New York. I began my career teaching a group of first grade students. This was the first experience I had using word work with primary students. The next year I transferred grade levels teaching in the same district, however, in a different building. I went on to teach a group of sixth grade students in the district’s middle school. Here, the English class I taught took a very different approach to literacy based skills, in particular, the absence of any word study approach. The weekly spelling words that were given were solely to be studied outside of class. While I was in
my third year as an educator when this study took place, I found myself in a new district teaching a group of aspiring and energetic second grade students. Here, I found myself reunited with the word study approach, in the context of the *Words Their Way* program (Bear, Invernizzi, Templeton & Johnson 2008).

While finding resistance from some students in the *Words Their Way Program* (Bear, Invernizzi, Templeton & Johnson 2008), I set out to find new instructional methods to reach my reluctant learners. As an educator, I wholeheartedly believe that all children have the ability to learn. Although true that not all children learn through the same methods, all children do have the capability to learn. No child or person, for that fact, is incapable of learning. Not all children learn through the same methods and approaches, but they do have the ability to learn when the material is presented in a form that is understandable to them. Therefore, I feel that it is the responsibility of the educator to determine the proper instructional materials and delivery mechanisms for each student. It is because of this strong belief that I set out to find a new instructional method for word study to increase the success rate of my, then students.

In addition, as the teacher-researcher involved in this study my educational philosophies had a direct connection to my instructional decisions. As an educator, I believe in the social constructivist theory and approach (Vygotsky, 1929). Therefore, it is my belief that individuals learn from each other and through self-discovery. Learning is an active process; therefore it makes sense that through interaction further learning occurs. It is because of this belief that I was interested in engaging my students in a new instructional word study approach where self-discovery and investigation was especially highlighted and valued.
My philosophy of effective literacy teaching in today’s classrooms includes the acknowledgment and appreciation for books and language through a balanced literacy approach. In effective literacy classrooms students should be exposed to language all day, every day, as it is vital to the development of many content areas. Language is a self-extending system, that is, it allows the learner to keep on learning by using it constantly. Furthermore, reading and writing are interrelated and children need to be given abundant opportunities to write (Pressley, Roehrig, Bogner, Raphael, Dolezal, 2002). In order to do so, I believe that guided writing and reading centers be used daily. Centers are both engaging and useful for students as they allow for more individualized introduction while the rest of the students are still engaged in learning. I implemented the research through guided reading groups and ELA centers to incorporate my beliefs of best literacy practices.

My role in the study was a teacher-researcher. I was the one administering the new instructional approach as well as collecting and analyzing the data to further my own future research.

Data Collection

I collected data through individual student weekly spelling assessments, individual weekly student writing samples, as well as pre and post student interview questions. I used pseudonyms for all participant names for each method of data collection.

Spelling Assessments

I gained explicit insight on students’ understanding of word features and whole word spelling from their weekly spelling assessments. The students took a pretest in the beginning of the week, prior to learning the particular word feature of the week. This was of high interest and
value to me as the teacher-researcher, in order to show what knowledge each individual child
already held and what gaps needed to be closed. The students also took part in a spelling post
assessment at the end of the week. This is the assessment that I utilized for my current ongoing
grade book, at the time, for word study and also was the assessment that showed growth,
retention, or stability in comparison to the pre assessment data. Therefore, the post assessment
gave insight as to if the children learned the necessary word feature for the week and if they were
independent when using it. Any post assessment score that has regressed, or shows a decrease in
score showed confusion in the current word feature, at that time. As part of the spelling
assessment, the students were assessed on their ten weekly assigned spelling words, as well as a
sentence dictation portion. The sentence dictation portion allowed me to verbally state a sentence
that utilized words from the spelling list in order to gain a better sense of how the students were
internalizing the word feature. As the teacher, this allowed me to examine how students apply
their knowledge of the spelling words and patterns in the context of a meaningful sentence. This
data was collected on a weekly basis and included one pre assessment and one post assessment
each week for the duration of the study.

**Writing Samples**

After taking the initial pre assessment, learning the weekly word feature, reviewing the
weekly spelling list, and taking part in the Making Words program (Cunningham & Hall, 2009)
students participated in authentic writing activities in order to demonstrate the impact the
kinesthetic word study approach had on their retention rate and independent transfer. The weekly
writings followed a teacher-directed prompt in order to focus the students’ writing and have the
students utilize the weekly word feature within their independent work. I collected a copy of
each participating student’s writing sample on a weekly basis to identify the students’ strengths and weaknesses in word feature usage.

**Interview/Observations**

Prior to beginning the study, students took part in a brief initial interview session. The purpose of the interview session was to tune into the children’s thought processes concerning the current word study routine in the classroom, at that time. The students were asked what they currently enjoyed and disliked about the word study approach, what they think would help them learn the words, and how they thought about their weekly spelling words in writer’s workshop. A copy of the exact interview protocol is attached. The goal behind the initial interview was to see which, if any, students think about connections between word study and authentic writing situations. The students took the same interview following the six weeks of implementation of the new instructional approach in their word study time block. The student responses were compared to note any changes in their connections between word study and authentic writing situations. The interviews were held in the classroom setting.

**Observations/ Anecdotal Notes**

Finally, while students are engaged in both word study and writing activities, I took anecdotal notes documenting my observations to note any key occurrences. As the children were engaged in the new instructional word study approach I recorded their behaviors, reactions, conversations, and academic talk in order to better understand the students’ thought process throughout. I also observed the students while they were engaged in assessment and writing situations. Through my observations of student engagement I looked for any connections the students utilized from the *Making Words* program to the spelling assessments and also to the
authentic writing situations. The observations were recorded on the observation protocol, which is attached. The document that was used to record the anecdotal notes listed the exact activity that the students were taking part in and in the next column there was space to record my own interpretations as well as direct observations.

Data Analysis

Spelling Assessments

I looked at weekly initial and final spelling assessments as both a measure of word knowledge growth, as well as to understand what impact the Making Words program had on the students’ ability to spell the list word in isolation. I used these assessments as a measure for the students’ own developmental stages in terms of understanding their current developmental status and in what direction my instruction should guide them next. For example, if the assessment data showed that they understood and could correctly use long vowel patterns, I could then structure my instructional lessons to delve deeper into more complex long vowel patterns. I did this by examining the specific characteristics of each developmental spelling stage in the samples. Therefore, through analyzing each assessment for evidence of what the children currently knew and could apply appropriately based on the developmental stage characteristics, I better understood how to structure future lessons.

Writing Samples

I used the individual writing sample to identify previously taught spelling words and the level of spelling accuracy within the context of the authentic writing situation. More specifically, I looked to identify spelling words that were within the developmental progression of each participant and whether or not they were spelled accurately. The writing samples were a key
component to help show where and how frequently the each students understanding strayed from conventional to invented spelling. For example, if the student was using the word feature correctly for spelling list words within their writing, however frequently misused that same word feature in non-spelling list words, that gave great insight to my own instruction. This knowledge helped better guide my own instruction, in order to see the transfer of knowledge into authentic writing situations. I used the writing samples to identify words and more specifically, the word patterns that were appropriate for each student’s particular developmental spelling stage. In addition to paying particular attention to both past and current word feature skills for the week, I also closely examined the invented spellings included in the writing samples. The invented spelling gave great insight into how the children were transferring their knowledge of word features and served as a great source of evidence as to what the children were both learning and applying.

**Interview/Observations**

I wrote information from the interviews and observations taken throughout the course of the study. I critically examined each area of data to identify patterns and common occurrences and sorted into varying categories. In order to do so, I used constant comparison methods for data analysis, using a method of coding. Hubbard and Power (1999) suggest the use of codes for research projects, in order to organize and understand the data. Clark and Creswell (2010) define codes as labels that the researcher uses to describe segments of the text. I completed this coding process by first sorting similar pieces of information together to identify major themes. I completed this process using manual analysis, in which I sorted similar pieces using color-coding to find like data. Once the coding process was complete, I then sorted the codes based on similarities, developing major themes within the data. This occurred over a period of time,
allowing for the triangulation of data for each child as well as groups of children based on similar groups of findings.

After analyzing each specific type of data collected, I developed individual case studies on each participant involved in the study. In constructing individual participant case studies, it helped to see the data spread out among all participants. Once the individual case studies were complete, I again used the constant comparison methods to look across the data for all the participants, looking to identify major themes and patterns within the data.

**Procedures**

**Week One:**

- Administered initial student interview questions to each participating student, on an individual basis.
- Introduced Making Words program to students and begin familiarizing the students with the new instructional approach to word study lesson groups.
- Students took normal weekly spelling assessment as well as complete one writing sample to use as an initial benchmark.

**Week Two:**

- Introduced the week’s word feature to each group through a mini-lesson.
- Used the making words program to have students manipulate different words that have similar features to the word feature of the week.
- Administered spelling assessment and independent writing sample at the end of the week.

**Week Three:**
• Introduced the week’s word feature to each group through a mini-lesson.

• Continued the use of the making words program to have students manipulate different words that have similar features to the word feature of the week.

• Began taking field notes of student behaviors in word study groups.

• Administered the second spelling assessment and independent writing sample at the end of the week.

Week Four:

• Introduced the week’s word feature to each group through a mini-lesson.

• Continued the use of the making words program to have students manipulate different words that have similar features to the word feature of the week.

• Continued taking field notes of student behaviors in word study groups.

• Administered the third spelling assessment and independent writing sample at the end of the week.

Week Five:

• Introduced the week’s word feature to each group through a mini-lesson.

• Continued the use of the making words program to have students manipulate different words that have similar features to the word feature of the week.

• Continued taking field notes of student behaviors in word study groups.

• Administered the fourth spelling assessment and independent writing sample at the end of the week.

• Administered post student interview questions to each participating student, on an individual basis.
Administered and analyzed a comprehensive spelling assessment and writing sample.

Criteria for Trustworthiness

As the teacher-researcher who was involved in this study, it was of utmost importance to conduct this study in a trustworthy and unbiased way. I collected the data in an ethical manner. Due to the fact that I was the acting teacher within the classroom and given the close relationship I, at the time, held with each of the student participants, I was committed to staying objective throughout the duration of the study. I did so by ensuring that the students stayed at the center of my focus, as their academic achievement was my main concern. I also did not pass judgments and ensured that the students continued to make gains. The data collected and the themes/patterns identified were always used to inform instruction and better the students’ learning outcomes and educational experiences. To ensure trustworthiness within the study, I used four different methods of data collection. I used spelling assessments, authentic writing samples, interviews and observations to ensure triangulation. In addition, I used prolonged engagement throughout the five weeks by engaging in the Making Words program with the participants. I took part in persistent observation with each participating student on a weekly basis, as I observed the students engaged in the Making Words lessons. I integrated transferability by discussing detailed descriptions of each participant and the research context.

Limitations of the Study

As with most research, there were limitations to this study. One limitation was the ability to differentiate the students’ origin of learning. For example, it was difficult to determine whether the students’ learning transfer was due to the Making Words program or a different
factor. However, it was possible to determine a consistency amongst the six total participants. That is to say that if all six participants were exhibiting similar behaviors and producing similar work, it was easier to determine that their gains were due to the Making Words instructional approach. An additional limitation of the study was the length of time the study is completed. Five weeks is a rather short amount of time to see the true impact of a new instructional approach such as the one being implemented in this study. Each *Making Words* lesson has three components and therefore requires an ample amount of time in order to ensure proper implementation into the second grade curriculum.

**Summary**

Integrating appropriate, meaningful, and engaging instruction is the daily challenge of all educators. The *Making Words* program, which was at the center of my research, offers many of these key components that educators strive so greatly to locate and use in their classroom. However, the question remains as to whether or not the presence of the new instructional technique has impacted student learning in word feature knowledge, which will then be reflected in their independent writing.

As I looked critically at six participants involved in this study, my hope was to gain a stronger understanding of whether or not hands on approach to word study lessons, through the *Making Words* program, impacted student outcomes. Through the experiences and potential learning of my participating students I was better able to better determine the overall effectiveness of the program to guide future instruction.
Chapter 4: Findings

Katie was taking part in one of many Making Words lessons in which her group was exploring long o vowel sounds, in particular the long ‘oa’ vowel pair. When trying to decode the word coat she was observed in the following self-talk:

“Coot. No that spells coooooot. I know! oa, that vowel team makes a long o. So not coot, but coat!”

Purpose

That short vignette was only one of many examples of student driven learning I observed over the course of the five week study. The purpose of this study was to determine the impact a kinesthetic hands-on approach to teaching spelling would have on the transfer of students’ spelling knowledge in independent writing tasks, through the use of the Making Words instructional program. The research focused on the implementation of a new kinesthetic instructional approach, through the continued use of weekly spelling assessments, and looked closely at individual student writing samples for an improvement in independent spelling success. Independent spelling success in independent writing specifically addresses the concerns for students to rely less on invented spelling and more on spelling strategies previously taught. The study sought to answer the following question: How might the Making Words program, a kinesthetic approach to spelling instruction, influence the transfer of word knowledge in independent writing tasks of second grade students?

I collected data through initial and culminating interviews, weekly spelling assessments (including both pre and post-test data), weekly writing samples, and observational notes through the Making Words lessons. Data analysis revealed several themes. The rest of this chapter shares
those common themes seen in the study. These themes include those related to students’ use of the visual and physical cuing systems, students’ engagement and attention, and increases in students’ assessment data scores. Other common themes included a game-like nature to the Making Words program, a collaborative effort observed in the groups, an emphasis on the meaning of words when independently writing, and a new sense of student accountability with letter tile manipulation.

The students participated in a weekly Making Words lesson. All Making Words lessons are named after their secret word that the children attempt to solve and correctly spell. For example, lesson number 80 is titled ‘shouting’ and the secret word for the lesson that the students must construct is, shouting. The students were given all necessary letter tiles needed in order to spell the words involved within the lesson. The students used the letter tiles to follow my prompts for the spelling of various words. The lesson flow was heavily scripted each week. The students received their letter tiles, and then I verbally stated the first word of the lesson and used it in a sentence. The children verbally repeated the work back prior to manipulating the letter tiles to correctly produce the word. After the students spelled the first word, the prompts explicitly stated certain portions of the previously spelled word to keep and others to change. For example, in this particular lesson, Cunningham and Hall (2009) instructed the teacher to prompt the students to spell the word coat. The prompt following that was to, “add a letter to spell coast. Do you coast down the hill on your bike? Everyone say coast” (p. 102). The students would then take the teacher directed prompts and rearrange letters by adding, deleting, or substituting in order to correctly spell the new word.
The information in this chapter is organized by each of the developmental spelling stages of the students who made up my classroom. There were three different groups, based on which developmental spelling stage the children were currently receiving instruction in. The students that were in each of the three groups will be introduced in greater detail in the sections that follow. The purple group contained Macy and Ryan, who were in the most accelerated Within Word stage developmental stage. The green group consisted of Joey and Katie who were in the beginning stages of the Within Word developmental stage. Finally, the blue group consisted of Gary and Tyler who were in the ending stages of the Letter Name stage. Within each color group section, I have organized my information into case studies for each participant. Within each case study, I discuss data for the interview section, all assessment data, and a narrative description that displays common themes witnessed over the course of the study as well as my own analysis of assessment data.

**Purple Group**

I will present two separate cases for children in this group. The first child is Macy and the second, Ryan. The purple group was the highest achieving group in the classroom at the point of the study. The students in the purple group were late Within Word spellers, almost to the next developmental stage of Syllable Juncture spellers. The group consisted of 6 members and Macy and Ryan were two of the six. Within this stage, the students generally have a strong understanding of initial and final consonants, including both blends and digraphs. This developmental stage of spellers do not yet consistently use conventional patterns such as consonant doubling and vowel in an unaccented syllable form.
Macy

At the time of the study, Macy was an eight year old second grade student. She had high energy and interest toward learning, especially in the realm of word study activities. Words and spelling patterns came very easy for Macy, thus her placement in the highest word study group of the classroom. Macy willingly completed all weekly spelling assignments, while appearing to be happy and energetic toward each assignment. Macy struggled transferring her knowledge into independent writing and often times would unconventionally spell certain word features that had previously been taught.

Upon analyzing the various forms of data specific to Macy, there were three themes that emerged. Macy appeared to be highly engaged in the Making Words lessons, she was observed noting visual relations within her independent writing, and finally she appeared to take well to the interactive form of kinesthetic manipulation in the weekly lessons as she applied that to her weekly authentic independent writing.

Initial Interview

Macy first took part in an initial interview process in which she shared her current feelings and thoughts toward the word study program up until that point in the school year. The interview took place prior to the Making Words intervention. The interview showed Macy’s current feelings toward how word study was occurring up to that current point in the classroom. Macy points out the fact that some of the lessons “challenged” her as she experienced some difficulty with them. In addition, Macy singles out the picture word sorts as being her favorite activity, as they separate the word feature, which helped her to learn the various words. Macy also noted an additional word study activity that helped her as the whiteboard option. Students
were allowed to use small whiteboards to practice writing their weekly spelling features as well as finding words that used the feature(s) of the week. Finally, Macy discusses thinking about a word chunking strategy when completing independent writing activities to help spell unknown or challenging words. Interestingly, going into the study, Macy has already identified two forms of active word study approaches that were occurring in the classroom as being ones that are engaging as well as meaningful in her own learning acquisition. Macy favored the kinesthetic picture sorts that involve cutting, sorting, and gluing as being one strategy that is beneficial to her own learning and understanding of the weekly spelling list. In addition, she enjoyed the kinesthetic practice of practicing writing weekly spelling features with whiteboards. Therefore, from the interview data alone, a great deal was learned from Macy that showed how she was integrating kinesthetic activities into word study application.
Developmental Spelling Assessment: Pre-Intervention

Initial DSA (Developmental Spelling Assessment) Score: 22/25

Figure 4.1. Macy’s Initial DSA

The above image depicts Macy’s initial Developmental Spelling Assessment (DSA) prior to the intervention program beginning. Macy took the Within Word spelling assessment and scored a 22/25 on it. She was using invented spelling for words that contained R-controlled vowels, such as glare and complex consonants in words such as patch and bridge.

Macy spelled the word glare as ‘glair’, showcasing her ability to use words she knows to attempt the spelling of unknown words. This can be seen in her insertion of the word ‘air’ when attempting to spell the word glare. Similarly, her unconventional spelling for the word patch...
showcased this same sophisticated use of invented spelling. Macy spelled the word patch as ‘pach’ neglecting to recognize the complex consonant blend with the letter ‘t’. This is however a very difficult skill to master at this age because it is a complex spelling pattern. Complex spelling patterns such as this are almost impossible for children to hear and therefore recognize the need to add the silent letter ‘t’. However, Macy’s spelling for this word shows a great deal of information regarding how she is thinking about and using complex digraphs and vowels. This can be seen in her use of the –ch digraph and the correct use of the vowel a in the attempted spelling.

The same absence of complex consonants can be seen in Macy’s unconventional spelling of the word ‘bridge’. Macy spelled this word as ‘brige’, not including the complex consonant ‘d’. The consonant in the middle of this word is a difficult sound to pick up on, even in the late stage of the Within Word developmental stage. As described previously, the fact that Macy did not recognize the complex spelling pattern is not overly concerning given the fact that it is a difficult spelling pattern to master at this age. Once Macy is familiar with the spelling pattern it will increase her ability to know when certain words contain it. Macy was able to correctly identify the initial blend, vowel, and ending. All of the portions of the word that Macy did correctly identify show a great amount of knowledge about how words work and the sounds that are associated with them. In order to receive credit for the correct usage of the word feature, as according to the authors of the DSA, Macy would have had to identify the –dge portion of the word bridge which is a spelling pattern that Macy is still learning to develop within her current stage.

In examining the 22 words that Macy did spell correctly in their entirety, it is clear that at the point this assessment was given, Macy held a great deal of knowledge on sophisticated
spelling concepts. Macy had a strong understanding of long vowels, specifically with the vowel-consonant-ending e pattern. In addition, she also held knowledge with abstract vowels, and various other common long vowels. Macy correctly identified and used various long vowels such as -ou, -ee, -ea, -oi, -ai, and -igh.

The initial Developmental Spelling Assessment was a great source of information going into the intervention program. The assessment showed the current developmental spelling stage that Macy was progressing through as well as the areas within the stage that she still required explicit teaching for. Finally, the assessment showed a great deal of information regarding Macy’s rather sophisticated use of invented and unconventional spelling.

There were many important pieces of knowledge that were gathered from Macy’s interview data as well as her initial DSA. From the interview data alone, a great deal was learned from Macy that showed how she was currently integrating kinesthetic activities for word study application. The interview was the first source of information in the study that showed her feelings toward word study activities. It was a precursor that showed her already present interest in some kinesthetic word study activities. In addition, the DSA showed how Macy was currently using her knowledge to progress through the Within Word developmental stage of spelling. It showed that Macy had a strong grasp on how to use onset and rimes in a predictable fashion, as well as her knowledge of consonants and vowels and their relationship. This assessment also showed her very sophisticated invented spelling which gave instructional points for the research projects future.
Weekly Assessment Data

Within the following table (Table 1) Macy’s assessment data for each of the five weeks of the study is included. The table breaks out the assessment data by week. Within each week, the table lists which word study list Macy was working on that week, her pre-test spelling test score, post-test spelling test score, writing sample score, and finally which Making Words lesson the group was working on that week. Each Making Words lesson is labeled with a number and word. The name of the lesson directly corresponds to the weekly “secret word” that the children attempt to solve and conventionally spell. The weekly spelling list which states the word feature and focus for the week can be found in the appendix. In addition, the table simply lists the title of the Making Words lesson plan for each week. The full lesson, in its entirety can be found in the appendix. The table provides a general summary of the data analysis that follows.

Table 1
Macy’s Assessment Data

<table>
<thead>
<tr>
<th>Week Number</th>
<th>Word Study list</th>
<th>Pretest Score</th>
<th>Final Score</th>
<th>Writing</th>
<th>Making Words Lesson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>B 29</td>
<td>10/10</td>
<td>10/10</td>
<td>4/4</td>
<td>Lesson 71 ‘cartoons’</td>
</tr>
<tr>
<td>2</td>
<td>B 30</td>
<td>9/10</td>
<td>10/10</td>
<td>4/4</td>
<td>Lesson 88 ‘snowflake’</td>
</tr>
<tr>
<td>3</td>
<td>B 31</td>
<td>8/10</td>
<td>9/10</td>
<td>5/5</td>
<td>Lesson 81 ‘lollipops’</td>
</tr>
<tr>
<td>4</td>
<td>B 32</td>
<td>10/10</td>
<td>10/10</td>
<td>5/5</td>
<td>Lesson 79 ‘playground’</td>
</tr>
<tr>
<td>5</td>
<td>B 33</td>
<td>7/10</td>
<td>6/10</td>
<td>1/4</td>
<td>Lesson 52 ‘jugglers’</td>
</tr>
</tbody>
</table>
The above table shows a comprehensive numerical summary of Macy’s assessment scores over the course of the five week long study. The table shows that Macy makes consistent gains or remains unchanged in terms of assessment scores from the weekly pre-test to the post-test for the first four weeks of the study. This trend then changes the last week of the study, as Macy’s pre-test score was higher than her post-test score that week. The table also shows how Macy was using the week’s spelling words as well as the word feature in her independent writing, based on the writing sample score.

Looking at the assessment data for Macy over the course of the five week study, it is clear to see the slight improvement of her assessment scores. The first week of the study (May 6, 2013- May 10, 2013) the spelling feature was on the vowel digraph oo. Macy scored a 10/10 on her pre-assessment, showcasing great knowledge of the weekly feature along with the four review sight words that were on the week’s list.

This confidence and strong ability level was also observed in the week’s Making Words (kinesthetic approach) lesson. The lesson for the first week of the study was titled ‘Cartoons’ and focused on working with common vowel patterns. The various vowel patterns included, -oo, -oy, -oi, -and –ou. The secret word of the lesson was ‘Cartoons’, as all Making Words lesson are named after their secret word that the children attempt to solve and conventionally spell.

Macy, with much ease, was able to conventionally spell all words presented to her. She appeared to have a strong understanding of the –oo digraph and did not appear to exert a lot of energy thinking about how the words were spelled, as it appeared to be very automatic. In addition, Macy was observed in the lesson helping her classmates spell several words that had the –oa vowel pairing. Her ability to so effortlessly help a fellow peer shows a great deal of
information. This shows her strong understanding of the weekly feature, as she was able to independently assist another child in his or her learning process. Macy’s participation in the first Making Words lesson was excellent. She was observed as being engaged, involved, and actively participating in the lesson. This could be seen in the observation notes for the week, shown below, that state Macy’s apparent excitement to learn the new “game”, as she referred to it.

**Figure 4.2 Macy’s Observation Notes**

<table>
<thead>
<tr>
<th>Description of Activity</th>
<th>Field Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Spell 'on'</td>
<td><em>The difficulty, strong understanding of the short vowel words</em></td>
</tr>
<tr>
<td>- Odd letter to read 'on'</td>
<td></td>
</tr>
<tr>
<td>- Use y letter to spell 'soody'</td>
<td></td>
</tr>
<tr>
<td>- Spell 'coat'</td>
<td><em>Excellent vowel manipulation. Good understanding of oo deform. Very automatic. Does not appear to rely on spell to hear oo sound.</em></td>
</tr>
<tr>
<td>- Spell 'coast'</td>
<td><em>Good understanding of 'oo' pattern. Very helpful.</em></td>
</tr>
</tbody>
</table>

**Behavior:** Engaged, very involved and actively participating.

She continued to score a 10/10 on the post-assessment for the week. In examining the written assessment for the week, Macy experienced success in the spelling portion of the assignment, especially in terms of the weekly spelling feature. However, it appeared quite difficult for Macy to generate a sufficient amount of ideas and words to showcase her understanding of the weekly spelling feature. The written assignment lacked enough ideas to utilize her knowledge in a coherent way.
The second week of the study (May 13, 2013- May 17, 2013), Macy’s group was looking more closely at vowel digraphs –aw and –au. Macy was able to correctly spell all of the list words that used that feature, however, unconventionally spelled one of the review sight words on her pre-assessment. Macy spelled the word ‘which’ as ‘wich’. Her invented spelling certainly makes sense and uses the correct vowel and ending digraph, however neglects the initial wh-spelling pattern.

The Making Words lesson for the week was lesson 88, ‘Snowflake’. This lesson was focused on integrating and practicing the -aw and -ow word pattern. The students began the lesson using the letter tiles to form the word ‘saw’ and built off of that to work through other words that contained the –aw word pattern. Observational notes for the week showing Macy’s activity in the Making Words lesson show that Macy was able to repeat the chosen word back to her on numerous occasions to help solidify the sounds she heard within the word. For example, the given word was ‘saw’ and Macy was observed stating to herself “owww….saw”. The lesson promoted the students to move through a variation of words containing the –ow word pattern,
asking them to use the letter tiles to form the words ‘slow’, ‘snow’, and ‘flow’. When asked to change the word to make the word ‘slow’. Macy was able to independently recognize that the vowel changed within the word and it was now a CCVC word. Macy was observed relying heavily on her visual cueing system at the end of this week’s Making Words lesson when she was asked to spell the secret word (snowflake). Macy at first spelled the word ‘snowflake’ as, ‘snowflack’ and was observed verbally stating that “that doesn’t look right” and then changed several letters to create the correct spelling of the word ‘snowflake’. Macy’s ability to independently recognize when a word does not look right shows her consciousness and awareness for spelling patterns and phonological skills.

In the post-assessment of the week, Macy scored a 10/10, correcting her previous unconventional spelling attempts in the pre-assessment. Taking into account the fact that there were two different wh- pattern words on the spelling list for the week (while and which) and Macy only incorrectly spelled one on the initial assessment, it is likely the error was due to attention factors and the fact that in different dialects it is difficult to differentiate the pronunciation of words that begin with w and wh. The writing portion of the assessment proved to be difficult again this week. Macy was able to correctly spell the words, using the correct vowel digraphs, however, again was very limited in her ability to generate enough ideas to write a meaningful piece. The prompt this week for the authentic writing piece was for the children to write about taking a trip to see relatives. I observed Macy using her list of spelling words to aid in this process which is likely the reason for the integration of so many of them. Macy’s difficulty in writing a meaningful piece may be supportive evidence to show her difficulty in creative writing pieces. Macy often times has a difficult time generating ideas, as seen in the weekly written data. It is possible that the writing prompt that was presented to her was not
particularly meaningful to her. In terms of word feature transfer to independent writing, Macy
did a nice job carrying over her knowledge of the –ow, -aw, and –au spelling patterns. In this
sample, it is clear that Macy was thinking about her weekly spelling words, as she underlined
each of them without being told to do so. The tactile approach to underlining words perhaps
shows an unconscious thought process of linking the kinesthetic Making Words lesson to the
authentic independent writing.

*Figure 4.4 Macy’s Writing Sample*

The third week (May 20, 2013- May 24, 2013) of the study, Macy’s group was looking
closely at the -ou and -ow diphthongs. Macy scored an 8/10 on her pre-assessment, however the
two words that she unconventionally spelled were not words that had the weekly feature and
instead were review words for the week. Macy spelled the word ‘answer’ as ‘awenser’ and the
words ‘already’ as ‘alredy’. The invented spelling for the word answer was interesting to
analyze. Macy’s unconventional spelling shows an understanding of the presence of the letter –w
in the word, which is a complex spelling pattern for this point in second grade, as it is a silent letter in the word. In addition, the invented spelling of the word ‘already’ as ‘alredy’ also shows a great deal of thinking from Macy. Macy was able to correctly identify the initial blend in the word as well as the complex consonants in the middle and end of the word. The unconventional spelling shows a need for further instruction in the –ea vowel pattern, as this spelling pattern can also be heard as a long vowel e in many other words in the English language system.

Macy was observed actively engaging in this week’s Making Words lesson. Observational notes for the week show Macy smiling and eager to learn the letters for the particular Making Words lesson. Macy waited to listen to all the directions and the first prompt prior to building her first word. The lesson for the week was lesson 81, titled ‘lollipops’. The lesson focused on working with the –ow, -all, -ell, -ill, and -aw spelling patterns. She was intrigued by the letter tiles and eager to get a chance to manipulate them to create various words. She was able to spell the first two CVC words correctly (‘pop’ and ‘lip’). The third direction asked her to create the word ‘oil’. Macy experienced slight confusion with this word, as she initially spelled it as ‘oyl’ She then verbally stated “that doesn’t really look right to me” and was able to switch out the letters to form the correct spelling of the word ‘oil’. She alluded to using the word ‘oil’ to help her know how to spell the initial word, oil. This certainly shows a strong understanding from Macy of how words work together and how there are words within other words. Macy was able to correctly spell the week’s secret word (‘lollipops’) on her second attempt this week. She initially spelled the word as ‘lolipops’ and then realized she needed to use her extra letter tile (L) at some point in the word and visually saw that it would need to go directly next to the other l in the word. Macy worked rather quickly when using the letter tiles to kinesthetically form the words involved in the lesson. Once she was directed by the teacher
prompt, she seemed comfortable rearranging the letter tiles to conventionally spell the given word.

In examining the post-assessment data, Macy improved her score by one, receiving a 9/10 on her test. She still spelled ‘answer’ the same unconventional way (‘awenser). However, in examining her written assessment, Macy did an excellent job utilizing her weekly spelling feature, integrating words that contained the -ou and -ow diphthongs, and doing so in a coherent way that told a story. This was an improvement from the previous two weeks of the story, where Macy struggled to use the word features within a story that had enough details to support her ideas. Interestingly, this week’s written assessment showed Macy underlining various misspelled words. When Macy was asked about this occurrence, she responded by stating that she underlined the words she wasn’t sure she spelled correctly. This shows an awareness of visual representation as well as integrating a tactile approach to editing her work. In second grade, students are expected to take responsibility for their own revisions process and be aware of words that they will need to use a resource to assist in spelling conventionally. Macy interestingly approached the editing process by using a kinesthetic motion of underlining words she knew were spelled incorrectly.
The fourth week of the study (May 27, 2013- May 31, 2013), Macy was looking more closely at silent beginning consonants: kn-, wr-, and gn-. Macy scored a 10/10 on the initial pre-assessment, correctly spelling all ten of the spelling words for the week. Through examining the assessment data and observational notes of Macy engaged in the pre-assessment, it was clear that Macy had a strong understanding of this word feature and how it worked within the context of words. Throughout the week Macy continued to challenge herself by practicing this feature using various words, other than the weekly spelling list.

The Making Words lesson that Macy participated in this week was shown to be at her independent level, as she was able to correctly create all of the chosen words, spelling them all correctly. The lesson for this week of the study was lesson 79, titled ‘playground’. The focus of this week’s lesson was working with the –oud and the –ound spelling patterns. The students were instructed as to which letter tiles they were to use for the remainder of the lesson. Macy only
used the instructed letter tiles and worked appropriately to form the dictated words. Macy was able to use self-talk to reinforce the ‘oww’ sound in the –ou word family, as shown in her ability to help other classmates who were struggling throughout this Making Words lesson. Examples of Macy engaging in self-talk to reinforce letter sounds can be seen in the observational notes taken below. Finally, Macy was able to correctly spell the week’s secret word (‘playground’) and in addition took it upon herself to mention that she recognized that the secret word of the week was also a compound word, which also exemplified her knowledge of compound words.

**Figure 4.6 Macy’s Observation Notes**

Macy scored a 10/10 on the final assessment of the week, showing a solid understanding of this week’s feature by not decreasing in her assessment score. In examining her writing sample for the week, with which she also received full credit on, she was able to correctly use
five of the weekly spelling words of the week, all containing the silent beginning consonants studied that week.

The fifth week of the study (June 3, 2013- June 7, 2013), Macy was looking more closely at consonant digraphs plus r- blends and the squ- spelling pattern. On this week’s list, there were six spelling words that contained the weekly feature and four review words from previous lists. Macy scored a 7/10 on the initial assessment. Macy’s pre-assessment shows her unconventionally spelling the following words: “shrike” for shriek, ‘squwak’ for squawk, ‘vacation’ for vacation. These invented spellings show a great deal of information regarding Macy’s progression through the Within Word developmental spelling stage, at this point in the study. Her spelling of the word ‘shriek’ as ‘shrike’ showed her knowledge of complex vowel patterns, especially her comfort for the VCe (vowel, consonant, ending e) word pattern. In addition, her unconventional spelling of the word ‘squawk’ as ‘squwak’ shows her understanding of the common –squ initial blend. This invented spelling also contained the correct ending, as Macy used all of the correct letters in her unconventional spelling. It was simply her letter placement that was out of order. This was also the case for her spelling of the word ‘vacation’. Macy used all of the correct letters but simply placed them in the incorrect order. This shows her knowledge of letter sounds and also shows the need for further instruction on correct placement of those letters.

The Making Words lesson for this week of the study did not completely relate to the weekly word feature for the week. Therefore, this lesson for the kinesthetic approach focused more heavily on word patterns using –ue, -us, and the word use. The lesson the students worked on this week was lesson 52, entitled ‘jugglers’. This lesson had an additional focus of ensuring the students correctly used capital letters for the formation of two proper nouns (first names) that
came up throughout the lesson. Macy showed a strong understanding in the creation of all words in this lesson’s particular list. She was observed helping to remind other students to use capital letters when spelling proper nouns, such as names. The only confusion witnessed from Macy in this week’s Making Words lesson was on the week’s secret word. The secret word of the week was the word ‘jugglers’. Initially, Macy spelled the word ‘jugel’ and stated that the word “did not look right”. She switched letters around for her second spelling and created the following: ‘jugle’ Macy stated after this try “that looks like the word jungle”. For a third time, she rearranged the words and created the word ‘juggle’. Upon creating that word with her letter cards Macy openly stated “I think that looks right! Now I just need to add an r and an s at the end.” Macy was observed using a lot of self-talk and thinking to work through slight confusions at points throughout this lesson. Examples of Macy’s self-talk can be seen in the below example of the observational notes taken throughout this week’s Making Words lesson.
Macy showed signs of regression on the post-assessment, scoring a 6/10. Macy spelled ‘shreik’ for shriek, ‘vacaion’ for vacation, ‘swack’ for squawk, and ‘squeze’ for squeeze. Macy showed several confusions on this list. Macy failed to understand that the vowel ‘–i’ comes before ‘–e’ following a consonant, the –tion ending, the –sq consonant digraph, and the –ee vowel pair. While these are confusions for her current developmental spelling stage, they too reveal a lot of information regarding Macy’s current placement in her developmental quest. While she misplaced the order of the –ie vowel pairing, she did include both letters in her attempt which shows an awareness of this pattern. At this point in second grade, an awareness of this spelling pattern is wonderful as it shows the students are working the pattern into their independent spelling attempts. In addition, Macy did not write the complete –tion ending in her
unconventional spelling of the word ‘vacation’. Macy was able to place all other letters correctly in the word, which makes me wonder if the missing letter t in the word was more attentional than it was a true spelling pattern confusion. Finally, Macy’s unconventional spelling attempt for both the of the –sq pattern words this week shows that she is working in the right direction of mastering the pattern. In one of the words she was able to recognize this very complex initial blend, which shows again an awareness of the pattern and an attempt to conventionally use it. Therefore, within her very minimal spelling confusions, it is clear that Macy is truly deeply thinking about the words and her knowledge of patterns.

These unconventional spelling attempts carried over into Macy’s writing sample for the week, as her work showed signs of these same unconventional attempts. Macy did not properly use the –ee vowel pattern in the word ‘heard’, as she spelled it ‘herad’ and the word ‘degrees’, as she spelled it ‘degres’. When analyzing these unconventional spellings, it is clear that Macy was thinking about letter sounds and letter placement as both invented spellings make perfect sense. In looking at Macy’s assessment data wholly, this last week of study proved to be Macy’s biggest struggle both in terms of assessment data as well as the writing sample. It is clear that as the spelling features increased in difficulty, Macy had to work harder to understand the feature and how to appropriately apply it to various words. That is not to say, however that she was not deeply thinking about words and spelling patterns, as in studying her unconventional attempts it is clear that she is was.
Culminating Interview

In examining Macy’s culminating interview that took place on June 17, 2013, it is interesting to note the differences in her answers between the first and second interview. When asked her feelings on the current word study lessons (Making Words program) she stated a level of enjoyment in the “game”, as she referred to it. This answer varies greatly from her original answer in the first interview, where she stated feelings of challenge as some of the lessons were “hard”. Macy discusses the same strategy of word chunking when spelling unknown words in independent writing situations. However, in her final answer to the culminating interview, Macy states, “It helps me to chunk the words when I write and I’m not sure how to spell them, like when I chunk words in the Making Words game that we play at guided spelling groups”. This is an interesting answer in that Macy is connecting the chunking strategy (simply breaking phonemes up), such as thinking about and applying syllables in her independent writing but also...
connecting this strategy to the Making Words program, thus showing Macy consciously thinking about the intervention while writing independently.

**Figure 4.9 Macy’s Post Intervention DSA**

![Developmental Spelling Assessment](image)

**Developmental Spelling Assessment: Post-Intervention**

**Post DSA (Developmental Spelling Assessment) Score: Macy- 22/25**

The above image depicts Macy’s final Developmental Spelling Assessment (DSA) after participating in the Making Words kinesthetic approach intervention. Macy was given the
assessment on June 13, 2013. Macy took the Within Word spelling assessment and scored a 22/25 on it, scoring the exact same number correct as in her initial Developmental Spelling Assessment. She was continuing to unconventionally spell words that contain R-controlled vowels, such as glare and complex consonants in words such as bridge. The word glare was the only R-controlled vowel that Macy unconventionally spelled and as previously discussed, her unconventional spelling shows her very sophisticated attempt to spell an unknown word with words that she knows. This word may not suggest confusion with R-controlled vowels, but rather simply a need for explicit instruction with this one word. However, on this assessment, Macy was able to successfully spell the word patch and identify the complex consonant –t within the word on this post DSA assessment. With a score in the high twenties and a strong understanding of complex spelling patterns, it is clear that Macy is ready to progress into the next stage of spelling development, the Syllable Juncture stage.

**Common Themes**

There were several themes that were apparent upon analyzing Macy’s data. The first is the level of engagement Macy was observed possessing when working in the Making Words lessons. She showed high interest in the kinesthetic program, referring to it as a “game” on numerous occasions, including the post-interview. During each Making Words lesson, Macy was observed interested, excited, and willing to participate in the manipulation of the letter tiles to form the dictated words. Her eagerness to participate and passion towards the kinesthetic program was also observed in her ability to help assist struggling students within her word study group. She nicely connected verbal cues and the kinesthetic manipulation, by verbally stating letter sounds and touching their corresponding letters.
A common theme that was observed with Macy throughout the course of the study was the reliance on her visual cueing system within both assessments as well as the kinesthetic Making Words lessons. Throughout many Making Words lessons, Macy was observed making comments that alluded to the fact that she relies heavily on her visual cueing system to identify whether or not a word “looks right” to her. She has a strong sense of how words should look and she can sense when letters are misplaced. This can be connected to Macy’s above-average reading level for the end of second grade. She was exposed to a great number and variety of literature and therefore connects the spelling and making of words to the reading and visual representation within the books she was reading.

These comments, referencing her visual cueing systems were made on weeks 2, 3, and multiple times on week 5. An example is during week 2, when attempting to spell the word ‘oil’. Macy initially spelled the word as ‘oyl’ and then commented saying “that doesn’t really look right to me.” She then proceeded to change the letters to make the correct spelling of the word oil. When asked next to add a word to make the word soil, Macy replied freely with “Hey! That was the word that I thought about before to help me spell the word oil.” In addition, in Macy’s weekly writing samples, she underlines words that she knew did not “look right” and this is her strategy for recognizing her own invented spelling. These pieces of evidence from the observational notes and writing samples show a clear reliance on Macy’s visual systems to identify whether or not a word looks correct to her. This theme was also observed in Macy’s weekly written assessment samples. Macy, many times, would underline either words containing the weekly feature or words that she knew were spelled unconventionally. There perhaps could be a connection between Macy’s engagement in the kinesthetic approach to the Making Words
lessons and the kinesthetic and tactile approach of underlining various words within her independent writing.

**Ryan**

At the time of the study, Ryan was an eight year old second grade student. Ryan struggled with independent tasks and focusing his attention on any activity for a prolonged period of time. Ryan held a great deal of knowledge with common spelling patterns and therefore was placed in the high word study group within the classroom. Ryan enjoyed working with various materials within the classroom for word study practice however struggled when he had to complete these activities without direct adult assistance. Ryan struggled with individual issues related to attention and focus. It was a great challenge to help Ryan attend to independent tasks for prolonged periods of time. In addition, writing tasks proved to be most difficult for Ryan as these required him to sustain energy and attention for a long period of time in order to properly convey his thoughts through written language.

In examining the various forms of assessment data compiled from Ryan over the five weeks of the study there were several common themes that emerged. One theme that emerged was Ryan’s unusually high levels of engagement throughout the Making Words lessons. In addition, another common theme that was found in the data analysis was confusion with conventionally using digraphs and common long vowel patterns within the context of his independent written work but not his kinesthetic activities in the Making Words program.

**Initial Interview**

Prior to the intervention taking place, Ryan was asked several questions, in an initial interview in order to learn more about his current feelings toward the word study program
currently in use. When asked how he felt about the current lessons, his response was rather vague only stating “I feel okay, I like how we learn how words work.” He then followed up by stating that he did not really think too much about our word study lessons when he was independently writing. Ryan identified his favorite word study activities to help when learning his spelling words as writing them and using spelling-city. Spelling-city is a website that was used in the classroom to help reinforce weekly spelling words. The website offered a variety of interactive activities, including games, to help the students learn their weekly word feature and words. Ryan stated when he is writing, the word study activities that were completed in class helped him to think about letter patterns. For example, he stated thinking about the difference between -ee and -ea based on what he learned from the word study activities. Finally, when asked about his strategies in independent writing for unknown words, he stated that he used his word book (individual student dictionaries) and also simply thinking about the letter or spelling pattern rules that he has learned so far.
Developmental Spelling Assessment: Pre-Intervention

Initial DSA (Developmental Spelling Assessment) Score: Ryan - 19/25

Figure 4.10 Ryan’s Initial DSA

The above image depicts Ryan’s initial Developmental Spelling Assessment (DSA) prior to the intervention program beginning. Ryan took the Within Word spelling assessment and scored a 19/25 on it. After analyzing the DSA, it is clear that, Ryan was still working toward mastery of words that contain long vowels, specifically words that have vowel-consonant-ending ‘e’, other common long vowels, complex consonant spelling patterns, and abstract vowels.
His invented spelling of the word ‘patch’ is a good example of Ryan’s current work toward mastering complex consonant spelling patterns. Ryan spelled the word as ‘pach’, which shows that he has a strong understanding of initial blends as well as common digraphs. This same occurrence can be seen in his spelling of ‘bridge’, as he spelled it ‘brige’. In this example, Ryan had an understanding of initial and final blends but did not recognize the middle complex consonant. This unconventional spelling was also seen in Macy’s first DSA data; in fact it was spelled the same way. Both children show solid understanding of the recognizable sounds in the word and do not include the complex and silent letter d because it is just that, silent. Ryan’s unconventional spelling does not show a lack of letter sound knowledge but rather simply inexperience with this spelling pattern. In analyzing some other of Ryan’s other unconventional spelling on this assessment, it shows that he needs more instruction in long vowel work. For example, he spelled ‘steep’ as ‘steap’. In this spelling Ryan is doing a number of things well; he recognizes and appropriately spells the initial blend, uses a middle long vowel pairing that makes sense, and uses the correct ending consonant. This same occurrence happens in Ryan’s spelling of ‘frown’, spelling it ‘froun’. Ryan again uses a middle long vowel pattern that makes sense and that he has used in words that have the same sound. Finally, his unconventional spelling of the words ‘coast’ and ‘grape’ as ‘coste’ and ‘grap’ show the need for more work with the vowel-consonant-ending e pattern. However, both unconventional spellings do show an awareness of this pattern, as Ryan spells the word coast using this very pattern. This assessment was a valuable piece of information going into the intervention and study, as it clearly represented the areas of strength for Ryan as well as the areas that would require further explicit instruction.

There was a great deal of information learned from Ryan’s initial interview and DSA. From the interview, one could gather that Ryan did not pay much attention to kinesthetic
activities for word study. This was seen in his rather vague response for answering which word study activities he felt helped him to learn his spelling list words the most. Ryan chose a computer program as his favorite, alluding to a more visual activity. In addition, the interview showed how Ryan was not using the word study activities in his independent writing, as he stated that he uses a student dictionary or word book to help him. In addition, the DSA also showed current word patterns that Ryan had a familiarity with as well as those for which he needed more instruction. The DSA showed a level of comfort with vowel patterns and other long vowel patterns.

**Weekly Assessment Data**

Within the following table (table 2) Ryan’s assessment data for each of the five weeks of the study is included. The table breaks out the assessment data by week. Within each week, the table lists which word study list Ryan was working on that week, his pre-test spelling test score, post-test spelling test score, writing sample score, and finally which Making Words lesson the group was working on that week. Each Making Words lesson is labeled with a number and word. The name of the lesson directly corresponds to the weekly ‘secret’ word that the children attempt to solve and conventionally spell. The weekly spelling list which states the word feature and focus for the week can be found in the appendix. In addition, the table lists the title of the Making Words lesson plan for each week. The full lesson, in its entirety can be found in the appendix. The table provides a general summary of the data analysis that follows.
Table 2
Ryan’s Assessment Data

<table>
<thead>
<tr>
<th>Week Number</th>
<th>Word Study list</th>
<th>Pretest Score</th>
<th>Final Score</th>
<th>Writing</th>
<th>Making Words Lesson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>B 29</td>
<td>8/10</td>
<td>10/10</td>
<td>3/4</td>
<td>Lesson 71 ‘cartoons’</td>
</tr>
<tr>
<td>2</td>
<td>B 30</td>
<td>9/10</td>
<td>8/10</td>
<td>4/4</td>
<td>Lesson 88 ‘snowflake’</td>
</tr>
<tr>
<td>3</td>
<td>B 31</td>
<td>9/10</td>
<td>8/10</td>
<td>5/5</td>
<td>Lesson 81 ‘lollipops’</td>
</tr>
<tr>
<td>4</td>
<td>B 32</td>
<td>6/10</td>
<td>9/10</td>
<td>6/6</td>
<td>Lesson 79 ‘playground’</td>
</tr>
<tr>
<td>5</td>
<td>B 33</td>
<td>6/10</td>
<td>5/10</td>
<td>2/4</td>
<td>Lesson 52 ‘jugglers’</td>
</tr>
</tbody>
</table>

Looking at Ryan’s assessment scores over the course of the study, it is clear to see his inconsistencies. Looking at the five week long study holistically, his assessment scores decreased between pre and post-assessment scores three of the weeks and increased a total of two weeks.

The first week of the study (May 6, 2013- May 10, 2013) the spelling feature was on the vowel digraph -oo. Ryan scored an 8/10 on this initial pre-assessment. He unconventionally spelled one word containing the –ch digraph as he spelled ‘teacer’ for the word teacher. His unconventional spelling shows that Ryan has an understanding of the long vowel spelling pattern and initial and final ending sounds. Ryan also unconventionally spelled a review sight word, spelling together as ‘together’. This too shows that Ryan has an understanding of initial blends,
vowels, and ending patterns. In both of Ryan’s unconventional spellings on this assessment, he was confusing common digraphs. It is interesting to note that Ryan was able to correctly use the same digraphs on the initial DSA (as in the correct use of the word “couch”).

In examining Ryan’s observational notes in the Making Words program for the week, there were interesting connections between his spelling on that lesson and the initial DSA given that week as well. The lesson for the first week of the study was titled ‘Cartoons’ and focused on working with common vowel patterns. The various vowel patterns included, -oo, -oy, -oi, -and – ou. The secret word of the lesson was ‘cartoons’, Ryan was observed as happily engaging in the new lesson and eager to begin making the words kinesthetically. This level of engagement was unusual for Ryan, as many times attending to independent tasks was a big challenge for him. Therefore, the level of engagement was the first observation noted at the start of the Making Words program for Ryan. This engagement can be seen in the observational notes for the weekly lesson, shown below.

*Figure 4.11 Ryan’s Observational Notes*
Ryan was experiencing great success in the beginning portion of the lesson and experienced no difficulty with the basic sight words and CVC words. Ryan’s first unconventional spelling was on the spelling of the word ‘soon’ as he initially spelled it as ‘son’. This can most likely be attributed to the fact that he needed the word to be restated and he was able to advocate for himself by asking me to repeat the word verbally and then correctly spelled this word. Interestingly, Ryan was able to conventionally spell the word ‘coat’ but then when prompted to add a letter to make the word ‘coast’ he completely changed the entire spelling and ended up spelling the word coast as ‘coste’. It is interesting to compare this spelling with the same word that was on the DSA. Ryan spelled the word coast in both situations the same way, showing his unfamiliarity of the word coast containing the long –oa and CVe (consonant, vowel, ending e) patterns. His unconventional spelling does show a great deal, as it makes perfect sense. Ryan understands that many words in the English language system that end in the letter e can make the middle vowel have a long sound.

Ryan ended up increasing his score on the post-assessment, scoring a 10/10 on the list for the week. In examining the written assessment for the week, Ryan experienced success in the spelling portion of the assignment, especially in terms of the weekly spelling feature. Ryan integrated many words into the writing portion that contained the –oo digraph, showing a great level of comfort with the weekly feature. The actual writing itself lacked voice and a story line that was easy to follow, which made it difficult to read. However, looking solely at the word features for the week, Ryan did a nice job on the initial written assignment.

The second week (May 13, 2013- May 17, 2013), Ryan’s group was looking more closely at vowel digraphs –aw and –au. Ryan was able to conventionally spell all but one of the list words containing the weekly word feature as well as the four review sight words on the
spelling list for the week. Ryan unconventionally spelled the word ‘taught’, spelling it as ‘taut’. Ryan’s spelling shows that he can identify and hear all of the audible sounds in the word, while the –gh digraph is silent. While Ryan correctly identified and spelled the weekly –au digraph, he again showed the need for further instruction with the digraph -gh. When comparing the use of the –gh digraph on his initial DSA, Ryan was able to conventionally spell a word with this spelling pattern in it. These inconsistencies show that Ryan is in the process of learning the appropriate times to use different patterns for the same sounds. His ability to sometimes conventionally use appropriate spelling patterns shows that he is internalizing the very complex rules of the English Language System.

The Making Words lesson for the week was lesson 88, ‘Snowflake’. This lesson was focused on integrating and practicing the -aw and -ow word pattern. The students began the lesson using the letter tiles to form the word ‘saw’ and built off of that to work through other words that contained the –aw word pattern. The weekly Making Word lesson for the week was rewarding for Ryan, as he experienced success in the physical making of many of the words. Ryan was observed as being engaged this week and had focused attention. This kind of behavior was atypical of Ryan and was a daily challenge in the classroom. However, perhaps a lack of attention did result in Ryan spelling the word ‘lawn’ on his first attempt at ‘lanw’. He was able to correctly spell the word on the second attempt. In addition, Ryan spelled the word ‘leak’ as ‘leek’ showing an understanding of long vowel spelling patterns. Many words in the English language system use the –ee vowel pattern to make the long vowel e sound and therefore Ryan was simply drawing from what he knows and has experienced in order to make a solid attempt at spelling an unfamiliar word. It is not clear whether or not attention played a role in Ryan’s performance in this week’s Making Words lesson. Observational notes for the weekly lesson
state Ryan’s attention zoning in and out throughout the lesson. The notes show inconsistencies with his engagement however, showing that at times he was focused and interested in the lesson. These notes can be seen in the figure listed below. Ryan mixed up two different spellings of two words given to him in the lesson. Ryan was observed physically manipulating letter tiles independently until he reached a spelling that looked correct and made sense to him. This was seen in the unconventional spelling of lawn, as Ryan was able to self-correct that letter confusion.

**Figure 4.12 Ryan’s Observational Notes**

The post-assessment score for this week resulted in Ryan receiving an 8/10, with his score decreasing from the week’s initial assessment. Ryan unconventionally spelled two words, containing the weekly feature, none of which he unconventionally spelled on the initial pre-assessment. Ryan spelled the word fault as ‘falt’ and the word hawk as ‘howk’. In both unconventional spellings, Ryan’s invented spelling neglected to properly use the week’s word feature, -au in ‘fault’ and –aw in ‘hawk’. Although Ryan did not identify the two word features
in his invented spelling, it did show a great deal. In Ryan’s spelling of fault, it shows that he
hears all sounds, both consonants and vowels. In addition, Ryan’s attempt at spelling the word
‘hawk’ as ‘howk’ shows his ability to properly recognize the –ow spelling pattern and attempt to
use it in a situation where it sounds appropriate. Finally, in his writing assignment, Ryan was
able to correctly spell all of the spelling list words with the correct feature, including the words
‘hawk’ and ‘straw’. This is interesting, as in his independent writing sample for the week, he was
able to correctly identify and use the –aw word feature for the week. The inconsistencies shown
on the post-assessment did not transfer over to his independent writing. On his writing
assignment, he continuously unconventionally spelled the word ‘through’, again showing a
confusion recognizing the –gh digraph at the end of the word. As previously stated however, this
inconsistency is appropriate for this age group as this digraph makes no recognizable sound in
the word. Therefore, Ryan’s unconventional spelling, not integrating the correct digraph does not
suggest an inability to recognize proper sounds in words but rather shows that he is still learning
to master when to use this digraph.
The third week of the study (May 20, 2013- May 24, 2013), Ryan’s group was looking closely at the -ou and -ow diphthongs. Ryan scored a 9/10 on his pre-assessment, however the word that he unconventionally spelled was not a word that had the weekly feature and instead was a review word for the week. Ryan spelled the word answer as ‘awswr’.

Ryan was observed actively engaging in this week’s Making Words lesson. The lesson for the week was lesson 81, titled ‘lollipops’. The lesson focused on working with the –ow, -all, -ell, -ill, and -aw spelling patterns. Ryan was observed actively engaged in the week’s Making Word’s lesson, excited for the lesson to begin and listening attentively. When asked to spell the
word ‘lip’, Ryan was observed repeating the word back in his own head and aloud while also emphasizing the short ‘i’ vowel sound. This was noted and observed on the weekly observational notes when it was noted that Ryan initially verbally spoke aloud the vowel ‘i’ sound in the word repeatedly, stating “i, i, i, short i sound”. Ryan’s ability to use self-talk to repeat the word back independently shows this level of attentiveness. When asked to spell the word ‘oil’, Ryan spelled it as ‘oile’ and needed to be reminded to take off the ending ‘e’. This is another example of Ryan’s inconsistent use and understanding of VCe (vowel, consonant, ending e) spelling patterns. Furthermore, when prompted to spell the word ‘pour’, Ryan spelled ‘poor’ which led into a short conversation about homophones. Ryan was able to spell the secret word (‘lollipops’) on the second attempt, after inserting the letter -y and needed to be reminded to not add letters, if I did no instruct him to do so.

For the second consecutive week in a row, Ryan’s post-assessment score was less than his pre-assessment scoring. Ryan scored an 8/10 on the final assessment of the week. Examining the assessment, Ryan once again spelled the word ‘answer’ as ‘answr’, as he did the week prior in the pre-assessment. His invented spelling once again showed an understanding of basic consonant-vowel relationships, however, he did not include the –er word ending. In addition, Ryan also misspelled the word ‘uncle’, spelling it as ‘unkele’. His invented spelling shows a strong understanding of letter sounds, as his spelling certainly makes sense and sounds right phonetically. This unconventional spelling is interesting because at the end of the assessment on the sentence dictation portion of the assessment, the word uncle was integrated into the dictation and Ryan correctly spelled it within this portion of the assessment. The dictation sentence is a sentence that is read aloud to the students, integrating the words with the weekly feature, which the students must transfer to independent writing. Ryan was able to correctly spell the word
‘uncle’ in this fashion but did not correctly spell it on the assessment. This can be seen in the figure below. In addition, in the writing assignment for the week, Ryan correctly spelled the word ‘uncle’ in that assignment. This shows that Ryan is working through his development of understanding the appropriate time and words to use certain spelling patterns. Ryan’s unconventional spelling shows that he is internalizing and attempting to independently use many of the spelling patterns that he is learning about. The inconsistencies in the conventional spelling are due to the fact that he is working through when to use certain spelling patterns.

*Figure 4.13.2 Ryan’s Weekly Assessment Sample*
In the fourth week of the study (May 27, 2013- May 24, 2013), Ryan was looking more closely at silent beginning consonants: kn-, wr-, and gn-. Ryan scored a 6/10 on the initial assessment for the week. Ryan spelled the word ‘cousin’ as ‘cusin’, ‘e’ for eight, ‘nash’ for gnash, ‘naw’ for ‘gnaw’, and ‘rap’ for ‘wrap’. It is apparent in analyzing Ryan’s initial assessment that he had very little understanding of the gn- and wr- beginning consonant spelling patterns. In addition, Ryan was still lacking an understanding of the –ou vowel pattern and the -gh consonant digraph.

The lesson for this week of the study was lesson 79, titled ‘playground’. The focus of this week’s lesson was working with the –oud and the –ound spelling patterns. The students were instructed as to which letter tiles they were to use for the remainder of the lesson. Ryan only used
the instructed letter tiles and worked appropriately to form the dictated words. Ryan was observed in the Making Words lesson for the week engaging and appearing to enjoy the physical manipulation of the words. This could be seen when Ryan was prompted to spell the word ‘rode’. Ryan appeared to be confused about which word to spell, and instead spelled the homophone ‘road’. This initiated a good conversation among the group. The students began thinking of other homophones and even created their own lists. Ryan was highly engaged throughout this conversation and even took it upon himself to kinesthetically build both variations of the words with the letter tiles. Also within this lesson, Ryan unconventionally spelled the word “loud” as ‘lode’, showing his awareness for the ending e rule, as shown in the initial DSA and throughout the study. The complex vowel pattern that Ryan did use in his unconventional spelling of the word loud shows both his awareness and comfort using it.

Ryan was able to dramatically improve his score in the final assessment of the week, scoring a 9/10 on it. The only work that Ryan unconventionally spelled this week was the word eight again; Ryan spelled the word ‘eight’ as ‘eaght’. This spelling is interesting in that it is the first time, in many weeks that Ryan was observed using the correct –gh consonant digraph pattern. In the weeks prior to this assessment, on multiple occasions, Ryan experienced great difficulty properly using the -gh digraph. This shows that Ryan is beginning to have an awareness of this spelling pattern and use it appropriately within the context of words. On the written assignment for the week Ryan wrote the number ‘8’, in numerical form, instead of writing it in the word form as ‘eight’ and therefore it was not clear whether or not he truly internalized the correct spelling of the word in authentic writing situations.
The fifth week of the study (June 3, 2013 – June 7, 2013), Ryan was looking more closely at consonant digraphs plus r- blends and squ- pattern. On this week’s list, there were six spelling words that contained the weekly feature and four review words from previous lists. Ryan scored a 6/10 on the initial assessment. Ryan spelled ‘weather’ as ‘wether’, ‘shreal’ for ‘shriek’, ‘squak’ for ‘squawk’, and ‘squees’ for ‘squeeze’. The initial assessment is a clear indication of Ryan’s comfort level with the weekly spelling assessment, as he was able to correctly spell the feature (squ- blend) in all of his attempts. It was the remainder of the words that Ryan experienced difficulty with. The level of difficulty is in terms of spelling the words conventionally, however, his unconventional attempts show a great deal of information regarding how Ryan is progressing through this stage of developmental spelling. For instance, Ryan’s spelling of weather as ‘wether’ shows that he has an understanding of common digraphs and initial and final letter sounds. In addition, his spelling for squeeze as ‘squees’ shows that he understands the initial and very complex squ- blend and also shows an understanding for the ee-long vowel pattern.
The Making Words lesson for this week of the study did not completely relate to the weekly spelling feature for the week. Therefore, this lesson for the kinesthetic approach focused more heavily on spelling patterns using –ue, -us, and the word use. The lesson the students worked on this week was lesson 52, entitled ‘jugglers’. This lesson had an additional focus of ensuring the students correctly used capital letters for the formation of two proper nouns (first names) that came up throughout the lesson. The week five lesson proved to be difficult for Ryan as his behavior was disengaged and non-attentive. Ryan needed many reminders to focus his attention that week. However, considering his behavior and lack of engagement, Ryan did well in the lesson as a whole. The only mistake that was noticeable in the observational notes was the spelling of the word ‘rule’. Ryan spelled it as ‘rool’ and changed it immediately upon looking at the word. This invented spelling creation showed a strong understanding of long vowel patterns, as the –oo sound does make the same sound as the vowel u with the ending e, as in the conventional spelling of the word rule. The image below shows the weekly observational notes for the Making Words lesson.

Figure 4.16 Ryan’s Writing Sample
Ryan showed signs of regression on the post-assessment, scoring a 5/10. Ryan was showing signs of the same confusions on this final assessment, as compared to the initial assessment given the week prior. Ryan confused the spelling of the word ‘through’, spelling it as ‘throgh’, ‘weather’ as ‘wether’, ‘squawk’ as ‘squak’, and ‘squeeze’ as ‘squise’. When analyzing Ryan’s work on this post assessment, there are many traits to be recognized. As in the initial assessment, one can see that Ryan, at this point in the study, had a firm understanding on the squ- blend, as he was using it appropriately in even the unconventionally spelled words. In addition, he has an understanding of certain vowel patterns that create long vowel sounds, as in his spelling of ‘shreak’. This choice in spelling shows that Ryan understood that the ‘-ea’ vowel pattern creates a long vowel sound. In addition, Ryan’s spelling of ‘throgh’ on this last assessment of the study proved hopeful as he has struggled with using the –gh digraph appropriately throughout the course of the intervention study.

Examining Ryan’s written work for the final week of the study, there are signs of comprehension from the past weekly features on previous spelling lists. Ryan was able to integrate the –gh digraph appropriately within the writing activity, which is exciting considering the confusions he had experienced with common digraphs throughout the study. In addition, many of the same unconventional spellings found on the written assessment relate directly to the post-assessment and therefore show a true confusion. What is meant by this is that many times Ryan would rote memorize how to spell a word on the spelling test and then lose the correct spelling in authentic writing situations, however, in this case it appears to be consistent between both forms of assessment.
In examining Ryan’s culminating interview, which took place on June 17, 2013, it is interesting to note the differences in his answers between the two interviews. When asked his feelings on the current word study lessons (Making Words program) he states a level of satisfaction, stating “I feel good- I like learning about words.” When prompted further, Ryan stated that “yes, they help me by practicing every day.” This answer varies greatly from his original answer in the first interview, where he stated feeling “okay” about it. Ryan mentioned practicing every day, making note of different word study activities used throughout the day. Ryan discussed various strategies for word study activities that he referenced in the second interview question. Ryan mentioned thinking about how the words should look such as on the word wall or with magnetic letters. This answer greatly varies from his original answer, as he did not mention any activities in the initial interview. When asked about which specific activities help the most, Ryan mentioned enjoying the use of sand/shaving cream to write word study words. This is an interesting choice, as it is certainly tactile in nature and different from his
original answer of the computer and writing. Ryan mentioned thinking a lot about the word study activities in his independent writing. He stated, “I try to remember the order of the letters but also think about the rules that we have learned.” Furthermore, Ryan stated that when he reaches an unknown word in his writing he “underlines it, to remind myself I need to check it later with a resource. Then I just think about what I know and have learned, like if the vowel is long, I will hear the letter.” These answers to the culminating interview are vastly different than his original answers. Ryan’s final interview answers showed a conscious thought process about how words work and how he was thinking about them at that time. The differences between Ryan’s initial and final responses on the interviews possibly indicate that the kinesthetic nature of the Making Words program may have impacted his ability to manipulate letter sounds in the building of words, therefore making him more conscious of this practice when independently writing.
Developmental Spelling Assessment: Post-Intervention

Post DSA (Developmental Spelling Assessment) Score: Ryan- 23/25

The above image depicts Ryan’s final Developmental Spelling Assessment (DSA), which was given on June 13, 2013 after participating in the Making Words kinesthetic approach intervention. Ryan took the Within Word spelling assessment and scored a 23/25 on it. His score improved on this final assessment, as compared to the initial assessment, as he scored four more correct. The information from this DSA showed that Ryan was only missing points in the area of
other common long vowels, as the assessment breaks down point values for each specific skill that is prominent in the developmental stage. Ryan’s sophisticated invented spelling of the word ‘steep’ as ‘steap’ shows a great understanding of common long vowel pairs as well as the correct placement of them, after an initial blend. Ryan showed improvements in his understanding of other common long vowels on this post-assessment, as he correctly spelled the word ‘grape’, understanding the VCe pattern, which was not show on the initial assessment. An additional improvement came from the word ‘frown’ as Ryan correctly identified the –ow spelling pattern and placed it correctly in the word, finding success in the spelling of this word on the post-assessment, as compared to the initial. With a score in the high twenties, it is clear that Ryan is ready to progress into the next stage of spelling development, the Syllable Juncture stage.

**Common Themes**

There were various common themes that emerged from the analysis of Ryan’s assessment, interview, and observation data. One theme that emerged was Ryan’s engagement level while participating in the making words lessons. In four out of five Making Words lessons, Ryan was actively engaged and attentive throughout the content on the lesson and the kinesthetic activity. Ryan needed minimal reminders to focus attention and complete the appropriate steps in the weekly lessons. His engagement and excitement toward the lesson was a consistent occurrence throughout the study’s entirety.

An additional common theme that was found in examining Ryan’s assessments and writing assignments was Ryan’s attempts to use various common digraph spelling patterns. Ryan was observed from the start of the study attempting to use various common digraphs. He would sometimes successfully complete this task and other times use the incorrect digraph in a word. In week one, Ryan confused one word containing the –ch digraph as he spelled ‘teacer’ for the
word ‘teacher’. Although Ryan was not able to conventionally spell the word with the correct digraph, his attempt does show that he in thinking about the spelling pattern. This can be seen in his attempt to correctly identify the letter ‘c’ in the word, as this shows that Ryan in thinking about the letters in the common ch- digraph. This same pattern with Ryan was present the second week of the study. While Ryan correctly identified and spelled the weekly –au digraph, he again showed inconsistencies with another digraph (-gh). When comparing the use of the –gh digraph on his initial DSA, Ryan was able to correctly spell a word with this pattern in it. Ryan was observed correctly using the digraphs in the Making Words lessons when active kinesthetic engagement was present, perhaps showing a positive effect from the tactile approach to building words. These inconsistencies show that Ryan is working on developing his understanding of how and when to use this digraph but is not yet able to so do on a consistent basis. This is merely a developmental progression and once Ryan understands which words use specific digraphs, he will be able to correctly spell those words. Ryan used the conventional spelling in Making Words lesson more frequently than in written assessment data and therefore may suggest a possible positive connection. The more engaged Ryan was in the kinesthetic activity, the more likely he was to conventionally spell the word with the correct digraph possibly constructing deeper meaning while doing so.

**Purple Group Common Themes**

Examining themes that emerged from the members of the purple group, both Macy and Ryan showed similar behaviors over the course of the five week study. The two common themes between both students included engagement and evidence of kinesthetic transfer to independent writing.
Over the course of the five weeks, engagement levels appeared to be a common theme in observational data for both Macy and Ryan when they were observed participating in the Making Words lessons for the week. Engagement levels for Macy were expected based on her personality traits; however, Ryan’s behavior leading up to the intervention was highly unengaged in all classroom activities. Ryan struggled to maintain focus and attention for nearly all classroom tasks and therefore his levels of engagement in the Making Words lessons were something interesting to note. Ryan was observed as acting engaged and interested in the Making Words lessons four out of the five weeks of the intervention. In addition, Ryan was actively participating in the lesson showing the high level of engagement. This too was observed with Macy, as she was observed eagerly participating and actively engaged in all five of the Making Words lessons. The high levels of engagement with the kinesthetic approach were apparent in both participants from this word study group.

An additional common theme observed within the purple group was a subtle kinesthetic transfer to independent writing situations. This theme was far more apparent in Macy’s work and observations than Ryan’s, however it was seen in both. Over the course of the study, Macy was observed relying heavily on her visual senses, taking note and paying attention to when words did not look right to her. The kinesthetic approach transferred into her writing when she was observed underlining words that she knew did not look right or were not spelled conventionally. Ryan also alluded to this act of underlining in his post-interview. Ryan listed underlining unknown words as a possible strategy for independent writing. Although his response was subtle, this was a common occurrence between the two members of the same group. This could therefore show a possible tactile connection between the Making Words lessons and independent writing by integrating the kinesthetic act of underlining in authentic writing situations.
Green Group

I will present two separate cases for the children in this group. The first child is Joey and the second, Katie. The green group was the second highest achieving group in the classroom at the point of the study. The green group members were early Within Word spellers. This particular group had just entered the Within Word developmental stage at the start of the study. The group consisted of six members and Joey and Katie were two of the six. Within this stage, the students are beginning to have an understanding and awareness of initial and final consonants, including both blends and digraphs. This developmental stage of spellers does not yet consistently use conventional patterns such as consonant doubling and vowel in an unaccented syllable form.

Joey

At the time of the study, Joey was an eight year old second grade student. Prior to the start of the study, Joey was progressing at a natural pace through the developmental spelling stages. Joey was a student who struggled with attention and it was a challenge for him to focus on many tasks. Joey was most engaged with tasks that involved reading and stories. In addition, Joey showed signs of inconsistencies with word feature knowledge in independent writing activities, as described in the characteristics of the developmental stage, stated above.

Upon analyzing the various forms of data specific to Joey, there were two reoccurring themes that emerged. Most weeks, Joey appeared to be highly unengaged in the Making Words lesson. This was noted with observational data tracking the number of times Joey required adult and peer prompts for redirection and refocusing. An additional reoccurring theme seen over the
course of the last three weeks of data collection was a tapping noise made when completing Making Words lessons as well as written tasks.

**Initial Interview**

Joey first took part in an initial interview process in which he shared his current feelings and thoughts toward the word study program in the classroom. Joey stated a sense of “fun” in the current word study activities as they helped him learn. In addition, he stated consciously thinking about the word study lesson when he was independently writing because he liked to think about writing in the lines and remembering how to chunk (meaning, breaking words apart into separate phonemes). In addition, spellingcity.com (a website used in the classroom) was his favorite activity for practicing words, as the games were fun in his opinion but also helped him practice his spelling words a lot because of the competitive factor. His answers show that he was thinking about word study activities at the time and that some had an impact on his learning and thinking when independently writing.
Developmental Spelling Assessment (DSA): Pre-Intervention

Initial DSA Score: Joey- 18/25

Figure 4.19 Joey’s Initial DSA

The above image depicts Joey’s initial Developmental Spelling Assessment (DSA) prior to the intervention program beginning. Joey took the Within Word spelling assessment and scored an 18/25 on it. After analyzing the DSA, it is clear that at this point, prior to the intervention beginning, Joey was developing an understanding of words containing long vowel patterns, complex consonant patterns, and abstract vowels. In addition, it also showed that Joey
was competent in long vowels with an ending e pattern as well as R-controlled vowels. Joey unconventionally spelled the word patch as ‘pach’. This is a very common spelling for this developmental stage, when attempting words with complex consonants. Joey easily recognized the correct initial sound, vowel placement, and ending digraph. Joey also spelled the word steep as ‘steap’, showcasing his understanding for long vowel patterns. Joey spelled the word bridge as ‘brige’, again showing a great understanding for the initial blend, middle vowel, and ending pattern. The complex spelling pattern in the middle of the word is difficult to hear and in fact, is silent. The letter g in the word represents the phoneme in this word. Joey is simply working through the development of understanding when to use this complex spelling pattern. Joey also spelled the word coast as ‘coste’, showing a solid understanding of VCe (vowel, consonant, ending e) word patterns. Joey also spelled the word flood as ‘floud’ and point as ‘pount’, showing an awareness and eagerness to use the –ou vowel pattern. Joey did not spell the word ‘quite’ correctly on the initial assessment, however, received credit for the spelling because he correctly identified the spelling feature of the word which was the qu- initial blend.

In examining the 17 words that Joey did spell correctly in their entirety, it is clear that at the point that the assessment was given, Joey held a fair amount of knowledge on common word parts as well as other sophisticated concepts. Joey had a strong understanding of long vowels, specifically with the vowel consonant, ending e pattern. In addition, he also was strong in the area of R-controlled vowels. This assessment was a valuable piece of information going into the intervention and study, as it clearly represented the areas of strength for Joey as well as the areas that would require further explicit instruction.

There were many important pieces of knowledge that were gathered from Joey’s interview data as well as his initial DSA. From the interview data alone, a great deal was learned
about Joey that showed how he was currently thinking about word study activities in relation to his authentic independent writing. The interview was the first source of information in the study that showed his feelings toward word study activities and was a precursor that showed his already present interest in some word study activities. Joey did not allude to any kinesthetic enjoyments when discussing his current process for word study in the classroom. In addition, the DSA showed how Joey was currently using his knowledge to progress through the Within Word developmental stage of spelling. It showed that Joey had a strong understanding on how to use onset and rimes in a predictable fashion as well as his knowledge of consonants and vowels and their relationship. This assessment also showed his invented spelling which gave instructional points for the research projects future.

**Weekly Assessment Data**

Within the following table (table 3) Joey’s assessment data for each of the five weeks of the study are included. The table breaks out the assessment data by week. Within each week, the table lists which word study list Joey was working on that week, his pre-test spelling test score, post-test spelling test score, writing sample score, and finally which Making Words lesson the group was working on that week. Each Making Words lesson is labeled with a number and word. The name of the lesson directly corresponds to the weekly ‘secret’ word that the children attempt to solve and correctly spell. The weekly spelling list which states the spelling feature and focus for the week can be found in the appendix. In addition, the table lists the title of the Making Words lesson plan for each week. The full lesson, in its entirety can be found in the appendix. The table provides a general summary of the data analysis that follows.
In examining Joey’s assessment scores, he made continuous improvements throughout the course of the semester. Four out of the five weeks of the study, Joey made improvements in his assessment score from the pre-test to the post-test. The only week this observation was not seen was week three when his pre-test score was higher than his post-test score. Looking more closely at the other four weeks of data, Joey made significant gains each week from pre-assessment data to post-assessment.

Week one’s (May 6, 2013 - May 10, 2013) spelling feature was short and long vowel o, with a focus on the -oa and -ow feature. Joey received a 6/9 on his pre-assessment, spelling ‘does’ as ‘dose’, ‘coach’ as ‘couch’, and ‘dock’ as ‘doak’. In his pre-assessment, it is clear to see Joey’s prior knowledge regarding the use of the -oa vowel pattern as he experiments with it in

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<th>Week Number</th>
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<th>Pretest Score</th>
<th>Final Score</th>
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<th>Making Words</th>
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<td>10/10</td>
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<td>‘Snowflake’</td>
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<td>B 2</td>
<td>8/10</td>
<td>9/10</td>
<td>4/4</td>
<td>Lesson 52</td>
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</tr>
<tr>
<td>3</td>
<td>B 3</td>
<td>9/10</td>
<td>8/10</td>
<td>3/4</td>
<td>Lesson 29</td>
</tr>
<tr>
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<td></td>
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<td></td>
<td>‘flashlights’</td>
</tr>
<tr>
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<td>B 4</td>
<td>8/10</td>
<td>10/10</td>
<td>4/4</td>
<td>Lesson 7</td>
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<td></td>
<td>‘contests’</td>
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<tr>
<td>5</td>
<td>B 5</td>
<td>6/10</td>
<td>10/10</td>
<td>3/4</td>
<td>Lesson 12</td>
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<tr>
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<td></td>
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<td>‘thanks’</td>
</tr>
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the unconventional spelling of the word ‘dock’ as ‘doak’. This week’s writing assessment proved successful for Joey in that he correctly used the week’s spelling feature, identifying such words as “coach”, “dock”, and “know”.

The Making Words lesson for the week was lesson 88, ‘Snowflake’. This lesson was focused on integrating and practicing the -aw and -ow word pattern. The students began the lesson using the letter tiles to form the word “saw” and built off of that to work through other words that contained the –aw word pattern. Interestingly, in response to the first prompt of the lesson to spell the word ‘saw’ Joey spelled the word ‘sawd’ and had to be reminded of the letters he was expected to use, as the letter ‘d’ was not a letter the students were told to use. The second attempt Joey was able to correctly spell the first word. When Joey was prompted to spell the word ‘lawn’, he initially spelled it as ‘laown’ and was then observed stating, “That looks wrong to me. Laaaaw.” Joey was stretching out the sounds he heard in the word and then formed the word ‘law’ and eventually ‘lawn’. This first lesson of the Making Words program was difficult for Joey as his behavior was recorded as being non-engaged for most of the prompts and needed a lot of redirection and reminders to focus his attention on the task at hand. Most rounds of prompts and word formation Joey would fall behind his peers and have to catch up to the working pace of the group.

In examining the post assessment scores for the week, Joey increased his score by receiving a 10/10 on the final assessment for the week. He was able to showcase his new knowledge of the weekly spelling feature through his post-assessment for the week. Joey did not participate in a writing sample for the week as he was absent on the day that his group participated in the written assessment portion. Although there was not an authentic writing sample for this week, Joey did showcase his knowledge on the sentence dictation portion of the
post spelling assessment. I read aloud a sentence containing some of the words on their weekly spelling test to witness how they transfer their knowledge and spelling words to written format. Joey correctly spelled all spelling list words in the context of the sentence.

Week two (May 13, 2013 - May 17, 2013) of the study for Joey’s group focused on short and long vowel u, with a central focus on open syllable –ew and –ue. Joey was able to correctly spell all list words that had this spelling feature, however, unconventionally spelled two common sight words that were put on that list as review. Joey spelled ‘every’ as ‘evry’ and ‘friend’ as ‘frend’. Therefore, Joey received a total score on the initial assessment of 8/10. Joey’s invented spelling of the word ‘every’ reveals insight that he is thinking about letter sounds and appropriately placing them in his invented spelling. When pronouncing the word ‘every’, it is difficult to hear the middle vowel sound which is most likely the reason Joey did not include it in his attempt at spelling the word. Joey did successfully represent each phoneme he heard when he said the word. In addition, the same can be said about his invented spelling of the word ‘friend’. Joey heard the initial fr- blend and used a word he knows, end, to include also. The middle vowel has no recognizable sound and therefore is most likely the reason Joey did not include it. Joey certainly was listening closely to all letter sounds in both of these attempts at spelling two unknown words.

The second week of the study the Making Words lesson the students worked on was lesson 52, entitled ‘jugglers’. This lesson focused on the –ue, -us, and –use word patterns. This lesson had an additional focus of ensuring the students correctly used capital letters for the formation of two proper nouns (first names) that came up throughout the lesson. Joey showed a strong understanding in the creation of all words in this lessons list. He was able to correctly spell all given words, showcasing a strong understanding for that Making Words lesson. The
only error that Joey was observed making in this particular lesson came in the beginning when prompted to spell the name ‘Gus’. Joey initially spelled it as ‘gus’ and recognized that it is a name and therefore replaced the lower case ‘g’ when a capital ‘G’. He was able to correctly spell the secret word of the week on the first attempt; the word was ‘jugglers’.

His behavior was again not fully engaged, although he was more attentive as compared to the previous week. This varied attention could be seen through observational notes for the week. Joey was initially engaged and showing attentive focus when he was able to self-correct his initial spelling of one of the prompted names in the Making Words lesson, Gus. Joey initially spelled the name ‘Gus’ with a lowercase ‘g’ but was able to self-correct and replace with a capital letter. However, his behavior and engagement levels seemed to decrease after this. This was seen through the need for teacher directed prompts and the need to restate the spelling prompts for the Making Words lesson. Joey’s engagement then picked back up shortly after this again, showing the inconsistency in the engagement levels for the week. When Joey was engaged it was apparent through his focused attention in manipulating the letter tiles and also not needing me to restate the given word. The inconsistent engagement throughout this week’s lesson implies that the kinesthetic program was able to hold Joey’s attention, however the amount of time it did so varied. Also interesting to note was the times that Joey was observed as being inattentive. When I examined the data, I noticed that Joey was more unengaged when there was a need for teacher-directed prompts. This showed the connection between engagement and physical manipulation of the letter tiles. I noticed that Joey was far more engaged when he had the opportunity to kinesthetically work with the letter tiles versus listening to directions.

Joey was able to master the spelling of the word friend in the week and correctly spell it on the post-assessment, however, continued to unconventionally spell the word every on the
post-assessment. When examining Joey’s writing sample for the week, he was able to correctly spell all words that contained the week’s feature (short and long u with open syllable –ew and –ue). In addition, it is interesting to note that Joey correctly spelled the word friend in his independent writing sample.

**Figure 4.20 Joey’s Writing Sample**

![Joey's Writing Sample]

Looking more closely at week three, the spelling feature or goal of the week was mastering an understanding of the short and long vowel ‘i’, focusing especially on the –igh and open syllable –y. In his pre-assessment, Joey showed familiarity with the –igh feature as seen in his overgeneralization of it, spelling the word ‘white’ as ‘wight’. Joey scored a 9/10 on his initial assessment, only unconventionally spelling the word ‘white’.

The third week of the study (May 20, 2013- May 24, 2013), the Making Words lesson plan proved to be successful for Joey in terms of spelling success. Joey was working on lesson 29 ‘flashlight’ this week. This lesson had a central focus on the vowel patterns –igh and –ight. Although Joey was successful with his spelling in this lesson, his attention was a large concern this week, as he needed teacher prompts for refocusing after each word that was presented to him. He seemed to be completely separate from the group atmosphere most times and even
caused peers to give him constant reminders for refocusing at times. Joey was able to spell each word correctly, however, only after it was presented to him on numerous occasions by both me and his peers. In addition, Joey was observed making a tapping sound using his voice and fingers on the working table. Joey was observed tapping sounds out on the table, sometimes in sync with the letter sounds of the given word. This behavior perhaps suggests a link between the kinesthetic nature of the Making Words program and the physical tapping that Joey began using as a strategy to move letter tiles and ultimately spell words.

Joey continued the same unconventional spellings in the post-assessment, however, also showed a greater understanding of the ending ‘e’. On the post-assessment for week Joey scored an 8/10. This score decreased from the initial assessment at the start of the week. The new unconventional spelling found on this post-assessment was the word ‘night’. Joey spelled it as ‘knight’, which also shows his understanding of words that sound alike but have different meanings and are spelled differently. Joey also once again unconventionally spelled the word ‘white’, this time blending two different spelling features, spelling it as, ‘wighte’. This use of the spelling feature for the week showcases an awareness and appropriate use of the ‘igh pattern. Interestingly, Joey was able to correctly spell the word ‘night’ in his writing assessment, yet again unconventionally spelled ‘white’ as ‘wight’. Joey’s written assessment for the week was coherent and made sense to a reader. It is important to note that although Joey used the wrong form of the word ‘night’ in his post-assessment for the week, he was able to use the correct form in the context of his written work. This occurrence shows an understanding of words that sound alike but are spelled differently and have multiple meanings. In addition, in analyzing his writing for the week it is interesting to think about the kinesthetic program in relation to the writing sample. Joey used the finger tapping when writing independently also paired with very slight and
quiet sounds. The combination of all these kinesthetic and physical actions may suggest a link in
his thinking back to the kinesthetic Making Words program. It was during the intervention
program that Joey’s new tapping behavior was observed and the fact that this in combination
with the noises were also observed during both the Making Words lessons as well as during
independent writing suggests a possible connection. The suggested connection would be that the
Making Words kinesthetic lesson aided in Joey’s new tapping (physical) behavior that helped
him attempt to conventionally spell unknown words when writing independently.

**Figure 4.21 Joey’s Writing Sample**

Week four (May 27, 2013- May 31, 2013) of the study for Joey’s group focused on the
short and long vowels ‘i’ and ‘o’, specifically for VCC words. On his pre-assessment Joey
unconventionally spelled two words, receiving an 8/10. Joey spelled the word fond as ‘fawned’
and child as ‘cild’. Joey showed an awareness of vowel sounds in both of his unconventional
spellings. In his spelling of the word fond, Joey showed an awareness of long vowel patterns in
his use of the –aw pattern. In addition, Joey was able to correctly identify the initial and final
sound in the word child, however neglected to recognize the ch digraph.
The Making Words lesson of the week was lesson seven ‘contests’. The focus of this week’s lesson was reviewing vowel sounds ‘e’ and ‘o’. As in the previous week, Joey was successful in the physical building of the words used in the Making Words lesson; however his attention was observed as being non-attentive once again. There was a total of five times throughout the lesson where Joey required redirection from an adult or a peer. The secret word of the week was ‘contests’. Joey initially spelled the word as ‘kontest’ and immediately recognized the unconventional spelling and was able to correct the spelling without any assistance. Joey was observed as being very quiet throughout the Making Words lesson, not speaking to peers or using any self-talk to reinforce words and letter sounds. I made an additional observation of Joey throughout the Making Words lesson for week four, which was a physical tapping sounds Joey would make sounds using his fingers, on the table. As Joey thought about the sounds that he needed to form with letters, he would tap his fingers at a rather fast pace on the table. Perhaps the physical movement of the tapping is somehow connected to the physical and kinesthetic manipulation of the letter tiles in the Making Words program itself.
Joey scored a 10/10 on his post-assessment for the week, increasing his score from the initial pre-assessment. Joey correctly spelled all list words showing a great awareness and understanding of the short and long ‘i’ and ‘o’ vowel sounds within the context of words. In addition, he went on to complete a flawless writing sample for the week, spelling four of the list words correctly, as well as prior week’s spelling feature such as the –igh pattern in words. In addition, Joey spelled many sight words correctly within this week’s writing sample.

Week five was Joey’s greatest improvement in terms of assessment data. He received a 6/10 on his pre-assessment and a 10/10 on his post-assessment. The week’s feature was a review of long vowel patterns. In examining Joey’s pre-assessment he spelled the word ‘sweep’ as ‘sweep’. Joey’s unconventional spelling had meaning in that he was remembering one of the previous week’s long vowel patterns. Joey also unconventionally spelled the word ‘scold’ as ‘scholed’ showing an awareness of the long ‘o’ vowel. Joey spelled the word ‘slide’ as ‘slie’,...
showing his understanding of final ‘e’ in words with long vowels. Finally, Joey lost credit on one of the review sight words that was on the list for this week. Joey spelled ‘it’s’ as ‘its’, missing the apostrophe.

Joey’s group participated in the Making Words lesson 12 ‘thanks’ throughout week five of the study. The focus of this lesson was a review of the th- sound as well as reviewing various long vowel patterns. In examining the Making Words observational data for the first week of the study, Joey’s behavior was the most noticeable factor observed. Joey was not engaged for most of the teacher directed prompts. He needed a great deal of redirection and refocusing and he fell behind the other students in the groups on all rounds of prompts. It was noted on the observational notes for this lesson that Joey required three different prompts to begin spelling the first word of the lesson, thus showcasing the non-attentiveness within the small group setting. In addition, Joey only had one misspelling in the last Making Words lesson of the study. Joey spelled the word ‘then’ when promoted to spell ‘than’. This is most likely an attention related unconventional spelling and not an actual spelling miscue. Joey was able to correctly identify the week’s secret word. Finally, the tapping behavior that had been observed in the previous two weeks was once again present in the final week of the study.

Joey scored a 10/10 on his final post-assessment for the week. This was a four point gain from the initial pre-assessment given at the start of the week. Joey showed an obvious improvement in his ability to understand and utilize the weekly spelling feature. In terms of his written assessment for the week, Joey lost one point on his written assessment for the week when he unconventionally spelled the word ‘found’, spelling it as ‘fond’. Interestingly, the sentence after unconventionally spelling the word found, Joey correctly used the word found again, this time spelling it correctly. The initial unconventional spelling was most likely then due to
attention related factors, as in the following sentence Joey shows his understanding of the correct spelling of this word. In reviewing the rest of his written work for the week, Joey completed a well written piece, utilizing many spelling features. Finally, observational notes for the week state the occurrence of the tapping behavior from Joey when independently completing his written assessment for the week. The same tapping behavior and noises that were made within the Making Words lesson for the past three weeks were once again made when Joey was completing the writing assignment. Therefore, perhaps this occurrence shows a connection between the physical manipulation of the letter tiles to form the words and the physical act of the written assignment.

*Figure 4.23 Joey’s Writing Sample*
Developmental Spelling Assessment: Post-Intervention:

Post DSA (Developmental Spelling Assessment) Score: Joey - 20/25

Figure 4.24 Joey’s Post DSA

The above image shows Joey’s post-assessment data for his DSA, which was given on June 13, 2013. Joey was administered the Within Word DSA assessment at the end of the five week study to compare his pre and post-test scores. Joey showed signs of improvement on this post DSA, scoring a 20/25 which is two points higher than his initial DSA prior to the start of the intervention. In this post-assessment, Joey showed confidence with long vowels that have a vowel-consonant-ending –e pattern as well as complex consonant patterns that were also seen in
the initial assessment. Joey increased his score in the complex consonant component, showing new confidence in this area of spelling development.

In examining the post-test, there were several gains in Joey’s ability to conventionally spell words that he could not at the start of the study. Joey showed greater knowledge with complex consonant spelling patterns by correctly spelling the word ‘bridge’ on this assessment. This is an improvement compared the initial assessment when Joey neglected to recognize the need for the consonant (letter d) in the word. In addition, Joey was able to correctly identify the feature of the word ‘flock’, although still using invented spelling to create this word; Joey attempted the word as ‘floack’. His spelling shows a greater awareness of the final /ck/ sound. In addition, Joey was able to correctly spell the word quite on the post-assessment, whereas on the initial assessment he correctly identified the initial qu- blend but neglected to add the appropriate middle vowel to the word.

Joey’s unconventional spelling on the post DSA show areas that require further instruction for his word study development. Joey continued to spell the word ‘patch’ as ‘pach’. Although Joey was able to recognize a complex consonant pattern in one of the words on the post DSA this invented spelling of the word patch shows that he is still working towards mastery of complex consonants. In addition, Joey continued to spell the word ‘steep’ as ‘steap’. This unconventional spelling shows signs that Joey has a strong understanding of long vowel patterns, as his choice of using the –ea vowel pair makes sense in this attempt. This too was the case in his invented spelling of the word ‘stood’; spelling it is as ‘stode’. Joey’s spelling shows that he is still working through common vowel patterns for a complete mastery and understanding.
Final Interview:

Joey took part in a final, post-interview following the five weeks of the study. Joey still expressed feelings of joy when discussing word study activities. He stated that it was like playing and doing fun games. When asked how he thought about word study lessons when independently writing, he stated “Well I think about how the word should look—like should it be more letters long because there are extra letters left over, like in Making Words.” This is an interesting connection to the intervention program. Joey connected the Making Words program to thinking about the number of letters within words. Furthermore, when asked about his favored activities for word study in the classroom, Joey once again mentioned the use of the Spelling City website. Joey stated, “I think about seeing them—like on a computer screen, whiteboard, or letter tiles.” This answer is expanded upon, as compared to his initial interview. In this answer, Joey is able to state more examples that lean towards favoring visual word study activities.

Common Themes:

The most prominent theme when looking across his data for the five weeks was his attention. The lack of attention was clearly evident in the Making Words lessons and observation notes. He had a great amount of difficulty following the prompts and keeping up with his peers. This was clearly indicated in his engagement levels and the amount of times both I and his peers have to remind him of focusing and completing the given prompts. Joey was observed as having behaviors that were unengaged and non-attentive for all five weeks of the study.

An additional common theme noticed when analyzing the assessment data from the five weeks was Joey’s overall performance on assessments. Four out of the five weeks of the study, Joey made improvements in his assessment score from the pre-test to the post-test. The only
week this observation was not seen was week 3 when his pre-test score was higher than his post-test score. In addition, when comparing his initial and final DSA assessment, that data showed an increase in overall score as well as Joey went from scoring an 18/25 to a 20/25.

A final theme that emerged from the data analysis was a trend in a behavior observed from Joey. Joey was observed making a tapping sound using his voice and fingers on the working table. Joey was observed tapping sounds out on the table, sometimes in sync with the letter sounds of the given word. This behavior continued throughout weeks four and five in the Making Words lessons. In addition, the same tapping and sound behavior was observed in the last week of the study when Joey was engaged in his independent writing assessment for the week. This behavior was observed with Joey in both Making Word lesson as well as independent writing situations. The tapping was both with his pencil as well as his fingers on the surface of the table. It is not clear whether the behavior was due to hyperactivity or if the kinesthetic program helped Joey develop this habit. However, it is important to note that this behavior was never observed with Joey in the classroom up to this point. It may be that the physical manipulation of the letter tiles helped Joey to develop this habit of very subtle, fine motor movement that he then used as a strategy to spell words when independently writing. The Making Words program was kinesthetic and physical in nature and therefore it is possible that perhaps Joey developed the physical habit while engaging in the program itself. It is interesting to think about whether or not the physical tapping habit was used as a strategy to perhaps group letters into syllables and then attempt to conventionally spell.
Katie

At the time of the study, Katie was an eight year second grade student. Prior to the start of the study, Katie’s spelling development was a concern within the classroom. Katie’s spelling development appeared to be progressing at a natural pace; however, she was extremely inconsistent with her ability level. There were times Katie appeared to have a strong grasp on weekly spelling features (mostly in isolation, such as on a spelling assessment) and then there were times she appeared to lose that knowledge (mostly within the context of independent writing tasks). In terms of behavior and personality traits, Katie was a consistently well-behaving student who always put forth maximum amounts of effort. She was hard working and most important to note, she was aware of her own areas for improvement and was eager to improve. Katie was very honest and vocal about her struggle with spelling and set personal goals to improve and better herself.

Upon analyzing the data there were common themes that emerged based on Katie’s assessment data, interviews, and observational notes. Over the course of the five week study, common themes observed with Katie were engagement levels, consonant and vowel placement confusion when spelling words and a physical-verbal strategy for blending and segmenting words.

Initial Interview: Pre-Intervention

Katie took part in an initial interview that discussed her thoughts, at the start of the study regarding the word study program in the classroom. The initial interview data from Katie were beneficial in understanding her thoughts surrounding the word study program. She expressed feelings of content when asked about the current word study approach, stating “I feel like I’m really learning my new words.” She mentioned thinking about letter patterns when writing
independently. Furthermore, when asked her favorite word study activity she stated that using the whiteboards was enjoyable to her because “I get to know my words by writing them and reading them.” The next question asked about strategies used when thinking about spelling words in writing, and Katie’s answer showcased a possible absence of strategy use as she mentioned “I think about my spelling words because I remember them.” The fact that Katie could not identify a specific activity used in the classroom shows that Katie was possibly not thinking about spelling strategies when she was engaged in independent writing. Her answer to the culminating question was however thoughtful. When asked her approach to spelling unknown words when writing in her journal she stated, “I write it how I think it goes, if it doesn’t look right then I think of spelling rules like adding a –e to the end to make the vowel say its name.” The initial interview gave great insight as to how Katie was thinking about word study activities at that time.
Developmental Spelling Assessment (DSA): Pre-Intervention

Initial DSA (Developmental Spelling Assessment) Score: 8/25

Figure 4.25 Katie’s Initial DSA

The above image shows Katie’s initial Developmental Spelling Assessment (DSA) prior to the intervention program beginning. Katie took the Within Word spelling assessment and scored an 8/25 on it. The Within Word spelling assessment proved to be very difficult for Katie. Although she did not show mastery at this level, it was a good indicator of her current developmental stage of spelling progression. Her score solidified her placement in the beginning stages of the Within Word stage.

The assessment showed her using invented spelling with words that contain R-controlled vowels, such as glare and complex consonants in words such as ‘patch’ and ‘bridge’. Her spelling of the word glare showcased her very sophisticated unconventional spelling ability to
use initial blends paired with words she knew. This can be seen in her spelling the word as ‘glair’. In addition, she also spelled the word ‘bridge’ as ‘brig’, showing a solid understanding of initial blends, middle vowels, and ending sounds. A final example can be seen in her invented spelling of the word ‘patch’ as ‘pach’. Although she was unable to recognize the letter /t/ in the middle of the word, she experienced no difficulty with the initial sounds and ending digraph. The fact that she did not include the middle letter /t/ in the word is not overly concerning at this point in her word knowledge development as the letter is in fact difficult to hear and pronounce in our English language dialect.

An example of her awareness of long vowel patterns came from her invented spelling of the word steep. Katie spelled it as ‘stepe’ showing her comfort with using the vowel, consonant, ending e pattern. Therefore, based on the assessment data, Katie was not yet aware of which common long vowels and complex consonants to use when attempting conventional spelling, however was able to showcase a great deal of knowledge otherwise.

There were many important pieces of knowledge that were gathered from Katie’s interview data as well as her initial DSA. From the interview data alone, a great deal was learned from Katie that showed how she was currently thinking about word study activities in relation to her authentic independent writing. Katie was able to name current word study activities that were occurring in the classroom that she was comfortable using independently. She was able to identify what worked best for her, which showed her conscious thought process about strategies and activities that she found success with. In addition, the interview showed that Katie was at peace with the current program and that she felt like she was progressing towards her individual goal of improving her spelling development. The interview gave a slight glimpse into how Katie was connecting word study to independent writing. Finally, the DSA was solid numerical data
that showed Katie’s developmental stage in her individual path of spelling development. This data were valuable because it showed what concepts Katie had an understanding of at the start of the study, and most importantly where the instruction of the intervention program needed to take her.

**Weekly Assessment Data**

Within the following table (table 4) Katie’s assessment data for each of the five weeks of the study are included. The table breaks out the assessment data by week. Within each week, the table lists which word study list Katie was working on that week, her pre-test spelling test score, post-test spelling test score, writing sample score, and finally which Making Words lesson the group was working on that week. Each Making Words lesson is labeled with a number and word. The name of the lesson directly corresponds to the weekly ‘secret’ word that the children attempt to solve and conventionally spell. The weekly spelling list which states the spelling feature and focus for the week can be found in the appendix. In addition, the table lists the title of the Making Words lesson plan for each week. The full lesson, in its entirety can be found in the appendix. The table provides a general summary of the data analysis that follows.
In reviewing the weekly assessment data for Katie, the data show a slow yet steady improvement over the course of the five week study. Katie was a student that in particular struggled greatly with spelling. Therefore, the improvements made over the course of the study were especially monumental in terms of her spelling development. The major theme identified from the assessment chart above is that Katie made steady improvements each week from her pre-test to her post-assessment for the week.

Week one’s (May 6, 2013- May 10, 2013) spelling feature was short and long vowel o, with a focus on the -oa and -ow feature. Katie received a 6/10 on her pre-assessment. Many of her unconventional spellings were due to her not yet having a solid understanding of consonant placement. For example, Katie spelled the word ‘close’ as ‘cose’, neglecting to represent the initial consonant blend. Katie understood the letter sounds in two of the words she spelled unconventionally, however she did not place those letters in the correct order to conventionally...
spell the word. For example, she spelled the word ‘know’ as ‘know’, ‘does’ as ‘dose’, and ‘throw’ as ‘thorw’. Many of these same unconventional spellings were repeated in both her post-assessment and written assessment for the week. Finally, Katie received a 7/10 on the post-assessment for the week. Two of her unconventional spellings were for consonant misplacement and one was for a misuse of the –oa vowel pattern.

The Making Words lesson for the week was lesson 88, ‘Snowflake’. This lesson was focused on integrating and practicing the -aw and -ow spelling pattern. The students began the lesson using the letter tiles to form the word ‘saw’ and built off of that to work through other words that contained the –aw spelling pattern. Katie was engaged and excited. This excitement stayed with her throughout the entire first lesson. She appeared attentive and ready to learn the rules of the game. When engaging in the weekly lesson, Katie was not able to initially conventionally spell the word ‘saw’. Katie took out letters that she was not instructed to and spelled the word ‘sow’. Although this showed that Katie was thinking about the weekly spelling feature, which was –ow, it also showed that she was not using it conventionally in the given word. Once instructed to not take out letters that were not part of the lesson, she chuckled at herself for not correctly following the rules of the ‘game’. After the re-teaching and explanation of the process, Katie seemed to understand the rules of the program. Throughout this lesson, Katie incorrectly spelled a basic CCVC word on three occasions, spelling the word ‘slow’ as ‘solw’, ‘lawn’ as ‘lwan’, and ‘flow’ as ‘folw’. This vowel and consonant misplacement was extremely common with Katie’s word formation. Katie was able to correctly spell the week’s ‘secret word’, which was ‘snowflake’. However, this took Katie three attempts. I do believe that because this was the first lesson of the program, Katie was still adjusting to the rules and processes of the program. Once she realized that she must use all of the given letters to correctly
identify and form the week’s secret word, she was able to form the word ‘snowflake’ on her third attempt.

**Figure 4.26 Katie’s Observation Notes**

Katie’s post-assessment for the week was a 7/10. Her score from the pre-assessment went up by one point and it was clear she was able to work through some confusion throughout the course of the week. In comparing her post-assessment to her pre-assessment, Katie made some reoccurring errors but also rectified some as well. For example, on the pre-assessment for the week, Katie spelled the word ‘close’ as ‘cose’ and the word ‘does’ as ‘dose’. These two unconventional spellings were repeated on the post-assessment for the week, showcasing Katie’s confusion with the onset. However, Katie did show improvement with some of the mistakes made on her pre-assessment. Katie initially spelled the word ‘know’ as ‘konw’ and the word ‘throw’ as ‘thorw’. This letter misplacement was very common for Katie, as she many times would confuse the order of the consonants and vowels within words. However, on the post-
assessment of the week, Katie was able to correctly place the letter in the correct order and receive credit for those two words.

Katie’s writing sample for the week showed some information in regard to spelling feature knowledge transfer. She wrote a short piece discussing her father’s experience with a baseball coach. In the writing sample, Katie conventionally spelled four of the list words. Interestingly, Katie was able to conventionally spell the word know, a word that she experienced difficulty with earlier in the week. Katie continued to unconventionally spell the word ‘does’ in her writing sample for the week, spelling it as ‘dose’. In addition, Katie used the incorrect vowel when attempting the word hurt. This spelling is not overly concerning, as the vowel sound and choice is a common invented spelling for this age group. Katie’s length and voice in this writing sample was slightly different than her usual writing pieces. Katie enjoys creative writing pieces and usually is able to expand more on her ideas. In this writing sample, Katie was using conventional spelling for many words. In addition, her writing is mostly clear from letter misplacement. Finally, this written sample shows Katie successfully attempting the conventional spelling of words, using the correct number of letters. Katie struggled with this concept prior to the start of the study as well as throughout the initial Making Words lesson discussed above. Katie had to be retaught on how to use all of the necessary letter tiles to form the word conventionally. In examining her written sample, it appears that Katie was using the correct number of letters in most of her attempted spellings. Therefore, there could be a possible connection between the initial Making Words lesson discussing numerical amounts of letters when conventionally spelling words and her independent writing sample for the week.
Week two of the study (May 13, 2013- May 17, 2013) Katie’s group focused on short and long vowel u, with a central focus on open syllable –ew and –ue. Katie received a 7/10 on her pre-assessment for the week. Katie spelled the word ‘true’ as ‘ture’, the word ‘every’ as ‘evey’, and ‘house’ ‘houe’. Again in week two it is clear to see the misplacement of letters and absence of some necessary consonants in her unconventional spelling attempts. Katie worked toward great achievements this week in both the kinesthetic program and its transfer to her independent thinking about spelling pattern knowledge. This week, Katie was instructed to begin sliding her finger under the word formation and verbally say letter sounds as she moved her finger. This physical strategy was intended for Katie to begin thinking about breaking apart letter sounds in recognizable pieces. Katie responded well to the strategy as seen in my Making Words observational notes and writing assessment data.

The second week of the study (May 13, 2013- May 17, 2013) the Making Words lesson the students worked on was lesson 52, entitled ‘jugglers’. This lesson focused on the –ue, -us, and –use spelling patterns. This lesson had an additional focus of ensuring the students correctly used capital letters for the formation of two proper nouns (first names) that came up throughout
the lesson. Throughout the week, my observational notes document Katie working intensely on
matching consonant blends, for example, properly identifying the consonant blend of /sl/ in the
word slug. The Making Words lesson for the week proved difficult for Katie. Her behavior was
engaged, she was respectful, well mannered, and was open to all feedback and assistance.
However, she had a very difficult time with the week’s prompts, forming the words correctly,
and the letters being in the correct placement. She once again needed to be reminded of the rule
of the program, which is not taking out any additional letters, other than the ones presented to the
students at the start of the lesson. In addition, as in the case of the prior week, she was showing
signs of confusion when attempting to spell CCVC (consonant, consonant, vowel, consonant)
words. This was seen in the spelling of the word ‘slug’, spelling it ‘sulg’. When she spelled this
word unconventionally, she eagerly accepted the help of a peer to help rectify confusions.

Throughout the Making Words lesson for week two, Katie showed ease and comfort with
the spelling of simple CVC words. She was able to correctly spell three of those words in
consecutive order, on the first attempt. The secret word of the week was ‘jugglers’ and it took
Katie five attempts before she correctly spelled that word. Her attempts at the spelling were as
follows: ‘juglr’, ‘jugelr’, ‘juggelr’, and ‘juggler’. The array of attempts shows her working
progressively through letter placements to eventually spell the word conventionally. In each
attempt she is working closer to the conventional spelling. For example, from her first to second
attempt she recognized the need to add an additional vowel in the word, which is a meaningful
realization. Then from the second to the third attempt Katie recognized the need to add an
additional g in the middle of the word. Finally, from her third to final attempt, Katie rearranged
the ending consonants to eventually conventionally spell the word. In examining her multiple
attempts at the secret word of the week it is clear that Katie was thinking deeply about letter
sounds, corresponding letters, and also letter placement. Katie did make an interesting comment while working through her developing letter placement knowledge construction when identifying the secret word. Katie stated, “Hey! That word has the word jug in it- like before, words within words!” Her excitement for this realization shows that Katie was thinking about word segments and using parts or whole words that she knew to form unknown words, such as in the example of the juggler's word.

I instructed Katie to begin sliding her finger under the word formation and verbally say letter sounds as she moves her finger. I used this instructional strategy in the hope that Katie would independently recognize when she inserted a letter in the wrong place within a word. Katie took well to this strategy and was reminded to use it in the next Making Words lesson. At the time, I did not realize the physical relationship between this suggested strategy and the kinesthetic word study intervention program. However, it is clear now that the two are related. Katie responded well to the physical act of moving her finger under words to break letter sounds and syllables into recognizable parts, which connects nicely to the kinesthetic intervention program.

Her post-assessment score for the week was a 10/10, completely rectifying her misplacement of consonant blends and vowels. In addition, her written assessment for the week showed a solid understanding of the week’s feature along with additional vowel patterns, such as the –ou and –ai. Katie was spelling many common sight words conventionally within the context of her independent writing for the week however there are places within the writing that the letter placement is again off. For example, in the written assessment Katie spells the word ‘said’ conventionally three times and unconventionally once, spelling it ‘siad’. Interestingly, during the writing time period for this week, Katie was given the option to use the letter tiles to help her
navigate her way through attempting to spell unknown words. Although she did not choose to use the letter tiles, once they were offered to her she did begin using the strategy mentioned above of sliding her finger under unknown words. This perhaps shows the link in her thinking with the kinesthetic Making Words program and the physical strategy of sliding her finger under unknown words.
Week three (May 20, 2013- May 24, 2013), the spelling feature of the week was mastering an understanding of the short and long vowel i, focusing especially on the –igh and open syllable –y. This week proved to be the largest improvement for Katie in terms of pre-assessment to post-assessment scores as she went from receiving a 4/10 to an 8/10. In her pre-assessment, Katie showed familiarity with the –igh spelling feature as seen in her unconventional spelling of it, spelling the word ‘white’ as ‘wigth’, the word ‘high’ as ‘higth’, and the word ‘night’ as ‘nigth’. Katie’s other two unconventional spelling attempts were for neglecting to represent consonants in words. For example, she spelled the word ‘grill’ as ‘gill’ and the word ‘twice’ as ‘tice’
In terms of the making words lesson plans for the week, Katie’s behavior once again was engaged and excited for the lesson. This was seen through observational notes. For example, when I introduced the lesson to the group, Katie showed her excitement for the activity by saying “Yay!” showing excitement for the upcoming lesson. Her group was working on lesson 29 ‘flashlight’ this week. This lesson had a central focus on the vowel patterns –igh and –ight. She did experience some confusion within the lesson, showing misplacements of vowels and consonants, as seen in previous weeks. For example, when asked to spell the word ‘fist’, Katie spelled it on her first attempt as ‘fit’ and then realized she had a leftover ‘s’. She was able to correctly place the extra missing letter in its appropriate placement in the word. Within this lesson, Katie was observed paying closer attention to vowel sounds and whether or not they were long or short. This was observed in her own self-talk throughout the lesson. For example, when spelling the word ‘high’ Katie picked up and pointed out the fact that the –igh pattern makes a long I vowel sound. Katie correctly spelled the secret word of the week, flashlight, on the first attempt and even vocalized her understanding that this word was a compound word, as she stated excitingly, “That’s a compound word!”

In her post-assessment, many of these unconventional spellings were corrected, only unconventionally spelling the word ‘night’ and ‘quit’. Her spelling of the word night was the same as the initial pre-assessment, spelling it ‘nigth’. Furthermore, Katie also continued to use unconventional spelling to spell the word ‘quit’. Katie spelled the word as ‘qiwte’, showing an awareness to letter sounds as her invented spelling makes sense when separating and blending letter sounds. Interestingly, when examining the written portion of the weekly assessment, Katie had varying levels of understanding with the spelling feature of the week. Within the written assessment she spelled the word ‘grill’ correctly on all occasions except one, when it was spelled
as ‘gill’, which was how it was spelled on her initial pre-assessment at the start of the week.

Katie was observed this week using an instructional strategy for her written assessment that was recommended to her in an earlier Making Words lesson. When attempting unknown words, Katie would run her finger on the paper and verbally chunk letter sounds while recording the corresponding letter. This occurrence shows a number of things. It first shows Katie’s ability to internalize and independently use a strategy given to her. It also shows a possibly kinesthetic connection in the moving of her finger on the paper combined with the verbal speaking of the letter sounds to the physical formation of matching letters.
Week four (May 27, 2013- May 31, 2013) of the study for Katie’s group focused on the short and long vowels I and o, specifically for VCC words. Katie unconventionally spelled two words on her pre-assessment, scoring an 8/10. She spelled the word fond as ‘foand’ and child as ‘chaild’. Katie’s choice of letters in these spelling attempts shows her varying understanding of long vowel combinations and experimentation of spellings.

The Making Words lesson of the week was lesson 7 ‘contests’. The focus of this week’s lesson was reviewing vowel sounds e and o. Katie was once again engaged in the Making Words lesson of the week. She started off the lesson strong; spelling the first three correctly and then
unconventionally spelled the word not as ‘knot’. This showed Katie’s new sense of awareness with the kn- initial blend. Katie spelled all words correctly, up until the point of the week’s secret word, which was ‘contest’. Katie spelled the word in two attempts prior to spelling it correctly. She initially spelled the word as ‘cnotst’ and then ‘contst’ and then finally spelled it conventionally. Katie was observed using self-talk and stating to herself a verbal reminder that she had to use all of the given letters to find the secret word of the week. Katie stated out loud ‘Oh, I have to use all of the letters!’”. This realization from Katie was monumental in terms of its direct connection to the kinesthetic study. The Making Words program and its corresponding letter tiles were used in the physical building of words. As Katie and the other children manipulated letter tiles, they were held accountable for using all of the letter tiles. This accountability factor may have aided in their spelling development as it allowed them to become more aware of certain spelling patterns. In addition, Katie was also observed this week using the physical stretching method of running her finger under the letters and blending sounds that she heard. This certainly appeared to help her in spelling the word ‘nest’ when she was sliding her finger and repeatedly stating st- st –st.
She received full credit on her post-assessment for the week, receiving a 10/10 and correctly using the weekly spelling feature. She showed no signs of confusion on the post-assessment for the week and appeared to have full understanding of the weekly spelling feature. Her written assessment for the week showed a very noticeable disconnect from her post-assessment data, in that she did not receive full credit. Katie unconventionally spelled the word frog as ‘forg’, reverting back to the misplacement of letter within the structure of the word. It appeared this week that when Katie was writing, her ideas were coming to her at a rapid pace and she struggled to keep up with the written expression. Her story had humor, interesting events, and she appeared to be so intrigued by her thoughts that her spelling strategies were not as strong.
Week five (June 3, 2013- June 7, 2013) proved to be a difficult week for Katie in terms of assessment scores. The weekly spelling feature for the week was a focus on reviewing long vowel patterns. Katie received a 5/10 on her pre-assessment. She again showed uncertainty with letter placement, consonant blends, and vowel patterns. Examples include spelling the word scold as ‘sold’, they’ve as ‘thay’ve’, bright as ‘brite’, trail as ‘trale’ and slide as ‘slid’. All of Katie’s invented spellings on this initial pre-assessment certainly show that she was consciously thinking about letter sounds in her attempt at forming the words as she used a number of conventional patterns in her unconventional spelling attempts.
Katie’s group participated in the Making Words lesson 12 ‘thanks’ throughout week five of the study. The focus of this lesson was a review of the th- sound as well as reviewing various long vowel patterns. The Making Words lesson for the week proved to be the most successful for Katie. She answered 13 out of the 14 prompts given to her. The only confusion she experienced was when prompted to spell the word ask. Katie initially spelled the word ask as ‘aks’, again exemplifying her inconsistent use of vowel consonant placement. Katie was able to correctly spell the week’s secret word, which was thanks, on the first attempt. Her behavior was engaged and attentive, as it was for the past four weeks of the study. The engagement and attentiveness was observed through the observational notes. The data state Katie was engaged, appearing to be smiling and happy the entire length of the lesson. Her clearly observable happiness can be connected to kinesthetic program as she became beamingly happy when the lesson was introduced to the group. If Katie was clearly happy and engaged when working with the Making Words kinesthetic program, she was invested in the content of the lesson and building spelling knowledge. This can be seen in the below image of the observational notes for the week. The knowledge that she was building was knowledge that could then be transferred to independent writing situations.
Katie showed minimal amounts of improvement in her post-assessment, scoring a 6/10. She had many of the same unconventional spellings as in the pre-assessment, only correcting one word, which was the word scold. Again, as in the initial assessment for the week, the unconventional spelling choices Katie made when spelling many of the words on the post-assessment made sense and correctly matched letter sounds. Therefore, Katie’s invented
spellings are showing a conscious effort at listening to letter sounds and matching those sounds with written letters.

When examining her written assessment for the week, Katie showed varying levels of understanding. Her work can be seen using the correct letter placement of words such as ‘bright’ and ‘found’. However, within the same written piece, she also unconventionally spells those same two words. The inconsistency of letter placement continues to be Katie’s greatest area of improvement at the end of five weeks. Interestingly, Katie’s written work uses the word trail and is spelled conventionally. Katie was unable to correctly spell this same word on the initial and post-assessment for week five. Therefore, it is interesting to see the word used conventionally in the context of authentic written text. Katie was observed this week once again using the physical action of sliding her finger under certain words when writing independently, again connecting the kinesthetic manipulation of letter tiles with the physical act of sliding and writing.
Final Interview: Post-Intervention

Katie’s post-interview conversation was vital to seeing her thought process following the intervention method. Katie’s answers changed drastically on some questions, as compared to the initial interview. Katie mentioned that she was excited with the current word study approach and found enjoyment in the Making Words “game” as she called it. She stated that, “it was fun to make the letter move around and to try and figure out the secret word.” This answer supports the observational data throughout the five weeks that states Katie was engaged and attentive. She was engaged because she was having fun trying to identify the weekly secret word! When asked strategies for solving unknown words in independent writing, Katie was able to list a variety of
strategies, as compared to the initial interview when her strategy use was vague. She mentions chunking, looking for visual clues to whether or not it ‘looks’ right, and thinking closely about sounds and their corresponding letters. Finally, Katie mentioned a strong liking of the Making Words program specifically in question number 3, when asked about the word study activities that help her to learn spelling words. She stated: “Making Words! We have been doing it a lot and it’s fun to try and move letter tiles around and to figure out words.” This a drastic difference as compared to the initial interview. In the initial interview, Katie was not able to verbalize any specific activity that helped her learn her spelling words; however, when asked again after the intervention program, Katie was able to recognize the Making Words program as beneficial to her. Not only did Katie describe her happiness and excitement that she felt towards the program, which shows her engagement levels, but she also was able to state how letter manipulation helped her spell unknown words conventionally. This answer from Katie is monumental when comparing answers from the two interviews. Katie certainly experienced growth from the intervention program in terms of learning and appropriately using strategies to assist in the attempted spelling of unknown words.
Developmental Spelling Assessment (DSA): Post-Intervention

Post DSA (Developmental Spelling Assessment): 12/25

Figure 4.34 Katie’s Post DSA

The above image depicts Katie’s culminating DSA assessment, which was given on June 13, 2013, directly following the five week intervention program. Katie scored a 12/25 on the Within Word assessment list. This is a four point improvement as compared to the initial assessment given at the start of the intervention program, 5 weeks earlier. The assessment shows that while Katie has mastered long vowels with VCe (vowel-consonant-ending e), she is still working through the development of fully recognizing R-controlled, other common, and abstract vowels. As previously stated however, many of Katie’s unconventional spelling attempts to do
not show a deficiency in spelling skills, but rather a steady progression though her current
developmental spelling stage. When comparing this final assessment to the initial assessment it is
clear to see that Katie had vastly increased her spelling pattern knowledge and was working
toward conventional spellings with certain patterns.

On the DSA, there were a total of five words given that assessed the understanding and
mastery of long vowels with a vowel, consonant, ending e pattern. Katie was able to spell all five
of these words correctly, showing a greater awareness as compared to her score of three out of
five on the initial assessment. The two words that Katie was able to spell conventionally in this
feature area were the words cute and drive.

The next area on the DSA that Katie showed great improvements with was the R-
controlled vowels feature. Katie went from receiving 0/5 credit on the initial assessment to
receiving 3/5 on the post DSA. She was able to spell the following words conventionally that
contained an R-controlled vowel: glare, hurt, and fear. Katie’s consistent use of this feature
shows her growth of understanding and more importantly, application, within this area.

Finally, Katie remained unchanged in the last two areas of the DSA assessment. Katie
received a score of 1/5 on other common long vowels and complex consonant patterns. She
spelled the same two words incorrectly on her initial assessment and again on her final
assessment, therefore, showing a remaining confusion with these two features. In addition,
Katie’s score on the final feature of the DSA (abstract vowels) went from a 3 to a 2 on the post-
assessment. Katie incorrectly spelled the word couch, spelling it as coach. This is an interesting
application as the –oa vowel pair was taught and practiced in the Making Words lesson plans,
perhaps showing a transfer over to her post DSA. The post assessment DSA shows the growth
Katie made over the 5-week period in terms of progressing through the Within Word developmental stage of spellings.

**Common Themes:**

Throughout the entire study and through examining the data, there were several common themes that emerged based on Katie’s work. The first theme within examining Katie’s assessment and observation data was her behavior during the intervention program, Making Words. In each lesson that was presented to her, Katie was extremely engaged and attentive, showing signs of interest and motivation to learn. In addition, Katie was extremely receptive to receiving feedback and assistance from adults and peers alike.

An additional common occurrence throughout Katie’s data was her consistent showcasing of developmental progression with vowel and consonant placements. In most Making Words lessons, assessment data, and writing samples, Katie was observed misplacing vowels and consonants consistently. For example, instead of spelling the very simple CCVC word ‘frog’, Katie would switch the r and o and instead spell ‘forg’. Many times, she could not recognize this confusion independently and would need the assistance of a teacher or peer to recognize her mistake. This occurrence was also seen in her independent writing samples. Many times, Katie would spell the same word conventionally and then with misplacement of consonants and vowels all within the same writing sample. These inconsistencies were observed throughout the entire five week period.

An additional theme observed over the course of the study was Katie engaging in a mixed physical and verbal strategy for word formation. Within the beginning stages of the Making Words lessons, I suggested to Katie to slide her finger under the word and individually chunk
and blend the letter sounds she saw. Katie took to the strategy and began using it independently in both her kinesthetic Making Words lessons and also in authentic independent writing situations.

A final theme that emerged from observing Katie over the course of the intervention was her comments regarding a need to use all of the letter tiles in the Making Words program. When Katie was engaged in the weekly kinesthetic program, she learned that she must use all of the letters dictated to her. For example, if I told the children to take out the following letters: s, w, n, and o and then told them to spell the word snow, they understood that all four letters must be used. Katie initially struggled with this concept early on in the intervention program; however she quickly learned this rule. Once Katie understood how the program worked it helped her understand certain spelling patterns. As Katie and the other children manipulated letter tiles, they were held accountable for using all of the letter tiles. This accountability factor may have aided in their spelling development as it allowed them to become more aware of certain spelling patterns.

**Green Group Common Themes:**

There were four common themes observed for the green group over the course of the five week study. Both Joey and Katie experienced increases from their initial to their final DSA, increased post-assessment scores on weekly spelling tests, physical integration to writing tasks, and accountability for spelling certain patterns through the use of the letter tiles.

Through examining the assessment data for both Joey and Katie over the five week study, both students had increased scores on their final DSA. Both Joey and Katie were administered the Within Word assessment prior to the start of the study. Joey received an 18/25 while Katie
received an 8/25 on her initial assessment. When they were once again administered the same DSA when the five week period was over, both Joey and Katie increased their score as compared to the initial assessment. On the final DSA, Joey received a 20/25 showing an increase of two points. Katie received a 12/25, showing an increase of four points. Therefore, as both students increased their DSA scores after the five week study, it is clear that their spelling feature knowledge had increased within the time frame.

In addition, a common theme witnessed from both Joey and Katie were increased post-assessment scores each week. In looking solely at assessment scores from weekly spelling exams, Joey was able to increase him score from pre to post assessment four out of the five weeks of the study. Katie too was able to increase her scores from pre to post assessment five out of the five weeks of the assessment. Therefore, both students were showing competence and knowledge increases each week, regardless of the weekly feature.

Finally, both Joey and Katie were observed participating in interesting physical actions throughout some Making Words lessons as well as when independently writing. Joey was observed making a tapping sound while using his voice and fingers on the working table throughout Making Words lessons as well as when independently writing. Interestingly, Katie was also observed engaging in a mixed physical and verbal strategy for word formation. Within the beginning stages of the Making Words lessons, it was suggested to Katie to slide her finger under the word and individually chunk and blend the letter sounds she saw. Katie began using this strategy throughout the Making Words lessons and also used it when writing independently. In addition, Katie verbally stated in one Making Words lesson the need to use all of the letter tiles. This verbal reminder was interesting in that it showed she was consciously thinking about spelling patterns with the available (and required) letters. She was held accountable for using all
of the required letters and this helped in her developmental knowledge of which letters form
which spelling patterns and how those patterns are represented in the English Language system.
Therefore, both students in the green group were observed using some kind of physical or
kinesthetic method that had verbal connections in both the intervention program as well as in
authentic writing situations.

**Blue Group**

I will present two separate cases for the two children in this group. The first child is Tyler
and the second is, Gary. The blue group was the lowest achieving group in the classroom at the
time of the study. The blue group just graduated from the Letter Name stage and just recently
entered the Within Word developmental stage. Spellers within the Letter Name developmental
stage rely heavily on the names of letters to spell words, as they approach the sound they are
trying to reproduce. Typically, at this point in second grade, students should have been working
in a higher developmental stage for spelling prior to this point. The blue group had been working
through the Letter Name developmental stage for the entire school year and at this point in the
year had just approached the end point of this stage and entered into the Within Word stage.
When working in the Within Word developmental stage, the students are beginning to have an
understanding and awareness of initial and final consonants, including both blends and digraphs.
This developmental stage of spellers do not yet consistently use conventional patterns such as
consonant doubling and vowels in an unaccented syllable form. The group consisted of six
members and Tyler and Gary were two of the six.
Tyler

At the time of the intervention study, Tyler was an eight year old second grade student. Tyler had been in the lowest word study group for the entire school year, as he struggled in the beginning of the year with conventional spelling of very simple CVC and CVVC sight words. Tyler worked through the Letter Name stage and completed all appropriate word sorts within that stage. Tyler had just graduated from the Letter Name developmental stage prior to the start of the intervention program. He began the Within Word stage the first week of the study. Tyler was a self-motivated learner who thrived on self-accomplishments. In addition, he was a hard-working and bright student who seemed to only struggle in the area of word study and conventional spelling.

Initial Interview: Pre-Intervention

The initial interview that was presented to Tyler gave great insight into how Tyler was thinking about and using the word study activities prior to the intervention beginning. When he was asked about his current feelings toward the word study activities being used in the classroom, Tyler mentioned feeling “okay” with it and that word study was his favorite part of the morning centers. In addition, Tyler could not specify one specific strategy for spelling unknown words. When he was asked, Tyler stated that he just knew how to spell it because he already learned the words. Tyler listed his favorite word study activity as Spelling City, the website used to practice and reinforce weekly spelling words. Tyler listed this activity as his favorite because he thought it was fun to play the games. Finally, Tyler mentioned strategies of chunking familiar letter sounds and using visual cues when independently writing unknown words.
Developmental Spelling Assessment (DSA): Pre-Intervention:

Initial DSA (Developmental Spelling Assessment) Score: 7/25

Figure 4.35 Tyler’s Pre DSA

The above image shows Tyler’s Developmental Spelling Assessment (DSA) score prior to the intervention beginning. Tyler had just exited the Letter Name stage and was given a Within Word DSA. Tyler scored a 7/25 on the Within Word assessment. His assessment gave great insight as to how Tyler was currently functioning in terms of spelling development prior to beginning the intervention program. The assessment showed that Tyler was progressing steadily through the long vowel (vowel-consonant-ending e) pattern knowledge. In addition, the
assessment also showed that Tyler was struggling to recognize and show an understanding of R-controlled vowels, other common long vowels, complex consonant patterns, and abstract vowels, which was not alarming considering his new entrance into the Within Word developmental stage. Tyler’s lack of knowledge with these features showed exactly where his instructional needs were.

The assessment showed him using invented spelling with words that contain R-controlled vowels, such as glare, and complex consonants in words such as patch and bridge. His spelling of the word ‘glare’ showcased his sophisticated unconventional spelling ability to use initial blends paired with letters that made sense. This can be seen in his spelling the word as ‘glar’. In addition, he also spelled the word ‘bridge’ as ‘brig’, showing a solid understanding of initial blends, middle vowels, and ending sounds. A final example can be seen in his invented spelling of the word ‘patch’ as ‘pach’. Although he was unable to recognize the letter /t/ in the middle of the word, he experienced no difficulty with the initial sounds and ending digraph. The fact that Tyler did not include the middle letter /t/ in the word is not overly concerning at this point as the letter is in fact difficult to hear and pronounce in our English language dialect. Based on the data, it does appear that Tyler is able to represent every phoneme in each word.

In addition, the assessment data showed Tyler using invented spelling strategies to spell words with common long vowels and complex consonant spelling patterns. This could be seen in his invented spellings of the following words: ‘steep’ as ‘step’, ‘might’ as ‘mite’, ‘lest’ as ‘least’, and ‘pant’ as ‘paint’. All of these attempts show a great deal of phonological developmental spelling. His spelling of steep as step shows an inconsistency with short and long vowel sounds. In addition, the other attempted spellings mentioned above show that further instruction was needed for other common long vowels patterns such as –ea, -ai, and –igh. The attempts show that
Tyler is close to progressing deeper into the Within Word developmental stage and begin closely studying vowel sounds and patterns. His strengths in this assessment include a solid performance on identifying initial blends and ending sounds as well as representing all phonemes using logical invented spellings.

There were many important pieces of knowledge that were gathered from Tyler’s interview data as well as his initial DSA. From the interview data alone, a great deal was learned from Tyler regarding his current feelings for word study practices at that time. Tyler stated feelings of contentment and was unable to articulate activities that he felt benefited him more than others. In addition, from the interview data alone it was gathered that Tyler favored the use of technology incorporation when practicing weekly list words. From the DSA, a great deal of data demonstrated Tyler’s readiness to move to the next phase of the developmental progression, the Within Word stage. The assessment showed that Tyler had a strong grasp on letter names and their corresponding letters but was now ready to learn more sophisticated common long vowel patterns. This assessment was a valuable piece of information going into the intervention and study, as it clearly represented the areas of strength for Tyler as well as the areas that would require further explicit instruction.

**Weekly Assessment Data**

Within the following table (table 5) Tyler’s assessment data for each of the five weeks of the study is included. The table breaks out the assessment data by week. Within each week, the table lists which word study list Tyler was working on that week, his pre-test spelling test score, post-test spelling test score, writing sample score, and finally which Making Words lesson the group was working on that week. Each Making Words lesson is labeled with a number and word.
The name of the lesson directly corresponds to the weekly ‘secret’ word that the children attempt to solve and correctly spell. The weekly spelling list which states the word feature and focus for the week can be found in the appendix. In addition, the table lists the title of the Making Words lesson for each week. The full lesson, in its entirety can be found in the appendix. The table provides a general summary of the data analysis that follows.

Table 5
Tyler’s Assessment Data

<table>
<thead>
<tr>
<th>Week Number</th>
<th>Word Study list</th>
<th>Pretest Score</th>
<th>Final Score</th>
<th>Writing</th>
<th>Making Words Lesson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>B 1</td>
<td>10/10</td>
<td>10/10</td>
<td>4/4</td>
<td>Lesson 1 ‘planets’</td>
</tr>
<tr>
<td>2</td>
<td>B 2</td>
<td>10/10</td>
<td>10/10</td>
<td>4/4</td>
<td>Lesson 20</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>‘chopsticks’</td>
</tr>
<tr>
<td>3</td>
<td>B 3</td>
<td>8/10</td>
<td>9/10</td>
<td>3/4</td>
<td>Lesson 2 ‘absent’</td>
</tr>
<tr>
<td>4</td>
<td>B 4</td>
<td>9/10</td>
<td>10/10</td>
<td>4/4</td>
<td>Lesson 10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>‘printers’</td>
</tr>
<tr>
<td>5</td>
<td>B 5</td>
<td>10/10</td>
<td>8/10</td>
<td>4/4</td>
<td>Lesson 8 ‘stopped’</td>
</tr>
</tbody>
</table>

In examining Tyler’s assessment scores, he made some improvements throughout the course of the study, however he was also showing a great deal of success prior to implementation of the Making Words program. Four out of the five weeks of the study, Tyler made improvements in his assessment score from the pre-test to the post-test or stayed successful at 100% scores on pre-test and post-test. Throughout week three he showed an increase in his
ending score, as compared to his pre-test score, however, continued to lack a full understanding of the weekly feature.

Looking more closely at week one (May 6, 2013- May 10, 2013) assessment data, Tyler did not change his score at all from the pre-assessment to the post-assessment. Tyler began the week scoring a 10/10 on the initial pre-assessment and maintained that knowledge and performance on assessment assignments by not showing regression and scoring a 10/10 on the final assessment as well. This week, the students were working on the first word list of the Within Word stage and were examining initial consonant blends. Such blends include the br-, sm-, tr-, sk-, and dr-. Tyler showed a great level of strength with this list of words and experienced no difficulty on the assessment or activities throughout the week.

The Making Words lesson for the week was the first lesson of the program, entitled ‘Planets’. This lesson focused on reviewing short vowel sounds ‘a’ and ‘e’. Although the lesson did not align directly to the word study list for the week, it was still a beneficial initial lesson to help the students learn how to participate in a Making Words lesson. The only error noted in this lesson was Tyler reversing the letter ‘b’ for a ‘p’, when attempting to spell the word ‘pat’, Tyler spelled ‘bat’. Tyler was able to self-correct his simple error independently. The first Making Words lesson proved to be successful for Tyler.

Within the first lesson, Tyler was observed as engaged and well mannered, as seen through observational notes. Tyler was making eye contact and was interested in learning how the new program worked. This attentiveness was also seen in his body language, as it was still and focused. Tyler was usually an interested learner in other classroom activities, so this was not a surprise. However, due to the fact that learning came rather easily for Tyler, he would
sometimes appear unengaged when tasks were either too short or easy for him. Therefore, the fact that he was engaging fully in this first lesson showed that the task was not yet too easy. This also showed that Tyler had an interest in the program, as seen in his still and focused body language.

An additional behavioral observation seen in the first Making Words lesson was that Tyler appeared to work quickly and rush through his work. It was almost as if he had to be the first person done, before that of his peers. The fast working pace was not out of the ordinary for Tyler, as he usually was an early finisher with most academic tasks in the classroom. The new behavior, however, was the competitive edge observed in this initial lesson. I had never seen Tyler express this much competition in any academic task, up to this point in the classroom. I had observed interest and excitement for academic games but not to the competitive interest that was observed throughout this Making Words lesson. It is not clear whether or not the kinesthetic program sparked the fast working pace seen in Tyler this week.

Tyler continued to show success in the post-assessment of week one. Tyler maintained his perfect score that was received on the initial assessment, once again scoring a 10/10. Tyler showed solid comprehension on the assessment as well as throughout the week. Furthermore, Tyler’s writing sample for the week was also flawless, showing no signs of difficulty in transfer to independent writing situations. The interesting behavior noted above concerning Tyler’s fast working pace, was also seen in his writing for this week. It is possible that Tyler’s competitive behavior seen in the kinesthetic program was also transferring to his independent writing.
Looking more closely at week two (May 13, 2013- May 17, 2013) assessment data, Tyler once again did not change his score at all from the pre-assessment to the post-assessment. Tyler began the week scoring a 10/10 on the initial pre-assessment and maintained that knowledge and performance on the post-assessment scoring a 10/10 on the final assessment as well. This week, the students were working toward building an awareness of consonant digraph patterns. Such digraphs include, -ch, -sh, -wh, and -th. Tyler showed a high level of strength with this list of words and experienced no difficulty on the assessment or activities throughout the week.

The Making Words lesson for the week, lesson 20, was entitled ‘chopsticks’. The lesson focused on consonant digraphs with a specific heavy focus on the -ch and -ck digraphs. Tyler showed great success in this lesson, utilizing verbal blending strategies to identify certain digraphs. For example, Tyler was observed stating “sh- sh- sh-“when attempting to
conventionally spell the word ‘shop’. Tyler was able to correctly spell that word. Tyler’s verbal strategy to break the word into recognizable parts shows a strategy. He touched and moved the letter s and h tiles while verbally stating the digraph sound. It is possible that Tyler was connecting the physical movement of the letter tiles with verbal sounds to assist him in the physical building of the given word. The only word that Tyler experienced difficulty with was ‘thick’, as he initially spelled it as ‘tick’, neglecting to notice that absence of an ‘h’ and the th-digraph. After Tyler received teacher support and was able to conventionally spell the word, he was observed moving the ‘t’ and ‘h’ letter tiles and voicing the corresponding letter sounds. Tyler pulled the letter ‘t’ and letter ‘h’ out of the word, grouped them together, and repeated the sound. Tyler was connecting the physical aspect of the program by independently choosing to manipulate the letters while voicing the accompanying sounds, as well. Tyler was able to correctly spell the secret word (‘chopstick’). Finally, Tyler’s behavior throughout this lesson was excellent and well-mannered as in the last week. The same observation noticed in the first Making Words lesson was again noticed this week. Tyler was observed as rushing through the kinesthetic making of the words, in attempt to be the first student completed. Perhaps Tyler saw the program as a competitive game and therefore the factors related to that belief drove him to work at a fast pace throughout the lesson. Although I did not directly ask Tyler why he was working at such a fast pace, I did on numerous occasions ask him to slow down and focus on the task at hand. When I would give Tyler verbal reminders to slow down, he would respond and compile initially, however seemed to speed back up.
Tyler continued to show success in the post-assessment of week two. Tyler maintained his perfect score that was received on the initial assessment, once again scoring a 10/10. Tyler showed solid comprehension on the assessment as well as throughout the week. Furthermore, Tyler’s writing sample for the week was also flawless, showing no signs of difficulty in transfer to independent writing situations.
Looking more closely at week three (May 20, 2013- May 24, 2013), the spelling feature of the week was mastering an understanding of the short and long vowel ‘a’. Tyler showed confusions with the long vowel ‘a’ in both his pre and post-test when he unconventionally spelled the word ‘frame’ as ‘fram’. It is interesting to see Tyler create this invented spelling with the ending e, as he showed a clear understanding in the same assessment with the word ‘skate’. This unconventional spelling of the word ‘frame’ shows an area of growth for Tyler for future instruction. It also shows what Tyler is paying close attention to letter sounds and spelling patterns that he knows and is applying those patterns conventionally to his invented spelling attempts. It shows that he is able to recognize and conventionally spell initial blends, identify proper vowel sounds, and middle consonants. Tyler’s unconventional spelling is actually quite advanced for his early placement in the Within Word stage of development.
The Making Words lesson for week three (May 20, 2013- May 24, 2013) was lesson two, entitled ‘absent’. The focus of this week’s lesson was on short and long vowel ‘a’. Tyler started the lesson off strong, showing great ability and effort levels. The name ‘Ben’ was given half way through the lesson and Tyler attempted the word as ‘been’ initially and then was able to independently self-correct to spell ‘ben’ and finally ‘Ben’, showing knowledge of proper nouns. His initial attempt (‘been’) also shows that Tyler has an understanding of the conventional spelling of the word ‘been’. The name ‘Ben’ is most likely not used in Tyler’s daily verbal or written exchanges, as compared to the word ‘been’. Therefore, Tyler most likely automatically spelled the word ‘been’ out of habit. In addition, Tyler attempted the word ‘absent’ as ‘adesent’ initially, but quickly realized his letter reversal and self-corrected. Tyler’s behavior this week throughout the lesson was attentive and focused, as seen in his immediate self-corrections with his two invented spelling attempts. Tyler did not require any teacher-directed prompts and was able to very quickly process his unconventional spelling attempts. Tyler’s engagement levels were apparent through observing his ability to process his unconventional spelling attempts independently and self-correct. If Tyler was not truly engaged in the Making Words program during this particular lesson, it would have been doubtful that he would be able to so quickly recognize his errors and independently correct them.

Tyler continued to show success in the post-assessment of week three. Tyler was able to increase his initial assessment score on the pre-assessment of 8/10. Tyler showed solid comprehension on the assessment as well as throughout the week with the Making Words lesson. Tyler did spell one word unconventionally on the post-assessment. Tyler spelled the word skate as ‘skat’. This was the same unconventional spelling pattern witnessed on the initial pre-assessment, with CVVC words. Tyler’s writing sample for the week showed an understanding
for the weekly skill, however, there were inconsistencies throughout it as well. When writing about a trip Tyler was taking, he discussed being on a train while it was raining. He spelled the word ‘raining’ as ‘raning’. Within this writing assessment, Tyler was able to showcase his knowledge of the ‘ai’ vowel pattern, such as when spelling the word ‘train’ conventionally. Therefore, this week’s data show Tyler’s varied use and understanding of the long ai- vowel pattern, which was assessed this week and Tyler showed competence in. The data gathered from his writing is interesting to study. It simply shows that Tyler is still experimenting with his developing spelling pattern knowledge. He showed signs of conventional use on the assessment for the week and then showed unconventional uses with the writing sample. This just shows he is developing toward a consistent use of the spelling pattern. It is interesting to note that Tyler’s quick self-corrections, noted in the kinesthetic program were not observed in writing situations. Therefore, it is possible that the kinesthetic and tactile letter tiles used in the program helped Tyler to more easily recognize when an unconventional spelling had occurred.
In week 4 (May 27, 2013- May 31, 2013), Tyler continued to show growth from the initial assessment to the ending assessment, as his score went from a 9/10 to a 10/10. In examining Tyler’s one error on the initial pre-assessment, it shows that he was not showing a full understanding with the vowel pattern of ‘ai’. Tyler unconventionally spelled the word ‘said’ as ‘siad’. He had an understanding of the two vowels needed in the word, however showed some
confusion with the correct pairing. In addition, this was one of the students’ 220 sight words that had been practiced all year long. Tyler still showed confusion with this sight word. This unconventional spelling is not overly concerning considering the various sounds the –ai vowel pattern can take on. For example, the sound of –ai is very different in the word said versus the word sail. In addition, the –ai in this word is an exception to the phonemes this letter pairing usually represents. The fact that Tyler is confusing the letter placement does not show a lack of phonological understanding, but rather a developmental progression towards recognizing proper letter placement.

The week’s Making Words lesson was reviewing short and long vowels and therefore the lesson may have assisted in his ability to understand the ‘ai’ vowel pattern on the final assessment later that week. The Making Words lesson for the week was lesson ten, called ‘printers’. Tyler had complete accuracy in this lesson, kinesthetically building all of the given words correctly on the first attempt. Tyler clearly showed strong capabilities within this lesson. His behavior was engaged and excited to be a part of the group. This was seen through his body language. It was relaxed, observant, and willing to participate. As in prior weeks, Tyler was once again observed having a competitive drive to entice him to finish the building of the words first, before his peers in the word study group. This behavior is interesting to follow throughout the course of the previous four weeks of the study. Tyler was extremely engaged in the lesson but it is not clear whether or not his engagement comes from the kinesthetic nature of the program or the fact that he saw this as a competitive game within his word study group. The kinesthetic nature of the program may have caused the onset of this behavior.

Tyler continued to show success in the post-assessment of week four. Tyler was able to increase his initial assessment score on the pre-assessment by scoring a 10/10 at the end of the
week. Tyler showed solid comprehension on the assessment as well as throughout the week with the Making Words lesson. Tyler’s writing sample for the week showed an understanding of the weekly skill. Tyler wrote a letter to a farmer discussing happenings on a farm. He showed great use of the weekly spelling words, conventionally spelling ‘pigs’ and ‘slide’. In addition, Tyler also showed great understanding through his spelling of ‘sliding’ as ‘slideing’ and ‘biking’ as ‘bikeing’. These invented spellings show a solid understanding of the weekly word features focus skill and also shows further instructional points for dropping the -e when adding an –ing ending. It certainly is interesting to study these unconventional spelling attempts. It is equally interesting to note Tyler’s gain in understanding with the ending e rule. In previous weeks Tyler unconventionally spelled words due to the fact that he did not include an ending e to make the middle vowel long. Therefore, in studying his unconventional spelling attempts in his writing sample for this week it is promising to see Tyler begin to apply that rule in his own writing, without direct adult assistance. He is clearly showing his developmental progression just simply over the course of a few weeks.
The last week of the study (June 3, 2013- June 7, 2013), Tyler’s pre-test score was higher than his post-test score. He scored a 10/10 on the pre-test and an 8/10 on the post-test. The spelling feature of the week was short and long vowel ‘o’. The two words Tyler unconventionally spelled on the final assessment were ‘goat’ and ‘clock’. Interestingly, as stated above these words were correctly spelled on the weeks pre-assessment. Tyler substituted the final letter ‘t’ in ‘goat’ for a ‘d’, spelling it ‘goad’ and likewise, substituted an ‘o’ for the ‘c’ in ‘clock’, spelling it ‘clook’. Tyler’s substitutions for letters do not show a misunderstanding of the weekly feature, as in the first unconventional spelling he correctly used the short vowel pattern and simply neglected to spell the ending sound correctly.
The Making Words lesson for the week was lesson eight, titled ‘stopped’. This lesson had a central focus on both short and long vowel ‘o’. Tyler showed great success in this lesson, scoring all presented words conventionally and not showing any visible signs of confusion or struggle. As in all of the other previous four lessons, Tyler’s behavior was observed as being engaged and attentive throughout the lesson. Tyler truly was hyper-focused on the prompts, in order to quickly comprehend and build the word in order to be finished quickly. Tyler almost acted as if it were a true physical race. His body language was still and focused when it was time for me to announce the list of letters and the words to form. His body language could be compared to that of an actual race and when I gave the list of letters and prompt, his body almost erupted as he set off to be the first to build the word. For example, prior to starting the actual lesson, Tyler was observed telling his peers “shh, shh! We need to hear the letters!” This was interesting to observe as Tyler was so focused that the noise from his peers made him appear nervous that he would not be able to hear the given letters for the lesson. He almost showed a sense of fear of missing the letters and therefore falling behind in the lesson. When I finally did announce that the letters for the first word were “s, e, and t” Tyler immediately found the letters and began experimenting as to what the word could be. Tyler had to be reminded that he was not to spell the word, as it had not yet been given to him. This was interesting as it was the first time in the study that his competitive behavior had impacted his ability to follow the rules of the program.

The final week of the written assessment for Tyler proved to be successful, as he received full credit on it. Tyler wrote a lengthy piece, which was out of the ordinary for him, as he usually wrote the bare minimum to meet the requirements. However, Tyler certainly flourished with this final independent writing activity. Tyler integrated a few of the weekly word study list words
into his assessment and did so conventionally. Such words included 'goat', 'they', and 'fox'. In addition, his writing sample also shows additional signs of development. This can be seen in his unconventional spelling of the word 'crazy'. Tyler spelled the word as 'crasie'. This is very interesting to study, as his attempt is rather sophisticated. Tyler was able to identify that the word began with the letter 'c' and then completed the proper initial blend. In addition he recognized the correct vowel and consonant. Most interesting is the way in which he attempted to spell the final sound. Instead of using a 'y' as in the conventional spelling, Tyler chose to use an –ie pattern. This is extremely sophisticated for this point in his developmental progression and certainly shows that he is applying what he is seeing and hearing, in terms of letter sounds, from other words.

*Figure 4.41 Tyler’s Observational Data*
Figure 4.42 Tyler’s Writing Sample

Tomorrow we are going on a field trip to the zoo with your class room. We are going with Mrs. Nice and Mrs. Mean.

Mr. Happy and Mr. Sad. I am in Mrs. Snake’s class. Finally it’s tomorrow and we’re at the zoo. We see the animals are going. Crasie. We visit the Kangaroo, goat, and rhinocerous.

I see they are all going.
Final Interview: Post-Intervention

There was a great deal of information learned from Tyler’s post interview, completed after the final week of the study. Tyler took part in the final interview on June 17, 2013. Tyler’s answers varied slightly in that the first question he expanded on his answer, stating that he “enjoyed having the option of choice when choosing word study activities.” In addition, the second question Tyler was able to state an actual strategy of spelling unknown words when he stated, “yes- I think about letter sounds a lot and which letters would match a sound.” This answer is different than his first when he listed strategies that involved rote memorization. This
answer is significant in that it showed a vast transformation in how Tyler was approaching unknown words. For Tyler to articulate this very profound strategy shows that over the course of the study he was able to not only learn, but also understand a strategy for approaching the spelling of unknown words. Finally, Tyler did mention the Making Words program in the third question when he stated that it helped him to learn his spelling words because “it’s so fun figuring out the secret word- I’m good at it.” This answer certainly goes back to the reoccurring theme observed with Tyler when engaging in the Making Words program. He was highly competitive and saw it as a competition and something he wanted to win. Tyler was not able to state a specific word study activity that he referenced when independently writing, however, was able to discuss how he relied on a chunking method when writing in his journal. This method that he referenced may or may not have come from the strategies used and learned in the Making Words program. The kinesthetic program allowed the children to break the letter tiles into recognizable blends and spelling patterns. Tyler may have picked up on that when engaging kinesthetically, which he then transferred into writing situations and is why he is listing it as a strategy.
Developmental Spelling Assessment: Post- Intervention: 9/25

Figure 4.44 Tyler’s Post DSA

The above image shows Tyler’s post-intervention Developmental Spelling Assessment. Tyler scored a 9/25 on the Within Word spelling assessment following the five week intervention program. Tyler increased his assessment score by two points as compared to the initial assessment. Tyler was able to show a greater understanding of R-controlled and abstract vowels in this post-assessment. He still experienced inconsistencies in recognizing complex consonants and other long vowel patterns. Above all else, this post assessment showed Tyler’s improvement in the area of understanding vowel sounds in multisyllabic words.

In examining the post DSA, Tyler’s score increased by two points, in two different feature areas. Tyler’s initial score in the R-controlled vowels was originally a one out of five and
on the post-assessment he increased his score correct to a two out of five. Tyler was able to conventionally spell the word ‘fear’, showing improved understanding with this R-controlled vowel example. In addition, Tyler also increased his score in the abstract vowel feature area by one point on the post-assessment. Tyler was able to conventionally spell the word ‘yawn’ on the post-assessment, showing his increased knowledge in the abstract vowel with -aw pattern.

In examining other features on the post DSA, it is clear that Tyler’s letter and sound knowledge increased over the course of the five week intervention period. Although Tyler only increased his conventional spelling score by two points, he was able to increase his letter-sound knowledge of other words. For example, when examining Tyler’s invented spelling of the word ‘quite’, it is clear his letter-sound knowledge increased over the five weeks. Tyler attempted the spelling of this word as ‘cwit’ on the initial assessment and by the final DSA spelled it as ‘qwite’. This transformation shows an increased understanding and also that he is working toward conventional spelling.

Common Theme

Tyler performed exceptionally well on the weekly Making Words intervention program over the course of the five week study. Each week, Tyler was observed as being especially attentive and engaged in the lessons, following all teacher directed prompts, as well as assuring his peers around him did the same. He was attentive, engaged, and appeared excited for each lesson. As previously described, Tyler’s body language throughout the lessons was very similar to that of an actual physical race. Tyler was so engaged and focused that as soon as I listed the required letters and prompt for spelling, it was almost as if the shotgun went off and the race began. Tyler did appear to work rather quickly throughout the Making Words lessons, always
being one of the first students to finish making the given word. Sometimes this would work against him, as he would make attention and speed related mistakes, as seen in the b/d letter reversals mentioned previously. Tyler was able to self-correct small confusions throughout the weekly lessons, showcasing his ability to recognize when something does not look right, sound right, or make sense. Overall, the Making Words lessons proved to be a successful program for Tyler as he was invested and eager to participate.

**Gary**

At the time of the intervention study, Gary was an eight year old second grade student. Gary had been in the lowest word study group for the entire school year, as he struggled in the beginning of the year with conventional spelling of very simple CVC and CVVC sight words. Gary worked through the entire Making Words Letter Name stage and completed all appropriate word sorts within that stage. Gary had just graduated from the Letter Name developmental stage prior to the start of the intervention program. He began the Within Word stage the first week of the study. Gary was a very shy student who had difficulty advocating for himself when he was experiencing difficulty on certain tasks. In addition, Gary struggled with consistent attendance throughout the entire school year. Gary would be absent from school consecutive days within the week, on a weekly basis. The amount of instructional time lost from unexcused school absences caused great gaps in his phonological understanding, which that transferred into Gary’s word study knowledge as seen in weekly assessments and writing situations. Although Gary did have gaps in his overall literacy development, his writing development was coming along quite nicely up to this point in the school year. Gary was able to effortlessly express his thoughts through his writing, using appropriate sentence structure, applying voice, and conveying meaning.
Initial Interview: Pre-Intervention

The initial interview provided information that showed how Gary was feeling toward the word study program at that point in time, prior to the intervention program beginning. Gary stated feelings of contentment and enjoying the program at the time, stating that he believed that he was good at most of the choices for word study activities. When writing independently, Gary stated that his strategy for solving unknown words was to think about what the word means and how to appropriately use it in a sentence. He also stated that he often times simply “thinks about how the word looked on his spelling list and which letters go where in the word.” Gary also stated that when he reaches an unknown word in the sentence he just guesses on how the word should be spelled. His answers showed that perhaps he favored more visual strategies. However, in a later question, Gary mentioned that he sometimes thinks about forming the letters using Wixi Sticks (a tactile approach to forming letters and words, offered as a choice during the word study block in the classroom). Gary’s initial interview showed his current thought process toward word study in the classroom and how he was currently transferring his thinking over to independent writing tasks.
Developmental Spelling Assessment (DSA): Pre-Intervention

Initial DSA (Developmental Spelling Assessment) - 5/25

Figure 4.45 Gary's Initial DSA

The above image shows Gary’s Developmental Spelling Assessment (DSA) score prior to the intervention beginning. Gary scored a 5/25 on the Within Word assessment. His assessment gave great insight into how Gary was currently functioning in terms of spelling development prior to beginning the intervention program. The assessment showed that Gary was progressing steadily through the long vowel (vowel-consonant-ending e) and R-controlled vowel pattern knowledge. In addition, the assessment also showed that at the time, Gary was in need of explicit teaching in order to recognize other common long vowel patterns, complex consonant patterns, and abstract vowels.
The assessment showed him using invented spelling with words that contain R-controlled vowels, such as ‘glare’ and complex consonants in words such as ‘patch’ and ‘bridge’. His spelling of the word ‘glare’ showcased his ability to use initial blends paired with letters that made sense. This can be seen in his unconventional spelling of the word as ‘glar’. The initial blend in the attempt is correct, as is the choice in vowel usage paired with the correct ending letter sound. In addition, he also spelled the word ‘bridge’ as ‘brig’, showing a solid understanding of initial blends, middle vowels, and ending letter sounds. In our dialect, as in many others, there are certain letters that cannot be heard when thinking about the sounds in words. The word ‘bridge’ is one of those words, as it contains the letter ‘d’, which is silent in the pronunciation of the word. Therefore, it is perfectly understandable why Gary did not include the letter in his spelling attempt. The same can be true for his attempt at the word ‘patch’. Gary’s invented spelling of the word ‘patch’ was represented as ‘pach’. Although he was unable to recognize the complex consonant spelling pattern in the middle of the word, he experienced no difficulty with the initial sound and ending digraph. The middle consonant in this word is also silent when processing recognizable letter sounds. It is very difficult to hear the letter ‘t’ in the word and that is most likely the reason why Gary did not include it in his attempt. As Gary learns more word feature knowledge and spelling patterns throughout this new and more advanced stage of spelling development, these complex and silent consonant spelling patterns will become more automatic for him.

In examining the initial DSA for Gary, it is clear that his greatest area of improvement is in the realm of learning long vowel patterns and rules. In analyzing the 20 words that Gary spelled unconventionally on the assessment, 16 of the words assessed the children’s understanding of long vowel usage. Gary experienced great difficulty with this topic. This can be
seen in his invented spelling of the word ‘steep’ as ‘stip’ and ‘paint’ as ‘pint’ showing not only inconsistencies with long vowels but also short vowel sounds.

Finally, through analyzing the DSA it is clear that Gary holds knowledge that secures his placement in this current spelling developmental stage. For example, the DSA showed that Gary had an understanding of complex digraph patterns, such as -sh in the word ‘short’, which was spelled conventionally. In addition, his invented spelling of the word ‘quite’ as ‘qwit’ shows a conscious thought process about letter sounds, as his invented spelling makes sense. This assessment was a valuable piece of information going into the intervention study, as it represented the areas of strength for Gary as well as the areas that would require further explicit instruction.

There were many important pieces of knowledge that were gathered from Gary’s interview data as well as his initial DSA. From the interview data alone, a great deal was learned about Gary regarding his feelings for word study practices at that time. Gary stated that he enjoyed the program at the time, stating that he believed that he was “good” at most of the choices for word study activities. When writing independently, Gary interestingly stated that his strategy for solving unknown words was to think about what the word means and how to appropriately use it in a sentence. The interview data suggested that Gary used visual references for checking to see whether or not a word looked correct. Gary did mention the use of kinesthetic activities in his initial interview, when talking about Wixi Sticks, which are pliable sticks that can be molded into letters and then words. In addition, from the DSA, information was gathered to support Gary’s current placement in the Within Word stage of spelling development. His performance on this assessment showed his current strengths and gaps in his spelling development and most importantly, where future instruction was needed to advance his
development. The DSA was a great source to showcase the developing knowledge Gary had in some feature analysis items.

**Weekly Assessment Data**

Within the following table (table 6) Gary’s assessment data for each of the five weeks of the study is included. The table breaks out the assessment data by week. Within each week, the table lists which word study list Gary was working on that week, his pre-test spelling test score, post-test spelling test score, writing sample score, and finally which Making Words lesson the group was working on that week. Each Making Words lesson is labeled with a number and word. The name of the lesson directly corresponds to the weekly ‘secret’ word that the children attempt to solve and spell. The weekly spelling list, which states the word feature and focus for the week can be found in the appendix. In addition, the table lists the title of the Making Words lesson for each week. The full lesson, in its entirety can be found in the appendix. The table provides a general summary of the data analysis that follows.
Table 6
Gary’s Assessment Data

<table>
<thead>
<tr>
<th>Week Number</th>
<th>Word Study list</th>
<th>Pretest Score</th>
<th>Final Score</th>
<th>Writing</th>
<th>Making Words</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lesson</td>
</tr>
<tr>
<td>1</td>
<td>B 1</td>
<td>10/10</td>
<td>10/10</td>
<td>4/4</td>
<td>Lesson 1 ‘planets’</td>
</tr>
<tr>
<td>2</td>
<td>B 2</td>
<td>10/10</td>
<td>10/10</td>
<td>3/4</td>
<td>Lesson 20 ‘chopsticks’</td>
</tr>
<tr>
<td>3</td>
<td>B 3</td>
<td>6/10</td>
<td>9/10</td>
<td>3/4</td>
<td>Lesson 2 ‘absent’</td>
</tr>
<tr>
<td>4</td>
<td>B 4</td>
<td>9/10</td>
<td>9/10</td>
<td>4/4</td>
<td>Lesson 10 ‘printers’</td>
</tr>
<tr>
<td>5</td>
<td>B 5</td>
<td>10/10</td>
<td>9/10</td>
<td>3/4</td>
<td>Lesson 8 ‘stopped’</td>
</tr>
</tbody>
</table>

In examining the data for Gary over the five weeks, it shows numerical scores for each assessment given throughout the intervention study. When examining the data, Gary does not experience any monumental growth or decline in any of the weeks. The first two weeks of the study, Gary received a 10/10 on the pre-assessment and continued to receive that same score on the post-assessment of the week. The following week, week 3, he showed significant growth from his pre-assessment score to his post-assessment score. Week four was a week he remained stagnant from the pre to the post-assessment, with a 9/10. Finally, week five was the only week of the study that Gary showed a decline from his pre-assessment score to this post-assessment score.

Looking at week one (May 6, 2013- May 10, 2013) assessment data, Gary did not change his score at all from the pre-assessment to the post-assessment. Gary began the week scoring a
10/10 on the initial pre-assessment and maintained that knowledge and performance, scoring a 10/10 on the final assessment as well. This week, the students in Gary’s group were working on the first word list of the Within Word stage and were examining initial consonant blends. Such blends include the br-, sm-, tr-, sk-, and dr-. Gary showed a great level of strength with this list of words and experienced no difficulty on the assessment or activities throughout the week.

The Making Words lesson for the week was the first lesson of the program, titled ‘Planets’. This lesson focused on reviewing short vowel sounds ‘a’ and ‘e’. Although the lesson did not align directly to the word study list for the week, it was a beneficial lesson that helped the students learn how to engage effectively in a Making Words lesson as well as learn the rules of the new program. Unfortunately, Gary was absent for the initial Making Words lesson with his word study group that week.

Upon his return to school later in the week, I explained how the new program worked and how he would participate in it. Gary experimented with the letter tiles on an independent basis and worked to form the words that made up his weekly spelling list. In addition, he spoke with his peers about the new program. They discussed many details of the program including: how it worked, how many letter tiles he is allowed, what to do when the teacher gives a prompt, and the secret word of the week. Gary used his weekly spelling list to build words using the letter tiles. He appeared to simply look at the spelling list and then build the words, as the words were not verbally spoken to him. He worked word-by-word and did not note anything in particular about the weekly spelling feature. At one point, Gary did state “oh, it’s kind of like when we use magnetic letters.” This realization was profound in that Gary was linking the relationship between two kinesthetic approaches to word study. This was noted in observational data, which can be seen in the figure below. When observing Gary in this post lesson experimentation he did
not seem overly enthused or excited with the new approach. In understanding Gary’s personality on a regular basis as well as keeping in mind the fact that he was not engaging in an authentic Making Words lesson, it cannot be determined whether or not engagement was absent in the lesson.

**Figure 4.46 Gary’s Observational Data**

Gary continued to show success in the post-assessment of week one. Gary maintained his perfect score that was received on the initial assessment, once again scoring a 10/10. Gary showed accurate comprehension of the weekly word feature on both the assessment as well as throughout the week, with various activities related to word study. Furthermore, Gary’s writing sample for the week was also flawless, showing no signs of difficulty in transfer to independent writing situations.
Looking at week two (May 13, 2013- May 17, 2013) assessment data, Gary once again did not change his score from the pre-assessment to the post-assessment. Gary began the week scoring a 10/10 on the initial pre-assessment and maintained that knowledge on the post-assessment scoring a 10/10. This week, the students were working toward building an awareness of consonant digraph patterns. Such digraphs included, -ch, -sh, -wh, and -th. Gary showed great understanding of the list of weekly spelling words as well as the skill itself. Interestingly, on the initial pre-assessment for the week, Gary was able to correctly spell all ten of the list words. However, when analyzing his sentence dictation portion of the assessment, Gary demonstrated inconsistent use of digraphs, which was the focus skill of the week. The sentence dictation portion of the assessment was when I verbally read a sentence aloud and the students wrote the same sentence on their paper. Gary was able to use knowledge of the -wh digraph in the word ‘when’ and the -th digraph in the word ‘thick’. However, when asked to spell ‘beach’ (a word not on the spelling list) he spelled it as ‘beash’. Gary did use a consonant digraph in his invented spelling of the word ‘beach’ which shows his familiarity with them. The sentence dictation portion of the assessment showed an area of instructional possibility in the week to come.
The Making Words lesson for the week, lesson 20, was titled ‘chopsticks’. The lesson focused on consonant digraph spelling patterns, with a specific focus on the -ch and -ck digraphs. Gary showed great success in this lesson, utilizing verbal blending strategies to identify certain digraphs. For example, Gary was observed independently self-correcting one unconventional error early in the Making Words lesson. Gary initially spelled the word ‘chip’ as ‘cip’, not including the -ch digraph. Gary was able to correct his unconventional attempt independently without the support of a teacher or peer. Gary successfully identified and spelled the secret word of the week, ‘chopstick’ on the first attempt. In examining his process of kinesthetically building this word, there were interesting behaviors. Gary immediately grouped letters ‘c’ and ‘h’ together, forming the initial digraph –ch. Gary’s ability to immediately recognize this digraph was seen in his tactile approach to placing both letters next to each other immediately. He then pulled the letter ‘p’ in the same line at the –ch digraph. After this kinesthetic placement, Gary then placed the ‘s’ and ‘t’, then the ‘i’ and ‘k’. At this point, Gary had the following letter formation ‘ch p s t i k’. I observed Gary reviewing his remaining letters and then immediately sliding them to the correct placement. Gary touched each letter after this final letter placement, almost as if to solidify his choice in letter construction.

In addition, his behavior for his first official Making Words lesson was engaged and attentive. Gary was quiet throughout this lesson. He appeared to simply sit and observe the activities and flow of the lesson, rather than participate by vocalizing ideas or thoughts. It is possible that because this was the first actual Making Words lesson that Gary was a part of with his word study group that he was acclimating to the environment and new program. It was noted that Gary did work at a slower pace as compared to the rest of the blue group. Again, this observation could be largely due to the fact that he was still learning how to engage appropriately
in the program. He seemed to move the letter tiles at a slow pace and with much caution, almost as if he were afraid to misplace one of the letters. This cautious behavior appeared to substantially decrease when he reached the end of the lesson and was asked to spell the secret word of the week, as he did so rather effortlessly.

Gary continued to show success in the post-assessment of week two. Gary maintained his score on the initial assessment, once again scoring a 10/10. Gary showed solid comprehension on the assessment as well as throughout the week. Interesting to note was once again Gary’s sentence dictation portion of the post-assessment for the week. Gary’s dictation included the correct spelling of all list words and in addition showed an awareness of digraphs in his unconventional spelling of the word ‘with’. Gary spelled it as ‘whith’, showing that he is thinking about digraphs and the sounds they make, as his invented spelling makes sense. Furthermore, Gary’s writing sample for the week was also flawless, showing no signs of difficulty in transfer to independent writing situations, as he wrote a creative piece integrating consonant digraphs appropriately. In comparing Gary’s working pace with the writing time and Making Words lesson, Gary worked much more hesitantly through the kinesthetic program as compared to writing. Gary seemed to write effortlessly and his word production flowed at an appropriate pace. This was much different than his behavior when engaging in the kinesthetic program, using the same words with the same spelling feature. Perhaps, the kinesthetic program was initially an overwhelming adjustment for Gary to participate in.
There are several themes that are prominent when examining Gary’s assessment data from week three (May 20, 2013- May 24, 2013). The weekly feature was studying the short and long vowel ‘a’. In his pre-assessment, Gary unconventionally spelled three of the ten list words, receiving an initial score of 6/10. His unconventional spellings included misuses of long vowels, as in the ‘oo’ spelling pattern and ending ‘e’ long vowels. In addition, Gary showed unconventional use of with ‘ai’ vowel pattern, spelling it as ‘ia’. Gary spelled the word ‘come’ as ‘coom’, the word ‘jack’ as ‘jake’, the word ‘rain’ as ‘rian’, and the word ‘train’ as ‘trian’. It is interesting to study Gary’s unconventional spelling attempts, as many of the words have many of the correct letters, simply misplaced throughout the word. This shows a great deal of developmental knowledge and skillset, as Gary is able to correctly distinguish letter sounds. It appears as though instruction is needed in the correct blending of those letter sounds.
The Making Words lesson for week three was lesson two, titled ‘absent’. The focus of this week’s lesson was short and long vowel ‘a’. Gary was once again absent for this lesson and was unable to participate with his group members this week. Gary was allowed to experiment with the letter tiles on an independent basis upon his return to school, in order to still participate in the kinesthetic nature of the program. Although the lesson was not nearly the same as the one that Gary missed in his absence, he was still interested in kinesthetically forming the week’s list words and additionally, voluntarily chose letter tile building as a daily word study activity throughout the week for a word study center. Gary worked with the weekly spelling feature, using the letter tiles provided in the Making Words program upon his return to school. When I observed Gary working with the letter tiles this week, he was far more engaged than in the prior weeks. Although he was not taking part in the authentic Making Words lesson, he was still actively engaging with the kinesthetic approach. His body language was more relaxed and there was not as much effort put into the experience. In previous lessons, he was noticeably tense and worked extremely slow, almost as if to ensure he did not misplace one of the letter tiles in the word. This week he was not showing signs of that same anxiety. He was also more engaged, as seen in his body language. He was focused on what words I asked him to make (based on his weekly spelling list words) and used the letter tiles with ease and comfort. He did need prompts to rearrange letters but interestingly appeared to understand how to use the letter tiles to blend letter sounds. It was almost as if something ‘clicked’ this week for Gary in terms of the letter tiles and kinesthetic nature of the program. It was almost visible to see in his behavior and engagement with the activity.

For example, as shown in the observational data in the figure below, Gary made a very interesting statement. In this make-up session, I structured the experience as close to the Making
Words lesson as possible, while having Gary work with his weekly spelling list words. Therefore, I prompted Gary as to which letter tiles to have out and then dictated the word to him. I instructed Gary to take out the letters, ‘m’, ‘c’, ‘o’, and ‘e’ and then asked him to spell the word ‘come’. Gary effortlessly conventionally spelled this word and then stated, “oh, I always spell it with two o’s [‘coom’] but I couldn’t this time.” This statement shows that Gary was being to internalize the Making Words program through understanding that I am guiding them in their spelling by telling them which letters to use in building process. This is why the program is guided instruction. Gary internalized that feature in this lesson.

**Figure 4.49 Gary’s Observational Notes**

The post-assessment data showed that Gary could correctly use the ‘ai’ long vowel pattern in correct order, understanding now that it is ‘ai’ and not ‘ia’. In addition, in the post-
assessment, he had a solid understanding of the correct spelling of the word ‘come’. When examining his post-assessment, it is apparent that Gary still lacked full understanding of how to appropriately use the ending ‘e’ when spelling words with long vowel sounds. This is seen in his spelling of ‘skat’ for the word ‘skate’ and ‘jake’ for the word ‘jack’. The final word Gary unconventionally spelled on this week’s assessment was again the word ‘train’. On the post-assessment, Gary spelled the word ‘train’ as ‘tran’, completely disregarding the use of the ‘ai’ vowel pattern that he mastered in the word rain.

In examining the writing data for the week, Gary experienced this same invented spelling with the word ‘train’, spelling it as ‘tran’. Gary spelled the word ‘train’ with the same invented spelling on two different occasions in his writing sample. Gary was able to use two different list words, map and bag, conventionally in his writing sample for the week. His writing showed great developmental gains. He was using familiar consonant digraphs in his invented spelling attempts. This was seen in his attempt to spell the word ‘wait’ as ‘what’. In addition, Gary appeared to split one word into multiple words. For example, Gary spelled the word under as ‘un der’. It is not clear if this was more of a mechanical spacing issue or perhaps Gary was thinking back to the kinesthetic nature of the letter tiles in which he learned to individually chunk letter sounds and then blend them.
Figure 4.50 Gary’s Writing Sample

Week four (May 27, 2013- May 31, 2013) Gary remained at a score of 9/10 for both pre and post-assessment. In both assessments, he unconventionally spelled the same word, however, using different invented spellings for the pre-assessment and the post-assessment. The word that Gary showed difficulty with was ‘said’. In his pre-assessment, Gary spelled it as ‘siad’. This was the same pattern that Gary showed unconventional behavior with in the previous week, unconventionally misplacing the letters in the ‘ai’ vowel pattern. This unconventional spelling is not overly concerning considering the various sounds the –ai vowel pair can take on. For example, the sound of –ai is very different in the word said versus the word pail. The fact that Gary is confusing the letter placement does not show a lack of phonological understanding but rather a developmental progression towards recognizing proper letter placement. Interestingly however, is how Gary spells the same word in his post-assessment. Gary spelled the word said as
‘sad’, not including the letter ‘i’ in this attempt. In addition, Gary’s invented spelling actually formed a very common CVC and sight word, which he did not notice in his unconventional attempt.

Week four’s Making Words lesson was reviewing short and long vowels. The Making Words lesson for the week was lesson ten, titled ‘printers’. Gary did not show full understanding within this lesson, kinesthetically building many of the given words incorrectly on the first attempt. Some of the errors did require teacher support to correct but others were simple attention-related errors that he was able to self-correct independently with little wait time. For example, Gary unconventionally spelled the word ‘in’, by placing the letters in the incorrect order and initially spelling it as ‘ni’. Gary was able to self-correct this error immediately and independently. However, when presented the word ‘stern’, Gary initially spelled it as ‘stirn’ and required teacher assistance to understand how to correctly fix it. When Gary engaged in the very brief vowel sound lesson, he was able to correct this error and form the word conventionally. As in prior weeks, Gary was observed working at a slower pace than the rest of the blue group.

Gary’s behavior was engaged and excited to be a part of the group, as he appeared to be having fun and smiling with his peers. I observed him verbally restating my prompts as well as certain letter sounds, while forming the words this week. This observed behavior was actually a common trait that I had also observed with many of the children taking part in the lesson. However, at times it was evident that he was confused and needed assistance but did not advocate for his learning and ask for teacher support. Interestingly, Gary would seek out help from peers in his group. It was clearly evident that Gary was more comfortable asking for peer support. Although the ability to collaborate is not mandated within the Making Words program, I did allow the children to work together in terms of voicing their thoughts when working through
certain spelling tasks. I felt that the students were in the perfect environment for collaborative
tasks and therefore allowed the occurrence. Based on observations, as shown in the figure below,
it was quite clear that Gary felt more comfortable working through certain challenging tasks with
the help of his peers. Perhaps, the kinesthetic nature of the program made Gary seek out the help
of others and increase his collaborative efforts.

*Figure 4.51 Gary's Writing Sample*

The writing sample for the week was successful for Gary, as his score was perfect and
did not show signs of any weekly feature confusion. Gary wrote a creative letter to a farmer
talking about some of the farm animals. He did unconventionally spell the word ‘dear’, spelling
it as ‘dere’ showing more of a willingness to experiment with the vowel-consonant-ending ‘e’
pattern. There are additional interesting invented spelling attempts that show Gary’s increasing
spelling pattern knowledge. For example, Gary’s attempt at spelling the word ‘even’ as ‘evin’ shows adherence to listening to letter sounds, as he spelled the ending portion of the word using known words. This too was seen in his invented spelling of the word ‘going’ as ‘giwing’. Gary used the known word ‘wing’ to assist in his attempt at a new and unknown word. Compared to Gary’s earlier writing samples, it is evident that he is taking more risks and applying a greater amount of spelling feature knowledge in these later writing samples. It may be that the kinesthetic program has allowed him to develop a visual strategy bank that he relies back to when writing independently.

Figure 4.52 Gary’s Writing Sample

Week five (June 3, 2013- June 7, 201) was the only week of the study that Gary showed a decrease in assessment scores from the pre to the post-assessment. Gary was able to get all ten words correct on his pre-assessment and unconventionally spelled one word on the post-
assessment. The feature of the week was short and long vowel ‘o’. Gary showed no difficulty spelling the word ‘frog’ on his pre-assessment for the week, however, unconventionally spelled the same word as ‘frag’ on the post-assessment. This either shows that Gary had lingering questions regarding the short ‘o’ vowel use in CCVC words or it is possible that the error was attention related. Perhaps Gary did not correctly hear the word and did not advocate his need to listen to the word a second time.

The Making Words lesson for the week was lesson eight, titled ‘stopped’. This lesson had a central focus on both short and long vowel ‘o’. The final week of the Making Words data show Gary as attentive and engaged in the week’s kinesthetic experience. Gary was interested in this lesson, as evident through his smiles and increased working pace, as compared to his pace in prior weeks. He did experience some confusion with the word ‘pot’, spelling it initially as ‘pat’. Gary was able to self-correct automatically, again showing his engagement levels. He neglected to add inflectional endings on two occasions, not recognizing that the words needed to have an ending ‘s’ in some circumstances. The secret word of the week was ‘stopped’. Gary worked through the kinesthetic building with his letter tiles through four different attempts. His first attempt at the word was spelled as ‘stop’, identifying all of the recognizable letter sounds in the word, except the ending. Next, his more sophisticated attempt was approached as ‘stopd’, this time identifying the ending sound more appropriately. His third attempt was ‘stoppd’, showing the doubling of the letter ‘p’ in the middle. His fourth attempt is when he was able to spell the word ‘stopped’ conventionally, adding the final –ed ending.

Overall, Gary experienced great success in this lesson. It was clear in this final week of the study that Gary had reached a new level of comfort in terms of the kinesthetic program. Throughout the entire study, Gary was observed seeking comfort in the presence of his peers, as
he would pursue the help of the children around him prior to asking me for assistance. However, this week was different in that his engagement levels seemed to be at a level where he appeared to have more comfort solving tasks independently, without seeking peer assistance. He appeared to truly feel at ease and it was apparent he understood how to physically manipulate the letters to form the words. This can be seen in the figure below which shows the observational notes for the Making Words lesson. Gary was observed engaging, smiling, and working through several attempts on an independent basis. This week Gary showed that he knew how to handle a situation in which he did not automatically conventionally spell the given word. This was seen in his multiple attempts at the secret word ‘stopped’. Through Gary’s four attempts at spelling the secret word, he was able to work closer to a conventional spelling each time. Most importantly, Gary did this independently. The independence piece of this observation shows a new level of confidence in persevering through four attempts. It may be that the engagement and participation in the Making Words lessons allowed Gary to build a newfound sense of pride and confidence in approaching unknown words.
Gary’s final writing sample for the week was successful. He was able to integrate and conventionally spell many sight words that had been a central focus for the school year and the intervention program. After analyzing the assessment, Gary was observed attempting long vowel patterns, such as –ee in his invented spelling of the word ‘seal’. In addition, Gary correctly identified and used appropriate consonant digraph patterns, as seen in his conventional spelling of the word ‘fish’ and his unconventional spelling of the word ‘went’ as ‘whent.’
In terms of the Making Words lesson plans for the five weeks, Gary was observed engaging in meaningful activities. Gary was absent for two of the five Making Words lessons, which did impact the amount of gathered data. Gary was absent the first week of the Making Words lesson and therefore did not participate in that lesson with his group. Gary was also absent for the third Making Words lesson of the study and therefore no data were compiled for that week. Although Gary was able to engage in a supplemental kinesthetic activity upon his return to school, it was not the same as engaging in a true Making Words lesson with the rest of the children in his word study group.
Developmental Spelling Assessment: Post-Intervention

Post DSA (Developmental Spelling Assessment) Score: 9/25

Figure 4.55 Gary’s Post DSA

The above image shows Gary’s post-intervention Developmental Spelling Assessment. Gary scored a 9/25 on the Within Word spelling assessment following the five week intervention program. Gary increased his assessment score by four points as compared to the initial-assessment. Gary was able to show a greater understanding of R-controlled vowel patterns, other common long vowel patterns, and complex consonant spelling patterns in this post-assessment. He still showed difficulty in his ability to recognize and understand abstract vowel patterns,
however. Above all else, this post-assessment showed Gary’s improvement in the area of understanding vowel sounds in multi-syllabic words.

In analyzing Gary’s post DSA, he was able to show a greater phonological understanding through his increased conventional spelling of long vowels. Examples of increased understanding can be seen in his ability to conventionally spell the words ‘glare’ and ‘drive’. These two examples were not spelled conventionally on the initial DSA, as Gary did not properly insert the ending ‘–e’ in the words. In addition, although Gary did not spell all words with common long vowels conventionally on the post DSA, his ability to integrate them into his invented spelling attempts shows his heightened awareness of them. For example, Gary’s unconventional spelling of the word ‘bridge’ on the pre-DSA as ‘brig’ was changed to ‘brige’ on the post DSA. This shows a great deal of developmental spelling pattern knowledge. For Gary to now understand the purpose the ending vowel ‘–e’ has on this word shows that he is working towards a conventional spelling of this very complex word.

Through analyzing Gary’s post DSA, it showed that he increased his score in the R-controlled vowel feature category by two points. Gary was able to conventionally spell the words ‘glare’ and ‘hurt’ on this second assessment of the intervention study. Through his conventional spelling, Gary showed a heightened awareness of vowel sounds that are controlled by the consonant ‘-r’. On the initial-assessment Gary did not recognize the ending ‘–e’ consonant in the word ‘glare’ and inserted an ‘–i’ in the word ‘hurt’ instead of the conventional spelling with the vowel ‘–u’. Gary’s improvements in the final DSA show a great amount of growth and development with phonological knowledge. Both his conventional and unconventional spelling attempts solidify his new placement working through the Within Word developmental spelling stage.
Final Interview: Post-Intervention

Following the intervention study, Gary participated in a post-interview. This post-interview conversation was far more detailed in terms of Gary’s level of response to the questions presented to him, as compared to the initial interview. For example, when asked his feelings toward the word study lessons that were occurring in the classroom at that point, he stated that, “I really like the days where we get to do word study groups and play games with the letter tiles and secret words.” The “game” that Gary was referring to in his answer was in fact the Making Words program. Gary also mentioned the intervention program when answering a question that asked which activities he thought about when writing independently. Gary stated that he thinks about the order that he would stamp letters in (for letter stamps, an additional word study choice activity in the classroom) and also moving letter tiles around when finding secret words. Gary also went into greater detail, speaking about his strategic methods of writing unknown words in his journal. Gary discussed thinking about how the word sounds and ending – e’s on words that change vowel sounds. This answer showed deep thought process as compared to his initial interview. In Gary’s initial interview he answered that very same question by simply stating “I don’t know.”

Common Themes

In examining Gary’s assessments, writing samples, and observational data there were three common themes that emerged from the analysis. The themes included an increased level of engagement, a willingness to collaborate, and his thought process concerning the letter tiles after the intervention program. The first common theme is attention, behavior, and attendance related. Gary was absent for several of the weeks assessment and data collection, however, when he was
present, he seemed to be following along at a rather slow pace. On numerous occasions, it appeared that he was confused and needed assistance; however, he would not advocate for himself to a teacher but *did* seek help from his peers. Overall, his behavior appeared to be engaged and attentive as the weeks went on. Gary began his participation in the kinesthetic program appearing unsure and not confident, as seen through his body language and timid appearance. However, as the weeks went on and he continued to participate in the lessons, it was apparent through more relaxed body language, smiles, and socialization that he was beginning to show more of a liking to the kinesthetic program.

A second theme that emerged from studying Gary’s data was that he was able to collaborate throughout the Making Words lessons. Gary’s willingness to collaborate was quite apparent each week. When the intervention study began, Gary was immediately observed initiating conversations between peers regarding the new program. At first, it appeared as though he was simply asking questions to ensure his understanding of the new program. However, as time went on, the level of collaboration between Gary and his group members did not subside. Gary’s ability to so effortlessly engage his word study group in collaborative conversations and efforts shows that perhaps the kinesthetic program and ‘game-like’ feel allowed Gary to feel more comfortable collaborating with fellow peers as opposed to asking me for assistance.

The third theme that emerged from studying Gary’s data was that he was able to articulate the use of letter tiles in his independent writing tasks. In the post-interview, I asked Gary to list any word study activities that he thought about when he was completing independent writing tasks. Interestingly, Gary mentioned the use of two different kinesthetic activities. Gary discussed thinking about letter stamps (a tactile activity) and the order in which he would stamp letters to spell certain words. In addition, Gary also discussed the use of letter tiles, making a
connection to the Making Words program. Gary was able to state that the manipulation of letter tiles allowed him to think about letter order and eventually conventional spellings of certain words. His ability to independently reference these two kinesthetic activities is vital in that it shows Gary was applying these strategies to his own independent writing. This shows a possible connection and transfer between the kinesthetic Making Words program and independent writing situations.

Blue Group Common Themes

There were several common themes observed for the blue group over the course of the five week study. Both Tyler and Gary experienced increases from their initial to final DSA and increased post-assessment scores on weekly spelling tests. In addition, Tyler and Gary both experienced increased engagement levels when working with the kinesthetic program. Finally, when Tyler and Gary were participating in the Making Words program they each treated the program as if it had a game-like nature to it. Both Tyler and Gary engaged in the program differently and therefore both experienced differences in how they manipulated the letter tiles.

In examining both Tyler and Gary’s assessment data from the initial and post-intervention DSA, it was shown that both students’ assessment data increased from the pre to the post-test. Both students were administered the Within Word assessment prior to the start of the study and Tyler received a 7/25 while Gary received a 5/25 on the initial-assessment. When Tyler and Gary were once again administered the same DSA following the five week intervention period, both increased their scores. On the final DSA, Tyler received a 9/25 showing an increase of two points. Gary received a 9/25, showing an increase of four points. Therefore, as both Tyler and Gary increased their DSA scores after the five week study, it is clear that their
word feature knowledge had increased within the time frame as well. This increased phonological knowledge was not only seen through these assessments but also in their independent writing samples.

Over the course of the five weeks, engagement levels appeared to be a common theme in observational data for both Tyler and Gary when observed participating in the Making Words lessons for the week. Tyler was observed as being engaged and actively participating in each of the five Making Words lessons over the course of the five week study. In addition, Tyler was actively participating in the lesson showing a high level of engagement and interest in assuring he performed well in the lesson. This too was observed with Gary, as he was observed participating and actively engaged in most of the Making Words lessons that he was present for, as he was absent two out of the five weeks. The high levels of engagement with the kinesthetic approach were apparent in both participants from this word study group.

An additional common theme observed for both Tyler and Gary throughout the intervention study were their thoughts concerning the Making Words program. Throughout the study, both children made references in both their verbal exchanges as well as their actions that led me to believe they viewed the program as a game. Tyler was observed acting extremely competitive throughout the Making Words lesson through both his physical appearance as well as his verbal actions. His body language appeared tense, yet excited, as often seen in physical competitions. In addition, he would many times appear visibly stressed when others around him were talking, almost in fear of not hearing necessary information to help him kinesthetically build the assigned words. He worked at an extremely fast pace throughout all of the lessons, acting as if it were a competitive race and he would be victorious if he was the first student to complete the word. This game-like reference was also observed with Gary. Although Gary did
not have the same competitive drive that I saw in Tyler, he did refer to the Making Words lesson as a “game” in the post-interview. Gary mentioned that he enjoyed days when he could play the game and make secret words with the letter tiles. His ability to verbally state his feelings of contentment when engaging in the Making Words program shows the game-like connection.

In studying the way in which Tyler and Gary manipulated the letter tiles in the Making Words program, it was interesting to note the differences. Both boys manipulated the letter tiles in the program, conventionally spelling the prompted words. Tyler would manipulate the letter tiles in a more fast-paced way, while Gary initially appeared to manipulate them more timidly. As time went on and Gary participated in more Making Words lessons, his confidence appeared to grow. This boost in confidence directly impacted how he manipulated the letter tiles. With increased confidence, Gary manipulated the letter tiles with more ease, able to form words conventionally at a faster pace.

**Intervention Study Themes**

Through examining the interviews, DSA, weekly assessment data, and observational notes of the six participants involved in the study, there were several themes found in the study. Such themes included increased levels of engagement, increased word feature knowledge, physical and verbal actions, a game-like nature, collaborative efforts, emphasis on word meaning, and finally a new level of accountability with conventional spelling attempts.

Over the course of the five weeks, engagement levels appeared to be a common theme in observational data from all selected participants. When engaging in the Making Words program, engagement levels were observed as being increased. I expected some participants, such as Macy, Katie, and Tyler, to have strong engagement and excitement levels, based solely on
personality traits. However, I did not expect some of the other participants, such as Ryan and Joey, to have such high interest levels in the intervention due to attention-related struggles that had occurred daily in the classroom up to the point of the study. Both Ryan and Joey struggled immensely in maintaining focus and attention for nearly all classroom tasks and therefore their levels of engagement in the Making Words lessons were something interesting to note. Tyler and Joey both participated in the program with the same levels of engagement, as Tyler’s behaviors were more noticeable with his competitive attitude. In addition, when Gary was in attendance, he too was engaged in the lessons and his engagement grew over time. Therefore, observational data for the intervention study show all six participants experiencing levels of increased engagement when taking part in the Making Words program.

Through examining both the assessment data and writing samples, a common theme of increased word feature knowledge was revealed through the data. Through examining the assessment data for all six participants over the course of the five week study, five out of the six students involved had increased scores on their final DSA. All participating students were administered the Within Word assessment prior to the start of the study. Macy received a 22/25, Ryan a 19/25, Joey an 18/25, Katie an 8/25, Tyler a 7/25, and Gary a 5/25 on the initial assessment. When all of the students were once again administered the same DSA following the intervention study, four of the five students increased their score as compared to the initial-assessment. One student, Macy, remained unchanged with her final DSA score. On the final DSA, Macy received a 22/25, Ryan a 23/25, Joey a 20/25, Katie a 12/25, Tyler a 9/25, and Gary a 9/25. Five out of six students increased their DSA scores after the five week study, it is therefore clear that their word feature knowledge had increased within the time frame. The DSA assessed word feature knowledge in a single word assessment. However, this increased word
feature knowledge was also seen in the independent writing tasks for the children as well. Even in unconventional spelling attempts in independent writing, the students were beginning to show increased word feature knowledge after participating in the intervention program. The spelling patterns and discussions that took place in the Making Words program were seen in the students post DSA and writing samples.

Finally, four of the six students in the study, Macy, Ryan, Joey and Katie were observed participating in interesting physical actions throughout some Making Words lessons as well as when independently writing. Over the course of the study, Macy was observed relying heavily on her visual senses, taking note as to when words did not “look right”. The kinesthetic nature transferred over into her writing when she was observed physically underlining words that she knew did not look right or were not spelled conventionally. Ryan also discussed this act of underlining in his post-interview. Ryan listed underling unknown words as a possible strategy for independent writing.

Joey was observed making a tapping sound using his voice and fingers on the table throughout the Making Words lessons as well as when independently writing. Interestingly, Katie was also observed engaging in a mixed physical and verbal strategy for word formation. Within the beginning stages of the Making Words lessons, it was suggested to Katie to slide her finger under the word and individually chunk and blend the letter sounds she saw. Katie began using this strategy throughout the Making Words lessons and also used it when writing independently.

Interestingly, the blue group members, Tyler and Gary were not observed engaging in any physical or visual strategy, as the other two groups were. The only physical occurrence
observed with Tyler was his extremely fast working pace. Tyler truly was hyper-focused on the prompts, in order to quickly comprehend and build the word to be finished quickly. Therefore, four of the six students in the purple and green groups were observed using some kind of physical or kinesthetic method that had verbal connections in both the intervention program as well as independent writing.

An additional common theme found across all groups was the game-like reference to the Making Words program. The children viewed the Making Words program as more of a game than a new instructional approach to spelling instruction. When asked about the new instructional program in post-interview conversations, Macy, Katie, and Gary all referred to the program as a game. Each student referenced the program, calling it a game and usually discussing levels of enjoyment and fun with it. The kinesthetic program was hands-on and involved much manipulation in terms of the letter tiles. The children viewed this tactile approach to spelling instruction as game-like in nature, based on their answers in post-interviews.

The Making Words program appeared to spark a collaborative effort with some of the participating children. Throughout the study, Katie was especially open to receiving feedback from her fellow group members. She was open to developing and trying new strategies with the letter tiles. In addition, this was also seen with Gary. I observed Gary seeking out the help of his fellow group members when he had questions or confusions with the new program. In fact, Gary would seek the help of his peers before he would ask me for assistance. The Making Words program perhaps created an environment where the children felt comfortable collaborating with each other in hopes of finding success with the letter tiles and conventional spelling of words.
Post-interview conversations and observational notes throughout the study showed some interesting themes regarding individual student thinking about word construction and letter tile manipulation. When I asked Gary how he attempted the spelling of unknown words in independent writing, he responded stating that he thinks about what the word means. This was interesting in that it showed that Gary was truly thinking about meaning in his writing. When we write, we have to distinguish between homophones in deciding word choice. This is a profound thought and in fact, he was the only student in the study to mention anything about word meaning when involved in written tasks. Throughout the study, there were several occasions when homophones and word meanings were discussed. This was an important occurrence throughout the study.

Throughout the study, an additional common theme noted was a new level of accountability for some of the students. Both Katie and Joey made interesting realizations throughout the lessons when they recognized the need to use all of the given letter tiles in the word formation. Katie would verbally remind herself of this rule when engaging in the Making words lessons, without teacher assistance. Her ability to recognize the need to use all of the letter tiles was used as a strategy for her to properly place letters in the correct place. In addition, I also observed Joey recognizing this new level of accountability. When talking about spelling strategies for unknown words in the post-interview, Joey discussed how he thinks the word should look based on whether or not it should have more letters because of leftover letter tiles in the Making Words program. This is an interesting connection to the intervention program. Both Katie and Joey connected the Making Words program to thinking about the number of letters within words.
Summary

Chapter four described the data that were collected from this study. The data were collected through pre- and post- Developmental Spelling Assessments, weekly observational notes, student writing samples, and student interviews. Data were then analyzed to determine if the kinesthetic approach to word study had an impact on the conventional spelling in independent written tasks. The information was collected throughout small group word study groups and various other portions throughout the day, when the children were independently writing. The data were then compiled and analyzed to search for common themes. Themes were then used to determine how the kinesthetic approach to word study, through the use of the Making Words program, impacted spelling development and transfer to independent writing tasks.
Chapter 5: Conclusions and Recommendations

Introduction

The purpose of this study was to determine the impact a kinesthetic hands-on approach to teaching spelling would have on the transfer of students’ spelling knowledge in independent writing tasks through the use of the Making Words instructional program. The research focused on the implementation of a new kinesthetic instructional approach through the continued use of weekly spelling assessments, and looked closely at individual student writing samples for an improvement in independent spelling success. The study sought to answer the following question:

*How might the Making Words program, a kinesthetic approach to spelling instruction, influence the transfer of word knowledge in independent writing tasks of second grade students?*

This chapter will discuss the conclusions that came out of this study and how they can support student learning. In addition, implications for future instruction and research will be discussed at the close of the chapter.

Conclusions

Increased level of engagement with kinesthetic approach

Through examining assessment data and observational notes from the kinesthetic intervention program, I concluded that through the use of a kinesthetic approach to teaching word study, students showed increased levels of engagement. When I examined the observation notes, which discussed the levels of engagement for each participating student throughout each
week of the intervention program, I was able to determine the number of students experiencing true engagement. Over the course of the five weeks, increased engagement levels appeared to be a common theme in observational data from all selected participants when observed participating in the Making Words lessons for the week.

In examining the very diverse personalities of the six participating students, I was surprised by the active engagement levels by some of the children. I did not expect Ryan and Joey, two participants involved in the study, to have such high interest levels in the intervention due to their attentional struggles that had occurred daily in the classroom up to the point of the study. Both Ryan and Joey struggled immensely in maintaining focus and attention for nearly all classroom tasks and therefore their levels of engagement in the Making Words lessons were something interesting to note. The fact that all six participating students showed heightened engagement and excitement when taking part in the Making Words lessons shows that the hands-on method may have had an impact on the interest level of the primary students.

In examining student interview conversations and exchanges, I was able to conclude that many of the participating students viewed this kinesthetic program as a game. The students referred to the Making Words program as a “game” in many different situations, alluding to the idea that they saw the kinesthetic design as play and fun. In addition, Tyler was also observed as having increased competitive behaviors throughout the lessons, linking to the game-like nature the program. Alderman and Green (2011) studied the impact that other types of spelling instruction have on student motivation, and found that one of the most important factors in spelling instruction is meaningful activities that spark interest and motivation. Norman and Calfee (2004) also discussed the impact hands on methods for word study acquisition had on student engagement levels. For example, the authors discuss how the hands on manipulation of
letter tiles is an excellent indicator that reveals a student’s actual ability to represent and identify phonemes as well as his/her application, decoding, and spelling strategies. The authors found that hands-on methods increase engagement levels because the physical manipulation of words breaks them apart into phonemes, onsets, rimes, and syllables. It is the physical separation that highlights the phonemes and holds engagement levels at heightened levels for the primary students involved in the task.

**Increased word feature knowledge within current developmental spelling stage**

Through examining the assessment data for all six participants over the five week study, I found that five of the six students involved had increased scores on their final Developmental Spelling Assessment (DSA), as compared to the scores on the initial Developmental Spelling Assessment given prior to the start of the study. The DSA was given as the initial benchmark assessment to determine where the students were starting in terms of developmental spelling knowledge. The students were assessed again at the end of the intervention time period. Through comparing the results from the initial and final DSA, I was able to clearly see that there was an increase in word feature knowledge in five of the six participants. All students were assessed and given instruction in their developmental stage of spelling. The students were all working through individual developmental stages and the three different word study groups were all at different points of progression. McMurray’s (2006) study is supportive in terms of a systematic teaching of orthographic knowledge, in order to develop learning strategies and effective processing.

When students work within their individual developmental stages, they are able to work through less developed skills with others working at the same level.

Increased word feature knowledge within individual developmental stages was also seen when I analyzed the score differences from the pre and post-assessment on weekly spelling tests.
The increased word feature knowledge could be seen when the students increased their weekly spelling assessment scores. I saw that more than half of the participating students involved in the kinesthetic study as having increased assessment scores in comparing weekly pre-assessments and weekly post-assessments. Matt (2008) is an additional researcher who studied the impact a kinesthetic approach to word study has on primary aged students spelling development. Matt (2008) found that her first graders’ scores all increased following a trial kinesthetic approach to spelling instruction. The study examined the effect on the 18 students total participating in the study. This study had similar results with many of the participating students experiencing the same increases in assessment scores. Although it is not clear whether or not the assessment data score increases were due to the kinesthetic nature of the intervention program, it is evident that there were score increases when examining the data.

**Physical/visual impact on independent writing when using kinesthetic program**

When I examined the data, it showed that there were several different verbal and physical strategies that accompanied these kinesthetic activities with several of the students involved in the study. I then saw these same students transferring the strategies to independent writing situations without my direct assistance. I observed four of the six students using a physical or verbal supplemental strategy to assist in their letter placement and spelling when they were independently writing. Previous researchers have found there to be a direct relationship between the ability to read, write, and spell various words (Cunningham & Cunningham, 1992; Ness, 2010; Williams et al., 2007). This shows a possible connected relationship between the kinesthetic ability to spell, or build, words and the ability to conventionally spell those words in written language.
Additional researchers have also looked more closely at physical/visual impact on word knowledge acquisition. Rogers (1999) explored the impact large body kinesthetic movements have when integrated into a primary spelling instruction block. The study explored the teaching and practicing of ‘Spelling Cheerleading.’ Within this strategy, students spell words by chanting and moving to each letter that makes up each spelling word. Rogers (1999) found that the students experienced increased spelling success when they were chanting and moving at the same time.

Furthermore, Fernald (1943) mentions various elements of the VAKT multisensory approach to word learning. The acronym VAKT stands for visual, auditory, kinesthetic, and tactile. Within Fernald’s VAKT approach, an emphasis is placed on incorporating the physical with the auditory, verbal, and visual elements of literacy instruction (as cited in Mather & Jaffe, 2002). This approach exemplifies how physical, verbal, and kinesthetic activities are related and work together. Donnell (2007) also used a multisensory approach to word study in her third grade classroom where she incorporated auditory, visual, and kinesthetic components. The author found an increased ability to encode common spelling patterns and application of the alphabetic principle when using a multisensory instructional approach. The research shows a positive connection with multisensory approaches to instruction. The work of these researchers are in line with the findings of this study, in that they show a possible positive impact on word feature knowledge when multiple senses are integrated and used.

Both Macy and Ryan used a kinesthetic/physical approach when writing authentically and independently by underlining unknown words. The physical act of underlining shows the kinesthetic connection to solving unknown words. Joey was observed making a tapping sound using his voice and fingers on the table throughout Making Words lessons as well as when
independently writing, showing the interconnectedness of physical and verbal strategic use.

Finally, Katie would slide her finger under the word and individually chunk and blend the letter sounds she saw, again showing a physical and verbal strategy use. In addition, Katie verbally stated in one Making Words lesson the need to use all of the letter tiles. This verbal reminder was interesting in that it showed she was consciously thinking about spelling patterns with the available, and required, letters. She was held accountable for using all of the required letters and this assisted in her developmental knowledge of which letters form which spelling patterns and how those patterns are represented in the English Language system.

Therefore, the data show a clear connection between the kinesthetic program and the physical actions when writing. These appropriately used strategies were an excellent source to refer back to when students were experiencing difficulty in independent writing tasks. The ability of the students to use their acquired strategy appropriately in written tasks illustrates the helpfulness of the strategy.

Another interesting point was that each of the students who developed a new physical/verbal strategy developed a different one. Each student responded differently to the new kinesthetic program, and therefore developed strategies and routines that helped each of them get the most out of the lessons on an individual basis. This is a common occurrence in a comprehensive spelling approach. Researchers have defined a comprehensive spelling program to be one in which all areas of literacy are interconnected in order to increase letter-sound relationship understanding (Hilte & Reitsma 2011; McMurray, 2006; Ness 2010; Sharp et al., 2008). The environment in which a comprehensive literacy approach evolves is when student choice and individuality is present. For example, in this study the children were observed developing and then referring back to diverse and individualized strategies.
Gardner (1983) is an additional researcher who discovered that each student learns in a diverse way, according to their individual multiple intelligences. Gardner found there to be eight multiple intelligences that best suit diverse learners. The students involved in this study were all observed using different variations of strategies to achieve individual success and directly relates to Gardner’s theory of multiple intelligences. For example, interpersonal intelligence is part of Gardner’s theory of multiple intelligences. A person who holds this trait would flourish in situations that allow for active collaboration and interaction with peers. Gary, a student in this study, certainly held interpersonal intelligences. He actively collaborated with members in his group and appeared to enjoy the collaborative nature of the Making Words program.

An additional example of one of Gardner’s (1983) multiple intelligences is the linguistic learner. This learner uses words effectively and often thinks in terms of the words he/she sees in his/her mind. Macy could be considered a linguistic learner within this study. Macy would make references as to how a word should look, as seen visually in her own mind. Finally, a third intelligence is bodily-kinesthetic. These learners have a keen sense of body awareness and enjoy movement. All of the students involved in this study took part in using this intelligence when manipulating letter tiles to spell words. Therefore, the students chose a strategy that was applicable to their own level of comfort, and one in which they felt they received the most success from based on their own individual multiple intelligences.

Implications for Student Learning

The results of the study indicate many implications for student learning. The first implication is that students should have kinesthetic and hands-on activities integrated into their daily word study activities due to increased engagement and attention span. In addition, students may benefit from taking part in kinesthetic word study programs, as it is an active word study
activity that may assist in the development of phonological knowledge which can be transferred to independent writing situations.

**Students engage longer in learning word feature knowledge, when involved with tactile, kinesthetic activities**

Macy, Ryan, Joey, Katie, Tyler, and Gary were all observed as having increased engagement levels when working with the kinesthetic word study program. I observed this through their body language, interest and participation in the lessons, and eagerness to engage in the lessons. Ryan and Joey were two students who had diagnosed attention-related limitations. Both Ryan and Joey were observed as having increased attention and engagement levels when taking part in the Making Words hands-on program. I did not expect them to have such high interest levels in the intervention due to attentional struggles that had occurred daily in the classroom up to the point of the study. However, these two children were also noted as experiencing high levels of engagement throughout the lessons, showing increased attention span and tolerance for the activity. In addition, the two children were able to speak to their engagement in the post-intervention interview.

Researchers have supported the claim that hands-on activities may allow for increased levels of engagement. Research by Dilorenzo, Rody, Bucholz and Brady (2011) show the positive effects from incorporating picture mnemonics and hands-on kinesthetic activities for instructional practices, as well as engagement levels. There were consistently heightened levels of engagement in five of the six participants in this study. The drastic change in behavior from the two students mentioned above was monumental in terms of a difference in work production. These findings are consistent with previous research regarding the Making Words program. Researchers believe the reason why Making Words works with primary aged children is because
the program is designed to be engaging, hands-on, fast paced, exciting, and fun in the eyes of children (Cunningham, 1992; Cunningham & Hall, 2009).

**Students participating in kinesthetic, hands-on approaches to word study showed increased phonological knowledge.**

Many of the participating students involved in the study experienced increased assessment scores after beginning the intervention program. Each week, I administered to the students a pre-assessment and a post-assessment, following the weekly participation in the Making Words kinesthetic program. Four of the six participating students showed increased weekly assessment scores, from the pre- to the post-assessment, in four of the total five weeks of the study. In addition, Katie, who had the most difficult time out of all participants in the study in terms of conventional spelling acquisition, was able to increase her weekly assessment score in all five weeks of the study.

Other researchers have also studied this concept and found similar results as those seen in this study. Rule et al. (2006) found the kinesthetic/tactile methods used may supplement and reinforce phonological awareness. The study examined three different groups: a kinesthetic group, tactile group, and a control group. The participants involved in the study included 34 students in grades first through third at risk of reading failure. The study found that the students participating in the kinesthetic or tactile groups experienced greater gains in phonological knowledge as compared to those students who did not take part in the kinesthetic activities. Rule et al. (2006) discussed and suggested the idea of linking phonological awareness to phonics through the use of kinesthetic instructional methods, discussing many of the same ideas presented in this study.
Students who struggled with spelling word transfer to independent writing benefitted from kinesthetic, hands-on approaches to word study

Over the course of the five week study I observed that students engaging in the kinesthetic program learned strategies and skills to apply in independent writing situations. I observed four of the six participating students using a physical and/or verbal strategy related to the kinesthetic program that transferred to their independent writing. I observed Macy, Ryan, Joey and Katie participating in these interesting physical actions in the Making Words lessons. I also observed some of these physical tendencies in independent writing situations. Such behaviors included finger tapping on the table in combination with vocal noises, underling unknown words, sliding a finger under a word to break apart and then blend sounds, and recognizing the need to use all letter tiles in the program. All of these acquired physical or verbal behaviors were strategies used by the children in both the kinesthetic Making Words program as well as in their independent writing. Therefore, based on my observations, it appeared that the strategies learned were beneficial to the students, in terms of their transfer into independent writing situations. The students had a strategy to use when attempting to spell unknown words when independently writing.

As the students were participating in a comprehensive literacy program, where spelling, reading, and writing were all interconnected, they were developing individualized strategies to use in various academic situations, both in the Making Words lessons and when authentically writing. This idea is similar and a subsection of a balanced literacy approach, which Tompkins (2010) defines as essential to developing spelling. Tompkins (2010) discusses that when children are learning to spell they are also attempting to understand and apply what they’ve learned through authentic reading and writing situations. I observed the students involved in this study attempting to apply what they had learned through authentic writing situations. I saw this
through each individual student and their use of their diverse strategies used when authentically writing.

**Implications for My Teaching**

Observation of tile manipulation indicates current strategies being used for conventional spelling attempts

After I studied observational data from each Making Words lesson, I found that in some cases student observational notes gave great insight as to where each child was in their phonological development. In week three of the study, when observing Macy taking part in the Making Words lesson, I observed her attempt the word ‘oil’ as ‘oyl’ when first spelling it with the letter tiles. Upon examining her formation of letters, she appeared puzzled and began touching the letters again, as if she knew something did not appear to be correct. She then verbally stated “that does not look right” affirming her puzzled appearance. She moved the middle vowel ‘y’ and replaced with the letter ‘i’. Her physical manipulation of the letter ‘y’ gave great insight into her thinking, as it showed she knew that it was not the correct vowel in this word. This invented spelling also showed her understanding of how this particular sound works in other words. For example, it is possible that Macy was comparing the very similar sounds in the words ‘oil’ to other commonly known words such as ‘boy’, ‘toy’, or ‘joy’. All of these words have the same vowel sound and it is therefore possible that Macy was drawing on that knowledge in her first attempt at spelling the word ‘oil’. In week four of the study, I observed Ryan in a similar situation that showed his understanding of long vowels. When he was prompted to spell the word ‘coast’, he initially spelled it as ‘coste’. His formation with the letter tiles gave insight into how he was currently thinking about long vowel patterns. His formation
made perfect sense, although he spelled it unconventionally. This observation showed that Ryan had understanding of long vowel patterns and was using them in situations that made sense.

I observed this same situation in week one with Katie when she gave insight as to her current level of knowledge for long vowel patterns when forming the word ‘leak’ as ‘leek’. Furthermore, Tyler and Gary also showed their phonological understanding through observational notes. When prompted to spell the word ‘stopped’, both children initially used the letter tiles to form a different and unconventional form of the word. Tyler initially spelled it as ‘stoped’ and Gary as ‘stop’. The letter tile formation showed that although the children understood and could conventionally spell the base word, ‘stop’, they were still progressing through having a conventional understanding of inflectional endings. Through multiple attempts at rearranging letters, both students were able to eventually conventionally spell this word. The manipulation of the letter tiles allowed for the students to make multiple attempts at the same word.

In addition, their invented spellings give great insight as to what they know about spelling patterns and phonics in general. This occurrence can reveal a lot of information regarding developing speller’s orthographic knowledge. The invented spelling will reveal what the student understands and is aware of, regarding the relationships between speech-sounds, graphemes, and phonemes (He & Wang, 2009). Through their invented spelling attempts, I could clearly see which phonological skills each student had an awareness of as they attempted to use them in their unconventional spelling attempts. For example, through Macy and Ryan’s invented spelling attempts, I could see that they were beginning to experiment with long vowel patterns.
Other researchers have also studied this concept and found similar results as those seen in this study. Norman and Calfee (2004) discuss how the hands on manipulation of letter tiles is an excellent indicator that reveals a student’s actual ability to represent and identify phonemes as well as their application, decoding, and spelling strategies. The physical manipulation of the letter tiles has proven effective in the past, as well as in this study as a positive approach to teaching phonological concepts. The information that teachers can discover regarding student understanding of phonological concepts through the use of kinesthetic approaches, sheds great light into the power these approaches can also have on overall spelling development. Using observational data could be compared to taking a running record, in the sense that observing what the children do with the letter tiles could allow teachers to assess the processes the children use as they work to spell unknown words.

**Using a kinesthetic word study practice helps develop word feature knowledge in students**

Through studying numerous forms of data, as well as comparing initial and final assessment pieces, I was able to clearly see that the kinesthetic program did impact the amount of word feature knowledge with second grade students. I administered each student two different forms of assessments: the Developmental Spelling Assessment, to test general word feature developmental knowledge as well as weekly spelling tests, to test the knowledge of the weekly spelling list feature. These two forms of data were closely analyzed for trends, regressions, and advancements.

In studying the assessment data, it was clear that students made advancements in word feature knowledge. Through the repeated exposure to the weekly kinesthetic lessons, the students were able to interact with their developing word feature knowledge in a new and different method than they were typically used to up to that point. Witnessing the increase in assessment
scores, especially considering the condensed time frame was beneficial for future instructional practices, possibly suggesting a positive impact from kinesthetic activities on word feature development.

Throughout the intervention study, when following the kinesthetic Making Words program, the authors of the lessons identified the importance of instructing the students within their individual developmental stages. The kinesthetic activities will have a greater chance of benefiting student advancement when they are within their developmental progression and in an order that makes sense, according to the authors of the Making Words program (Cunningham & Hall, 2009). I also saw this occurrence when observing the students interacting in the kinesthetic lessons. For example, in week four when Gary was spelling the word ‘stern’ he initially spelled it as ‘stirn’. His invented spelling shows the need for further instruction regarding vowel sounds or simply the need for more exposure to this spelling pattern. Regardless of his instructional needs, at that point in time it would not have made sense for me to increase the level of challenge by asking him to then create the word ‘sternly’, now adding the challenge of creating an inflected ending and pushing him beyond his developmental progression. The kinesthetic nature of the program may help to increase word feature knowledge of the students, however, not passed the point of developmental limits.

Researchers have identified five stages that students tend to move through as they progress toward becoming conventional spellers (Bear, Invernizzi, Templeton, & Johnston, 2008; Sharp, Sinatra, & Reynolds, 2008; Tompkins, 2010). The major five stages of spelling development include: emergent spelling, letter name-alphabetic spelling, within word pattern spelling, syllables and affixes spelling, and derivational relations spelling. Joey, a student involved in this study was working through the Within Word developmental stage at the time of
the study. Throughout this stage, the students are beginning to have an understanding and awareness of initial and final consonants, including both blends and digraphs, but not yet using them consistently. Joey’s observational data for the intervention program supports his placement in the within word stage. For example, in week three of the intervention study, Joey was participating in the Making Words lesson and prompted to spell the word ‘white’. Joey used his letter tiles to spell ‘wight’. This spelling showed his awareness of common consonant digraph spelling patterns. Although he did not conventionally spell the word, his invented spelling supports his current placement in the Within Word developmental stage. Joey will benefit from engaging in word study activities that help support the conventional use of common consonant digraph spelling patterns.

**Using developmentally leveled word study groups will allow for greater advancements in word feature knowledge**

The participating students involved in this study were all placed in developmentally leveled word study groups based on their developmental progression within the word study program. Prior to student participation in the study, I administered each student a pre-assessment to determine where each of them was currently operating in the spelling developmental progression. The students were then grouped based on skills mastered and skills yet to master. The groups that the students were broken up into were directly in line with the suggested developmental stages of many researchers. As previously mentioned, the students were working through the commonly identified five stages of spelling development. The students were grouped by developmental progression in order to appropriately assign Making Words lessons. Each group required work with diverse skills and concepts within the Making Words program. Grouping students with similar needs allowed for the Making Words lesson to be more easily assigned.
Making the instructional choice to group students by developmental spelling stage allows for students to work toward similar points of mastery. In addition, these groupings can allow students to coexist in a heterogeneous group that can allow for academic socialization. Heterogeneous means that although the students are in the same developmental spelling stage, they all excel at certain features and require assistance with others. Therefore, although six students may be working in the Within Word developmental stage, one student may have mastered common consonant digraph patterns while the others are still working toward conventional use of them. Therefore, heterogeneous grouping within the same developmental spelling stage allows for social learning opportunities, as well as increased approximate spelling success. This is true for instructional purposes as well. If teachers use developmental spelling groups, they are better able to shape their instruction to the individual needs of students who are grouped with similar needs.

Montésinos-Gelet and Morin (2005) sought to study the influence that social interactions among peers have on the approximation of spelling in kindergarten children. The researchers found that cooperation among children lends itself to increased approximate spelling successes. In addition, researchers have found that students working in developmentally appropriate spelling groups are making instructional gains in spelling development, in a systematic developmentally appropriate stage structure. Teachers should therefore be teaching in a similar structure.

McMurray’s (2006) study is supportive in terms of a systematic teaching of orthographic knowledge, in order to develop effective processing. The students participating in this study were grouped in this suggested format. The developmentally appropriate groupings allowed for continued instruction at individualized levels and therefore assisted in the advancement of
students’ orthographic knowledge and the alphabetic principle. This proved just as beneficial in this study, showing the students had greater success when grouped with members of the same developmental stage. The grouping choices for this study made it possible to tailor each Making Words lesson to each group appropriately. While each group was working toward mastery of different skills, the grouping choices were vital in that the mixture of children participating in each group required different Making Words lessons in order to help increase their individual word feature knowledge. Some lessons in the Making Words program would not be developmentally appropriate for some groups and therefore if the children were not grouped by developmental stage some students would run the risk of participating in lessons that were not aligned with their individual developmental progression.

**Writing is an interactive process that pairs well with kinesthetic word study activities**

When a person is writing s/he is forced to activate many different forms of knowledge, as writing is a complex process. Therefore, students who experience attention related delays especially struggle with the task of writing. They are asked to think of a structurally meaningful sentence, remember the sentence, and form letters and words in a coherent and logical flow to match their initial thought process. This is quite difficult for many students, let alone those who have attention related delays and physically cannot attend to a task. Researchers have studied this topic in the past seeking to understand how related systems benefit students’ conventional spelling in authentic writing situations. Hilte and Reitsma (2011) saw this possibility for a connection and through their research found that when the process of meaning or semantics was activated, conventional spelling occurrences increased. In addition, the researchers found that meaning is considered to help children focus attention on specific word identity when all lexical
properties (semantics, phonology, and orthography) are activated. It is clear to see that this is a very complex process that involves the use of many different areas working together to produce logical thoughts and conventional spelling.

Therefore, a sound instructional choice to integrate into daily classroom activities would be to use kinesthetic approaches to teaching word study. Through the data collected from this research as well as from past researchers, kinesthetic activities trigger a physical and or verbal strategy that helps students recall a greater amount of word feature knowledge that can be applied in writing situations (Hilte & Reitsma 2011; McMurray, 2006; Ness 2010; Sharp et al., 2008). I observed four of the six students in the study, Macy, Ryan, Joey and Katie participating in interesting physical actions throughout some Making Words lessons, as well as when independently writing. I observed Macy relying heavily on her visual senses, taking note and attention to when words did not look right to her. The kinesthetic action transferred over into her writing when she was observed physically underlining words that she knew did not look right or were not spelled conventionally. Ryan also discussed underlining unknown words as a possible strategy for independent writing. Joey was observed making a tapping sound using his voice and fingers on the table throughout the Making Words lessons as well as when independently writing. Finally, Katie would slide her finger under a word and individually chunk and blend the letter sounds she saw when engaging in Making Words lessons as well as writing independently. This process is directly in line with the findings of past researchers who found that when meaning or semantics was activated, conventional spelling occurrences increased (Hilte & Reitsma, 2011). Four of the participating students involved in the study created their own individual physical or verbal strategy that assisted them in building their own individual semantic knowledge. Through their chosen strategy, they were able to build deeper meaning,
which resulted in success with more approximate conventional spelling attempts in independent writing.

**Recommendations for Future Research**

**Extended time frame**

This study was limited in the number of weeks allotted to data collection. Therefore, I propose that the number of weeks given for data collection be increased in future research to validate the results of this study. A longer time frame will give more data that will either more strongly support or negate the findings of this research study. In addition, a longer time frame will allow for an increased frequency of weekly Making Words lessons to observe the impact that more than one weekly lesson will have on the students’ phonological transfer to writing situations.

**Use a less scripted kinesthetic program**

This study looked into the impact of using kinesthetic activities for phonological acquisition and transfer. The Making Words program was designed to be scripted in its teacher execution of instructional delivery. According to Cunningham and Hall (2009), the authors of the Making Words program, the Making Words lesson plans are an example of guided instruction. Guided instruction theory states that children retain and remember more information when they discover the ideas on an individual basis, through the gentle guidance of their teacher (Cunningham & Hall, 2009). Therefore, it may be interesting to look into studying the effect of a more relaxed and non-scripted program to see if there is a more natural impact of kinesthetic instruction on phonological development and transfer to independent writing situations. Guided instruction based strictly on individual teacher planning may allow for a more individualized
instructional planning. If there was not the use of a scripted program, such as Making Words, teachers would have the freedom to guide their instruction solely on their own observations and recommendations for each individual student with whom they’re working with. This change in instructional planning and delivery may allow for greater acquisition of word knowledge, as it is more individualized and based solely on the needs of each student. The comparison of the two differing programs may be interesting to study. Possible future questions could look into whether or not a scripted kinesthetic program helps or hinders the spelling development of primary-aged students.

**Study the impact of different kinesthetic activities**

This study specifically studied the impact of the Making Words program as a kinesthetic approach to teaching word study skills. Therefore, I propose that additional kinesthetic resources be examined to see whether there is a certain program that is more effective than another. In addition, through studying multiple programs one could determine whether or not the actual program has an effect on phonological development or if it is simply the kinesthetic approach that makes a difference. In addition, through studying multiple programs one could compare the characteristics of each participating program to determine if there are certain qualities or instructional approaches that make an impact on student learning.

One type of program that could be studied is the difference between large and small motor kinesthetic activities. For example, it was not noted in this study what the impact of using large body kinesthetic movements have on spelling acquisition, only fine motor kinesthetic activities were utilized through the use of letter tiles. There have been some researchers in the past who have sought to study the impact large verses small body movements have on spelling development (Maat, 2008; Rogers, 1999; Rule et al., 2006). However, there has been very little
research on whether or not there is a difference between large and small body movements in general. Therefore, future researchers could seek to study what impact, if any, there is when looking more closely at the type of kinesthetic integration in the spelling program.

**Final Thoughts**

Reflecting back on the entire study it is clear that kinesthetic word study activities *can* make a difference in word feature knowledge and application. When used consistently and appropriately, the physical and tactile approach to teaching word feature knowledge can impact student engagement and understanding of certain phonological skills. The greatest professional and personal finding from this study was the relationship between the kinesthetic instructional approach and increased level of engagement. Two of the six participating students in the study had extremely short attention spans that limited their educational gains. The fact that both of these students experienced success and increased engagement levels that resulted in increased attention spans is extremely meaningful. The research points to a relationship between hands-on and tactile methods with increased interest levels. The research showed me that materials that can be touched and manipulated are better able to hold the attention and interest of students.

Also interesting were the verbal and physical strategies that accompanied these kinesthetic activities that were then transferred to independent writing situations, without my direct assistance. Four of the six students participating in the study were observed using a physical or verbal strategy to assist in letter placement and spelling when independently writing. The students were observed first developing these strategies when engaged in the Making Words program. It was then seen in independent writing activities as well. The occurrence of this on more than one occasion, with more than one student, suggests the possible relationship between the kinesthetic activity and the transfer to writing activities. Future questions would look into this
occurrence to look for relationships and trends that prove or disprove the impact of the 
kinesthetic program on encouraging the development of physical/verbal strategies.

The study, as a whole, was enlightening on many different levels. Integrating a new 
instructional approach is always exciting; however, integrating this new approach was especially 
valuable given the opportunity to study six diverse students so closely. The study allowed for the 
close observation of six very diverse students and the impact of the new instructional program. 
The abundance of data collection methods allowed for a close look at how the students were 
responding to the new program. This was especially valuable as this kind of close observation is 
not feasible with every new instructional technique used in a classroom with more than 20 
children. The takeaways from the study are plentiful; however, one of the most meaningful was 
the opportunity to look so very closely at the response of a new instructional program on 
developing students to study the academic and behavioral response.

The participating students achieved a great deal of success throughout the course of this 
study. Specifically, the students were able to enjoy an academic activity, expand their knowledge 
of spelling features; physically engage with words, and most importantly apply that learning to 
independent authentic writing situations. Through the study, the close examination of the new 
instructional program allowed students the chance to enjoy learning and building their 
orthographic knowledge.
References


Appendix A

Sample Word Study Assessment

Word Study Assessment

Name: __________________________________________

1. ____________________________________________

2. ____________________________________________

3. ____________________________________________

4. ____________________________________________

5. ____________________________________________

6. ____________________________________________

7. ____________________________________________

8. ____________________________________________

9. ____________________________________________

10. __________________________________________

Sentence Dictation:
Appendix B

Observation Protocol

Date:
Making Words Lesson Number:
Word Study- Weekly Word Feature:

<table>
<thead>
<tr>
<th>Description of Activities</th>
<th>Field Notes</th>
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<tbody>
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Appendix C

Purple Group- Weeks 1-5 Spelling Lists
Level B: Sort 29 (Vowel Digraph oo)

stood
brook
wool
noon
troop
stool
*picture
*sure
*teacher
*together
Level B: Sort 30 (Vowel Digraphs aw, au)

lawn
hawk
straw
taught
cause
fault
*until
*while
*which
*yellow
Level B: Sort 31 (Diphthongs ou, ow)

- ground
- south
- shout
- howl
- crown
- plow
- *already
- *answer
- *aunt
- *uncle

Level B: Sort 31 (Diphthongs ou, ow)

- ground
- south
- shout
- howl
- crown
- plow
- *already
- *answer
- *aunt
- *uncle
Level B: **Sort 32** (Silent Beginning Consonants: kn, wr, gn)

- known
- knee
- wrist
- wrap
- gnaw
- gnash
- *eight
- *four
- *cousin
- *goes

Level B: **Sort 32** (Silent Beginning Consonants: kn, wr, gn)

- known
- knee
- wrist
- wrap
- gnaw
- gnash
- *eight
- *four
- *cousin
- *goes
Level B: Sort 33 (Triple r – Blends: scr, str, spr)

scream
scratch
straight
strange
sprout
spread
*once
*second
*tomorrow
*right
Appendix D

Green Group- Weeks 1-5 Spelling Lists
Level B: Sort 21 (Review Long Vowel Patterns)

scold
bright
trail
sweep
slide
grape
stew
fry
*it’s
*they’ve
Level B: \textbf{Sort 17} (Short o (CVC) & Long o (CVCe, CVVC-oa, Open Syllable-ow))

chop
dock
globe
close
coach
loaf
know
throw
*does
*father

Level B: \textbf{Sort 17} (Short o (CVC) & Long o (CVCe, CVVC-oa, Open Syllable-ow))

chop
dock
globe
close
coach
loaf
know
throw
*does
*father
Level B: Sort 18 (Short u (CVC) & Long u (Open Syllable-ew and -ue))

junk
dump
knew
drew
true
sue
*mother
*every
*friend
*house

Level B: Sort 18 (Short u (CVC) & Long u (Open Syllable-ew and -ue))

junk
dump
knew
drew
true
sue
*mother
*every
*friend
*house
Level B: **Sort 19** (Short i (CVC) & Long i (CVCe, VCC-igh, & CV Open Syllable-y))

grill  
quit  
twice  
white  
night  
high  
try  
cry  
*can’t  
*don’t  

Level B: **Sort 19** (Short i (CVC) & Long i (CVCe, VCC-igh, & CV Open Syllable-y))

grill  
quit  
twice  
white  
night  
high  
try  
cry  
*can’t  
*don’t  

Level B: Sort 20 (Short i,o (CVCC) & Long i,o (VCC))

will
kiss
pond
fond
child
kind
both
most
*I’ll
*I’m

Level B: Sort 20 (Short i,o (CVCC) & Long i,o (VCC))

will
kiss
pond
fond
child
kind
both
most
*I’ll
*I’m
Level B: Sort 21 (Review Long Vowel Patterns)

scold
bright
trail
sweep
slide
grape
stew
fry
*it’s
*they’ve

Level B: Sort 21 (Review Long Vowel Patterns)

scold
bright
trail
sweep
slide
grape
stew
fry
*it’s
*they’ve
Appendix E

Blue Group- Weeks 1-5 Spelling Lists
Level B: Sort 5 (Short & Long Vowel o)

frog
fox
top
clock
goat
ccoat
bone
nose
*the
*they

Level B: Sort 5 (Short & Long Vowel o)

frog
fox
top
clock
goat
ccoat
bone
nose
*the
*they
Level B: Sort 1 (Initial Consonant Blends)

- bran
- brad
- smog
- smell
- trip
- trot
- skip
- sky
- drop
- drum

Level B: Sort 1 (Initial Consonant Blends)

- bran
- brad
- smog
- smell
- trip
- trot
- skip
- sky
- drop
- drum
Level B: *Sort 2* (Consonant Digraphs)

chat
chin
shut
shell
when
whip
thin
thick
*are
*blue
Level B: Sort 3 (Short & Long Vowel a)

| bag  |
| map  |
| ram  |
| jack |
| rain |
| train|
| skate|
| frame|
*come
*good
Level B: Sort 4 (Short & Long Vowel i)

pig  
crib  
hill  
smile  
write  
bike  
slide  
*have  
*here  
*said

Level B: Sort 4 (Short & Long Vowel i)

pig  
crib  
hill  
smile  
write  
bike  
slide  
*have  
*here  
*said
Level B: Sort 5 (Short & Long Vowel o)

frog
fox
top
clock
goat
coat
bone
nose
*the
*they

Level B: Sort 5 (Short & Long Vowel o)

frog
fox
top
clock
goat
coat
bone
nose
*the
*they
Appendix F

Macy- Initial and Final Interview

Date of Interview and Time: 5/13

Purpose Statement: **Start audio recording. Identify participant by pseudonym, the date, and time.**

The purpose of this interview is for me to gain a better understanding of how you currently use our word study lessons in your own independent writing. I sometimes wonder if students are thinking about the word study lessons when writing in your journals. Any information that you can give me would help me become a better teacher. If at any time you feel uncomfortable with a question I ask, please know that you have the choice not to respond. You may stop the interview at any time. I believe that our interview will last five to ten minutes. I will be recording our conversation, if you have agreed to let me do so.

1. How do you feel about our current word study lessons?
   - It makes me feel challenged. *b/c*
   - Some lessons are hard.

2. Do you think about our word study lessons when you are writing independently? If so how?
   - Sometimes I do. I think about chunks, patterns.

3. Which word study activities help you learn your spelling words and features the most? Why do you think so?
   - The picture sorts help. They separate it.

4. Which word study activities, if any, do you think about when you are writing? In what ways does this activity help you in your writing?
   - I think about whiteboards. *b/c*
     - We can do tests on them.

5. When writing in your journals and you reach a tricky word, how do you approach spelling it?
   - I think about chunks and seeing it fit.
Interview Protocol:

Participant Pseudonym: use
Date of Interview and Time: 0-17-15

Purpose Statement: **Start audio recording-Identify participant by pseudonym, the date, and time**

The purpose of this interview is for me to gain a better understanding of how you currently use our word study lessons in your own independent writing. I sometimes wonder if students are thinking about the word study lessons when writing in your journals. Any information that you can give me would help me become a better teacher. If at any time you feel uncomfortable with a question I ask, please know that you have the choice not to respond. You may stop the interview at any time. I believe that our interview will last five to ten minutes. I will be recording our conversation, if you have agreed to let me do so.

1. How do you feel about our current word study lessons?
   "I love it! It's such a fun game to try to practice our spelling words!"

2. Do you think about our word study lessons when you are writing independently? If so how?
   "Yes - I think about how I can chunk the words into parts."

3. Which word study activities help you learn your spelling words and features the most? Why do you think so?
   "I like the picture sorts. I'm good at them and it's kind of like chunking!"

4. Which word study activities, if any, do you think about when you are writing? In what ways does this activity help you in your writing?
   "Chunking - like what we do in the game (chunking words) in guided reading groups!"

5. When writing in your journals and you reach a tricky word, how do you approach spelling it?
   "I like to chunk the words so I can hear all the sounds. "It helps me to chunk the words when I write and I'm not sure how to spell them like when I chunk words in the backguard game and that we play at guided reading groups!"
Appendix G

Ryan - Initial and Final Interview

Participant Pseudonym: 
Date of Interview and Time: 5/13 2:00pm

Purpose Statement: **Start audio recording. Identify participant by pseudonym, the date, and time.**

The purpose of this interview is for me to gain a better understanding of how you currently use our word study lessons in your own independent writing. I sometimes wonder if students are thinking about the word study lessons when writing in your journals. Any information that you can give me would help me become a better teacher. If at any time you feel uncomfortable with a question I ask, please know that you have the choice not to respond. You may stop the interview at any time. I believe that our interview will last five to ten minutes. I will be recording our conversation, if you have agreed to let me do so.

1. How do you feel about our current word study lessons?
   - I feel okay - I like how we learn how words work.

2. Do you think about our word study lessons when you are writing independently? If so how?
   - Not really.

3. Which word study activities help you learn your spelling words and features the most? Why do you think so?
   - Writing / Spelling or y.

4. Which word study activities, if any, do you think about when you are writing? In what ways does this activity help you in your writing?
   - I think about the letter patterns ee or ea?

5. When writing in your journals and you reach a tricky word, how do you approach spelling it?
   - Use my word book.
   - I think of letter/spelling rules.
Interview Protocol:

Participant Pseudonym: **Ryan**
Date of Interview and Time: **6-17-13**

Purpose Statement: **Start audio recording-Identify participant by pseudonym, the date, and time**

The purpose of this interview is for me to gain a better understanding of how you currently use our word study lessons in your own independent writing. I sometimes wonder if students are thinking about the word study lessons when writing in their journals. Any information that you can give me would help me become a better teacher. If at any time you feel uncomfortable with a question I ask, please know that you have the choice not to respond. You may stop the interview at any time. I believe that our interview will last five to ten minutes. I will be recording our conversation, if you have agreed to let me do so.

1. How do you feel about our current word study lessons?
   **I feel good - I like learning about words!!**
   Prompt: Do they help you to learn words?
   **Yes, they help me by practicing everyday!!!**

2. Do you think about our word study lessons when you are writing independently? If so how?
   **I sometimes think over how the words should look -- like on the word wow, or with the magnetic letters, or letter tiles.**

3. Which word study activities help you learn your spelling words and features the most? Why do you think so?
   **I like when we are allowed to write them in sand or use shaving cream. It's fun and I think I remember the words better.**

4. Which word study activities, if any, do you think about when you are writing? In what ways does this activity help you in your writing?
   **I think about a lot of them - I try to remember the order of the letters but also think about the rules that we have learned.**

5. When writing in your journals and you reach a tricky word, how do you approach spelling it?
   **I always underline it to remind myself I need to check it later (with a resource). Then I just think about what I know and have learned.**
Appendix H

Joey- Initial and Final Interview

Interview Protocol:

Participant Pseudonym: Joey
Date of Interview and Time: 5/13 2:00pm

Purpose Statement: **Start audio recording-Identify participant by pseudonym, the date, and time**

The purpose of this interview is for me to gain a better understanding of how you currently use our word study lessons in your own independent writing. I sometimes wonder if students are thinking about the word study lessons when writing in your journals. Any information that you can give me would help me become a better teacher. If at any time you feel uncomfortable with a question I ask, please know that you have the choice not to respond. You may stop the interview at any time. I believe that our interview will last five to ten minutes. I will be recording our conversation, if you have agreed to let me do so.

1. How do you feel about our current word study lessons?
   - It's fun + helps me learn

2. Do you think about our word study lessons when you are writing independently? If so how?
   - Yes, I think about writing in the lines and I remember how to chnic

3. Which word study activities help you learn your spelling words and features the most? Why do you think so?
   - Spelling city, games are fun and you practice a lot and want to win!

4. Which word study activities, if any, do you think about when you are writing? In what ways does this activity help you in your writing?
   - Spelling city.

5. When writing in your journals and you reach a tricky word, how do you approach spelling it?
   - I chnic it and
Interview Protocol:

Participant Pseudonym: **Joey**
Date of Interview and Time: **6-1-7**

Purpose Statement: **Start audio recording-Identify participant by pseudonym, the date, and time**

The purpose of this interview is for me to gain a better understanding of how you currently use our word study lessons in your own independent writing. I sometimes wonder if students are thinking about the word study lessons when writing in your journals. Any information that you can give me would help me become a better teacher. If at any time you feel uncomfortable with a question I ask, please know that you have the choice not to respond. You may stop the interview at any time. I believe that our interview will last five to ten minutes. I will be recording our conversation, if you have agreed to let me do so.

1. How do you feel about our current word study lessons?
   I love word study. I just think it’s like playing and doing fun games.

2. Do you think about our wordy study lessons when you are writing independently? If so how?
   Well I think about how the word should look like. Should it be more letters long because there are extra letters? To make it longer in making words.

3. Which word study activities help you learn your spelling words and features the most? Why do you think so?
   Spelling city. I just love the computer so much. It’s so fun.

4. Which word study activities, if any, do you think about when you are writing? In what ways does this activity help you in your writing?
   I think about seeing them like on a computer screen. What word, letters fit.

5. When writing in your journals and you reach a tricky word, how do you approach spelling it?
   I underline it. Then check a reference, like the word wall.
Appendix I

Katie- Initial and Final Interview

Participant Pseudonym: [REDACTED]
Date of Interview and Time: 5/1/20 9:30am

Purpose Statement: **Start audio recording-Identify participant by pseudonym, the date, and time**

The purpose of this interview is for me to gain a better understanding of how you currently use our word study lessons in your own independent writing. I sometimes wonder if students are thinking about the word study lessons when writing in your journals. Any information that you can give me would help me become a better teacher. If at any time you feel uncomfortable with a question I ask, please know that you have the choice not to respond. You may stop the interview at any time. I believe that our interview will last five to ten minutes. I will be recording our conversation, if you have agreed to let me do so.

1. How do you feel about our current word study lessons?
   - I feel like I'm really learning my new words.

2. Do you think about our word study lessons when you are writing independently? If so how?
   - Sometimes - I think of the letter patterns.

3. Which word study activities help you learn your spelling words and features the most? Why do you think so?
   - Whiteboards b/c I get to know my words by writing and reading them.

4. Which word study activities, if any, do you think about when you are writing? In what ways does this activity help you in your writing?
   - I think of my spelling words b/c I remember them.

5. When writing in your journals and you reach a tricky word, how do you approach spelling it?
   - I write it how I think it goes if it doesn't look right. I think of spelling rules like adding an 'e' to 'end' to make the vowel sound.
Interview Protocol:

Participant Pseudonym: 
Date of Interview and Time: 

Purpose Statement: **Start audio recording-Identify participant by pseudonym, the date, and time**

The purpose of this interview is for me to gain a better understanding of how you currently use our word study lessons in your own independent writing. I sometimes wonder if students are thinking about the word study lessons when writing in your journals. Any information that you can give me would help me become a better teacher. If at any time you feel uncomfortable with a question I ask, please know that you have the choice not to respond. You may stop the interview at any time. I believe that our interview will last five to ten minutes. I will be recording our conversation, if you have agreed to let me do so.

1. How do you feel about our current word study lessons?
   - “I love that game that we have been playing - making words. It’s fun to move the letters around and figure out the secret word!”

2. Do you think about our word study lessons when you are writing independently? If so how?
   - “I think about what looks right - because sometimes my brain will tell me if something looks wrong.”

3. Which word study activities help you learn your spelling words and features the most? Why do you think so?
   - “Making words! We have been doing it a lot and it’s fun to try and move letters around to figure out words.”

4. Which word study activities, if any, do you think about when you are writing? In what ways does this activity help you in your writing?
   - “Sometimes I think about the word when and what words on there that I should know. I think about making letters around inside a word and how that could change the word.”

5. When writing in your journals and you reach a tricky word, how do you approach spelling it?
   - “I chunk it and think about the sounds I hear and which letters match those sounds.”
Appendix J

Tyler- Initial and Final Interview

Interview Protocol:

Participant Pseudonym: Tyler
Date of Interview and Time: [Redacted]

Purpose Statement: **Start audio recording-Identify participant by pseudonym, the date, and time**

The purpose of this interview is for me to gain a better understanding of how you currently use our word study lessons in your own independent writing. I sometimes wonder if students are thinking about the word study lessons when writing in your journals. Any information that you can give me would help me become a better teacher. If at any time you feel uncomfortable with a question I ask, please know that you have the choice not to respond. You may stop the interview at any time. I believe that our interview will last five to ten minutes. I will be recording our conversation, if you have agreed to let me do so.

1. How do you feel about our current word study lessons?
   "It's okay-It's my favorite part of running centers."

2. Do you think about our word study lessons when you are writing independently? If so, how?
   "Well no-I just know how to spell it because I already learned the words."

3. Which word study activities help you learn your spelling words and features the most? Why do you think so?
   "I love spelling city-it's so fun to play the games."

4. Which word study activities, if any, do you think about when you are writing? In what ways does this activity help you in your writing?
   "I think about how it is supposed to be spelled and how it looks."

5. When writing in your journals and you reach a tricky word, how do you approach spelling it?
   "I just chance it then I match it with letters."
Date of Interview and Time: ________________________________

Purpose Statement: **Start audio recording. Identify participant by pseudonym, the date, and time**

The purpose of this interview is for me to gain a better understanding of how you currently use our word study lessons in your own independent writing. I sometimes wonder if students are thinking about the word study lessons when writing in your journals. Any information that you can give me would help me become a better teacher. If at any time you feel uncomfortable with a question I ask, please know that you have the choice not to respond. You may stop the interview at any time. I believe that our interview will last five to ten minutes. I will be recording our conversation, if you have agreed to let me do so.

1. How do you feel about our current word study lessons?
   I think it's fine. I like that we have choices and we can pick ourselves.

2. Do you think about our word study lessons when you are writing independently? If so, how?
   Yes. I think about letter sounds a lot and which letters would match a sound.

3. Which word study activities help you learn your spelling words and features the most? Why do you think so?
   I like that game, braiding words— it's so fun figuring out the secret word. I'm good at it.

4. Which word study activities, if any, do you think about when you are writing? In what ways does this activity help you in your writing?
   I don't. I mean, I just think about the letters.

5. When writing in your journals and you reach a tricky word, how do you approach spelling it?
   I chunk.
Appendix K

Gary- Initial and Final Interview

Interview Protocol:

Participant Pseudonym: Gary
Date of Interview and Time: 5-13

Purpose Statement: **Start audio recording-Identify participant by pseudonym, the date, and time**

The purpose of this interview is for me to gain a better understanding of how you currently use our word study lessons in your own independent writing. I sometimes wonder if students are thinking about the word study lessons when writing in your journals. Any information that you can give me would help me become a better teacher. If at any time you feel uncomfortable with a question I ask, please know that you have the choice not to respond. You may stop the interview at any time. I believe that our interview will last five to ten minutes. I will be recording our conversation, if you have agreed to let me do so.

1. How do you feel about our current word study lessons?
   I like it - I think I'm good at most of our choices.

2. Do you think about our word study lessons when you are writing independently? If so how?
   I think about what the word means and how I should use it in a sentence.

3. Which word study activities help you learn your spelling words and features the most? Why do you think so?
   Mostly just how they look on my spelling list and which letters go where in the word.

4. Which word study activities, if any, do you think about when you are writing? In what ways does this activity help you in your writing?
   Wixi stories- sometimes I can remember making the letters and words with them.

5. When writing in your journals and you reach a tricky word, how do you approach spelling it?
   I just guess
Interview Protocol:

Participant Pseudonym:       Gary
Date of Interview and Time:   6-19

Purpose Statement: **Start audio recording- Identify participant by pseudonym, the date, and time**

The purpose of this interview is for me to gain a better understanding of how you currently use our word study lessons in your own independent writing. I sometimes wonder if students are thinking about the word study lessons when writing in your journals. Any information that you can give me would help me become a better teacher. If at any time you feel uncomfortable with a question I ask, please know that you have the choice not to respond. You may stop the interview at any time. I believe that our interview will last five to ten minutes. I will be recording our conversation, if you have agreed to let me do so.

1. How do you feel about our current word study lessons?
   I really like the days where we get to do word study groups and play games with letter tiles and secret words.

2. Do you think about our wordy study lessons when you are writing independently? If so how?
   Yes - I think about vowel sounds and consonant patterns.

3. Which word study activities help you learn your spelling words and features the most? Why do you think so?
   I really like letter stamps - it's fun to paint your letters and words!

4. Which word study activities, if any, do you think about when you are writing? In what ways does this activity help you in your writing?
   I think about the order I stamped them in or like moving those letter tiles around when we find secret words.

5. When writing in your journals and you reach a tricky word, how do you approach spelling it?
   Think about how it sounds and ending -e's on words that change vowel sounds.
Appendix L

Purple Group Making Words Weekly Lessons
Lessons 71-80

These 10 lessons teach the common vowel patterns oo, oy, oi, and ou.

Lesson 71

cartoons

Letters: a o o e n r s t (Patterns on, ot, oast, orn, and oon)

Words to Make: on Ron not cot soon torn corn coat coast roast roost acorn actors cartons cartoons

Part One • Making Words

Have the children arrange their letters in front of their holders to match the pocket-chart letters, with the vowel first and the other letters in alphabetical order. Ask the children to hold up and name each letter, noting the capital letter is used to spell names.

on  “The first word we are going to spell is on. My can was sleeping on my bed. Everyone say on. Use 2 letters to spell on.”

Choose a child who has on spelled correctly to spell on with the pocket-chart letters. Have the class chorally spell on and fix their word if on is not correct.

Ron  “Add a letter to spell Ron. Do you know anyone named Ron? Everyone say Ron.”

Let a child who has Ron spelled correctly spell Ron with the pocket-chart letters.

not  “Use 3 letters to spell not. It is not a rainy day. Everyone say not.”

Continue the lesson, giving children explicit instruction about which letters to remove and where to add letters. Put each word in a sentence and have children say each word before making it. Have them “stretch” some words to provide practice for children who are still learning to segment words. Let a child who has spelled the word correctly make that word with the pocket-chart letters. Choose your struggling readers when the

Lesson 88
snowflake

Letters: a e o f k l n s w (Pattern aw and ow)

Make: saw law low slow slaw lawn snow flow leak weak

Sort: saw slow leak lake slaw snow weak

Transfer: draw throw straw rake

**Make Words**
- Have children name and hold up letters.
- Tell children how many letters to use to make each word.
- Have children say each word and stretch out some words.
- Give sentences to clarify meaning.
- Give specific instructions on how to change words:
  - Add one letter.
  - Change the first letter.
  - Use the same letters.
- Have children clear their holders before making an unrelated word.
- Have children correct their word once it is made in the pocket chart.
- Give children one minute to figure out the secret word and then give them clues.

**Sort Words**
- Put words in pocket chart in the order made.
- Have children say and spell each word.
- Remind them of how each word was changed to spell the new word.
- Select one word from each rhyming set and line up in columns.
- Let children choose the other words that rhyme.
- Have children pronounce the words.

**Transfer Words**
- Tell children that they are going to use the rhyming words to spell some new words they might need when they are writing.
- Say the word and a sentence one of your children might write.
- Have children say the word and decide on the beginning letters
- Write the beginning letters on an index card.
- Take the index card with the beginning letters to the pocket chart and have children say the columns of rhymes and the new word to find the rhyming pattern.
- Write the rhyming pattern on the card to finish the word.
- Have students write the word on paper or a whiteboard.

Lesson 79
playground

Letters: a o u d g i n r p y
(Patterns oud and ound)

Make: pay play pony road pound round ground loud aloud along proud
around dragon playground

Sort: play pay loud proud pound round ground playground

Transfer: cloud sound found tray

Make Words

• Have children name and hold up letters.
• Tell children how many letters to use to make each word.
• Have children say each word and stretch out some words.
• Give sentences to clarify meaning.
• Give specific instructions on how to change words:
  — Add one letter.
  — Change the first letter.
  — Use the same letters.
• Have children clear their holders before making an unrelated word.
• Have children correct their word once it is made in the pocket chart.
• Give children one minute to figure out the secret word and then give them clues.

Sort Words

• Put words in pocket chart in the order made.
• Have children say and spell each word.
• Remind them of how each word was changed to spell the new word.
• Select one word from each rhyming set and line up in columns.
• Let children choose the other words that rhyme.
• Have children pronounce the words.

Transfer Words

• Tell children that they are going to use the rhyming words to spell some new words
  they might need when they are writing.
• Say the word and a sentence one of your children might write.
• Have children say the word and decide on the beginning letters.
• Write the beginning letters on an index card.
• Take the index card with the beginning letters to the pocket chart and have children
  say the columns of rhymes and the new word to find the rhyming pattern.
• Write the rhyming pattern on the card to finish the word.
• Have students write the word on paper or a whiteboard.

Cunningham, P. M., & Hall, D. P. (2009). Making words second grade: 100 hands-on
lessons for phonemic awareness, phonics, and spelling. Boston, MA: Pearson
Lesson 52

jugglers

Letters: e u g g j l r s
(Patterns ue, us, and use)

Make:
us, Gus, use, sure, jug, slug, glue, rule

Sure juggle jugglers

Sort:
Gus, Sue, us, glue, jug, rug, log, slug

Transfer: clue, plug, true, bus

Make Words

- Have children name and hold up letters.
- Tell children how many letters to use to make each word.
- Have children say each word and stretch out some words.
- Give sentences to clarify meaning.
- Give specific instructions on how to change words:
  - Add one letter.
  - Change the first letter.
  - Use the same letters.
- Have children clear their holders before making an unrelated word.
- Make sure children use a capital letter when spelling Gus and Sue.
- Have children correct their word once it is made in the pocket chart.
- Give children one minute to figure out the secret word and then give them clues.

Sort Words

- Put words in pocket chart in the order made.
- Have children say and spell each word.
- Remind them of how each word was changed to spell the new word.
- Select one word from each rhyming set and line up in columns.
- Let children choose the other words that rhyme.
- Have children pronounce the words.

Transfer Words

- Tell children that they are going to use the rhyming words to spell some new words they might need when they are writing.
- Say the word and a sentence one of your children might write.
- Have children say the word and decide on the beginning letters.
- Write the beginning letters on an index card.
- Take the index card with the beginning letters to the pocket chart and have children say the columns of rhymes and the new word to find the rhyming pattern.
- Write the rhyming pattern on the card to finish the word.
- Have students write the word on paper or a whiteboard.
Appendix M

Green Group Making Words Weekly Lessons
Lesson 88
snowflake

Letters: a e o f k l n s w (Patterns aw and ow)

Make:
saw law low slow slaw lawn snow flow leak weak
wake lake flake snake snowflake

Sort:
saw slow leak lake
slaw snow weak wake
law flow flake snake

Transfer: draw throw straw rake

Make Words
- Have children name and hold up letters.
- Tell children how many letters to use to make each word.
- Have children say each word and stretch out some words.
- Give sentences to clarify meaning.
- Give specific instructions on how to change words:
  - Add one letter.
  - Change the first letter.
  - Use the same letters.
- Have children clear their holders before making an unrelated word.
- Have children correct their word once it is made in the pocket chart.
- Give children one minute to figure out the secret word and then give them clues.

Sort Words
- Put words in pocket chart in the order made.
- Have children say and spell each word.
- Remind them of how each word was changed to spell the new word.
- Select one word from each rhyming set and line up in columns.
- Let children choose the other words that rhyme.
- Have children pronounce the words.

Transfer Words
- Tell children that they are going to use the rhyming words to spell some new words they might need when they are writing.
- Say the word and a sentence one of your children might write.
- Have children say the word and decide on the beginning letters.
- Write the beginning letters on an index card.
- Take the index card with the beginning letters to the pocket chart and have children say the columns of rhymes and the new word to find the rhyming pattern.
- Write the rhyming pattern on the card to finish the word.
- Have students write the word on paper or a whiteboard.

### Lesson 52: Jugglers

**Letters:** e u g g j l r s

(Patterns use, us, and use)

**Make Words**
- Have children name and hold up letters.
- Tell children how many letters to use to make each word.
- Have children say each word and stretch out some words.
- Give specific instructions on how to change words:
  - Add one letter.
  - Change the first letter.
  - Use the same letter.
- Have children clear their holder before making another unrelated word.
- Make sure children use a capital letter when spelling Gus and Sue.
- Have children correct their word once it is made in the pocket chart.
- Give children one minute to figure out the secret word and then give them clues.

**Sort Words**
- Put words in pocket chart in the order made.
- Have children say and spell each word.
- Remind them of how each word was changed to spell the new word.
- Select one word from each rhyming set and line up in columns.
- Let children choose the other words that rhyme.
- Have children pronounce the words.

**Transfer Words**
- Tell children that they are going to use the rhyming words to spell some new words they might need when they are writing.
- Say the word and a sentence one of your children might write.
- Have children say the word and decide on the beginning letters.
- Write the beginning letter on an index card.
- Take the index card with the beginning letters to the pocket chart and have children say the columns of rhymes and the new word to find the rhyming pattern.
- Write the rhyming pattern on the card to finish the word.
- Have students write the word on paper or a whiteboard.

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Lesson 29
flashlight

Letters: a i f g h i l s t  (Vowel patterns igh and light)

Make: sit lit fit fist list fill gill hill high sigh sight light

Sort: sit list sigh gill sight
lit list high fill light
fit fist hill flight

Transfer: spill twist chill might

Make Words
- Have children name and hold up letters.
- Tell children how many letters to use to make each word.
- Have children say each word and stretch out some words.
- Give sentences to clarify meaning.
- Give specific instructions on how to change words:
  — Add one letter.
  — Change the first letter.
  — Use the same letters.
- Have children clear their holders before making an unrelated word.
- Have children correct their word once it is made in the pocket chart.
- Give children one minute to figure out the secret word and then give them clues.

Sort Words
- Put words in pocket chart in the order made.
- Have children say and spell each word.
- Remind them of how each word was changed to spell the new word.
- Select one word from each rhyming set and line up in columns.
- Let children choose the other words that rhyme.
- Have children pronounce the words.

Transfer Words
- Tell children that they are going to use the rhyming words to spell some new words
  they might need when they are writing.
- Say the word and a sentence one of your children might write.
- Have children say the word and decide on the beginning letters.
- Write the beginning letters on an index card.
- Take the index card with the beginning letters to the pocket chart and have children
  say the columns of rhymes and the new word to find the rhyming pattern.
- Write the rhyming pattern on the card to finish the word.
- Have students write the word on paper or a whiteboard.

Lesson 12

thanks

Letters: a h k n s t (Sound of th)

Make Words

- Make words with children:
  - tank
  - sank
  - thank
  - thanks

Sort Words

- Sort words:
  - ask
  - tank
  - sat
  - sank
  - thank
  - as
  - tan

Transfer Words

- Transfer words:
  - mask
  - prank
  - brat
  - van

Appendix N

Blue Group Making Words Weekly Lessons
Lesson 1
planets

Letters: a e l n p s t (Review vowel sounds a and e.)

Words to Make: at pat pet net ten tan ant sent nest pest past pant plant planets

Part One • Making Words

Have the children arrange their letters in front of their holders to match the pocket-chart letters, with the vowel first and the other letters in alphabetical order. Have them notice that the vowels are a different color and tell them they will make many new words today by just changing the vowel. Have children hold up and name each letter, noting the capital letter is used to spell names.

at

“The first word we are going to spell is at. We are at school. Everyone say at. Use 2 letters to spell at.”

Choose a child who has at spelled correctly to spell at with the pocket-chart letters. Have the class chorally spell at and fix their word if at is not correct.

Pat

“Add 1 letter to spell the name Pat. My cousin’s name is Pat. Everyone say Pat.”

Let a child who has Pat spelled with a capital P spell Pat with the pocket-chart letters.

pet

“Change the vowel to spell pet. Do you have a pet? Everyone say pet.”

Continue the lesson, giving children explicit instruction about which letters to remove and where to add letters. Put each word in a sentence and have children say each word before making it. Have them “stretch” some words to provide practice for children who are still learning to segment words. Let a child who has spelled the word correctly make that word with the pocket-chart letters. Choose your struggling readers when the

Lesson 2
absent

Letters: a e b n s t (Review vowel sounds a and e.)

Make:
at bat sat set net ten tan ban Ben bent best

Sort: at bat sat net set Ben ten nest best tan sent bent absent

Transfer: spent vest plan seat

Make Words
- Have children name and hold up letters.
- Tell children how many letters to use to make each word.
- Have children say each word and stretch out some words.
- Give sentences to clarify meaning.
- Give specific instructions on how to change words:
  — Add one letter.
  — Change the first letter.
  — Use the same letters.
- Have children clear their holders before making an unrelated word.
- Be sure children use capital letters when spelling Ben.
- Have children correct their word once it is made in the pocket chart.
- Give children one minute to figure out the secret word and then give them clues.

Sort Words
- Put words in pocket chart in the order made.
- Have children say and spell each word.
- Remind them of how each word was changed to spell the new word.
- Select one word from each rhyming set and line up in columns.
- Let children come and choose the other words that rhyme.
- Have children pronounce the words.

Transfer Words
- Tell the children that they are going to use the rhyming words to spell some new words they might need when they are writing.
- Say the word and a sentence one of your children might write.
- Have children say the word and decide on the beginning letters.
- Write the beginning letters on an index card.
- Take the index card with the beginning letters to the pocket chart and have children say the columns of rhymes and the new word to find the rhyming pattern.
- Write the rhyming pattern on the card to finish the word.
- Have students write the word on paper or a whiteboard.
Lesson 10
printers

Make Words
- Have children name and hold up letters.
- Tell children how many letters to use to make each word.
- Have children say each word and stretch out some words.
- Give sentences to clarify meaning.
- Give specific instructions on how to change words:
  - Add one letter.
  - Change the first letter.
  - Use the same letters.
- Have children clear their holders before making an unrelated word.
- Have children correct their word once it is made in the pocket chart.
- Give children one minute to figure out the secret word and then give them clues.

Sort Words
- Put words in pocket chart in the order made.
- Have children say and spell each word.
- Remind them of how each word was changed to spell the new word.
- Select one word from each rhyming set and line up in columns.
- Let children choose the other words that rhyme.
- Have children pronounce the words.

Transfer Words
- Tell children that they are going to use the rhyming words to spell some new words they might need when they are writing.
- Say the word and a sentence one of your children might write.
- Have children say the word and decide on the beginning letters.
- Write the beginning letters on an index card.
- Take the index card with the beginning letters to the pocket chart and have children say the columns of rhymes and the new word to find the rhyming pattern.
- Write the rhyming pattern on the card to finish the word.
- Have students write the word on paper or a whiteboard.

Lesson 20
chopsticks

Letters: j o c h o stick tick sick sock chopsticks

Make:
- hop
- shop
- chop
- stick
- tick
- sick
- shock
- stock
- sock

Sort:
- hop
- shop
- chop
- ship
- stick
- thick
- chick
- flock
- trick
- flip

Transfer:
- kick

Make Words
- Have children name and hold up letters.
- Tell children how to use each word.
- Have children use each word and stretch out some words.
- Give sentences to clarify meaning.
- Give specific instructions on how to change words:
  - Add one letter.
  - Change the first letter.
  - Use the same letters.
- Have children clear their holders before making an unrelated word.
- Have children correct their word once it is made in the pocket chart.
- Give children one minute to figure out the secret word and then give them clues.

Sort Words
- Put words in pocket chart in the order made.
- Have children say and spell each word.
- Remind them of how each word was changed to spell the new word.
- Select one word from each rhyming set and line up in columns.
- Have children choose the other words that rhyme.
- Have children pronounce the words.

Transfer Words
- Tell children that they are going to use the rhyming words to spell some new words they might need when they are writing.
- Say the word and a sentence one of your children might write.
- Have children say the word and decide on the beginning letters.
- Write the beginning letters on an index card.
- Take the index card with the beginning letters to the pocket chart and have children say the columns of rhymes and the new word to find the rhyming pattern.
- Write the rhyming pattern on the card to finish the word.
- Have students write the word on paper or a whiteboard.

Assessment Lesson
Tell the children to write a story using the word today. You can help them. Have the children write the word in a sentence. Ask them to write a sentence using the word. Have them write the word in each sentence. Ask them to read the sentences and then decide if they can say the word.

Recreate the rhyming pattern of the secret word.
Lesson 1

planets

Letters: a e l n p s t (Review vowel sounds a and e.)

Words to Make: at pat pet net ten tan ant sent nest pest past pant plant planets

Part One • Making Words

Have the children arrange their letters in front of their holders to match the pocket-chart letters, with the vowel first and the other letters in alphabetical order. Have them notice that the vowels are a different color and tell them they will make many new words today by just changing the vowel. Have children hold up and name each letter, noting the capital letter is used to spell names.

```
 a e l n p s t
```

**at**

“The first word we are going to spell is at. We are at school. Everyone say at. Use 2 letters to spell at.”

Choose a child who has at spelled correctly to spell at with the pocket-chart letters. Have the class chorally spell at and fix their word if at is not correct.

**Pat**

“Add 1 letter to spell the name Pat. My cousin’s name is Pat. Everyone say Pat.”

Let a child who has Pat spelled with a capital P spell Pat with the pocket-chart letters.

**pet**

“Change the vowel to spell pet. Do you have a pet? Everyone say pet.”

Continue the lesson, giving children explicit instruction about which letters to remove and where to add letters. Put each word in a sentence and have children say each word before making it. Have them “stretch” some words to provide practice for children who are still learning to segment words. Let a child who has spelled the word correctly make that word with the pocket-chart letters. Choose your struggling readers when the

## Appendix O

**Macy’s Weekly Observation Data**

<table>
<thead>
<tr>
<th>Description of Activities</th>
<th>Field Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spell 'on'</td>
<td><em>No difficulty. Strong understanding of CVC-Check vowel words</em></td>
</tr>
<tr>
<td>- Add a letter to 'more'</td>
<td><em>Appears to have a strong understanding of CV-CVC pattern. Very automatic. Does not appear to have to even think about which letters make the 'ow' sound.</em></td>
</tr>
<tr>
<td>Spell:</td>
<td><em>Good understanding of 'oo' pattern. Was helping other classmates remember to shout include 'oo' pattern.</em></td>
</tr>
<tr>
<td>- Coast</td>
<td><em>Correctly spelled this on 1st attempt.</em></td>
</tr>
<tr>
<td>- Roast</td>
<td></td>
</tr>
<tr>
<td><strong>Mystery word: cartoons</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Observation Protocol**

Date: 5-10-13  
Making Words Lesson Number: 91  
Word Study-Weekly Word Feature: Vowel Digraph-oo  

**Behavior** - engaged.

Very involved and actively participating.
**Observation Protocol**

**Date:** 5-29-13  
**Making Words Lesson Number:** 88  
**Word Study - Weekly Word Feature:** Snow/aw

<table>
<thead>
<tr>
<th>Description of Activities</th>
<th>Field Notes</th>
</tr>
</thead>
</table>
| 1. Make the word / saw!  
  - law (√)               | 1. Macy was repeatedly  
  |                            | repeating the word  
  |                            | emphasizing the /aw vowel  
  |                            | digraph - pointing frequently  
  |                            | observing to watch  
  |                            | 2. Macy to independently  
  |                            | recognize the vowel change  
  |                            | 3. Macy to hear the /aw  
  |                            | digraph once more  
  | 2. Change a letter to make  
  |  law ( )                 | 7. At first - Macy arranged  
  |                            | the spelling of /snow, law,  
  |                            | /aw, /awn ( )  
  | 3. Change a letter to make  
  |  saw - sawn ( √)         | ( /snow, law, /awn)  
  |                            | ( /that  
  |                            | doesn't work right)  
  |                            | Changed to a correct  
  |                            | spelling of /snowflake!  
  | 4. Snow, Flow ( √, √)    |  
  | 5. Lear, Wear ( √, √)    | Strong  
  | Mystery word - Snowflake | Visual  
  |                            | writing system |
### Observation Protocol

**Date:** 3-30-13  
**Making Words Lesson Number:** LESSON 80  
**Word Study-Weekly Word Feature:** ENDINGS OUT, OW

<table>
<thead>
<tr>
<th>Description of Activities</th>
<th>Field Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Spell 'pop' (✓)</td>
<td>answered correctly</td>
</tr>
<tr>
<td>2. Spell 'tip' (✓)</td>
<td>had as -oil at first</td>
</tr>
<tr>
<td>3. Spell 'oil' (✓)</td>
<td>that doesn't rhyme, I thought about it</td>
</tr>
<tr>
<td>4. Add a letter to make 'isoll'</td>
<td>'oil' right</td>
</tr>
<tr>
<td>5. Spell 'four' (✓)</td>
<td>changed to 'oil'</td>
</tr>
<tr>
<td>6. Spell 'more' (✓)</td>
<td>had that was the word I thought about to help me spell oil before.</td>
</tr>
</tbody>
</table>

"I think it's interesting how they rhyme and have different word families!"

secret word: toucans  
1st guess: tollicops  
2nd guess: tollicops (✓)  
"Nope! I have an extra 'l.' I know where it goes."

visual cues:
### Observation Protocol

**Date:** 6-5-13  
**Making Words Lesson Number:** Y9  
**Word Study - Weekly Word Feature:** Words beginning with sound /ow/ or /ou/  
**Shortening Beginning Consonants:** /ow/ or /ou/

<table>
<thead>
<tr>
<th>Description of Activities</th>
<th>Field Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Spell &quot;pay.&quot;</td>
<td>✓</td>
</tr>
<tr>
<td>2. Add a letter to more: &quot;paw.&quot;</td>
<td>✓</td>
</tr>
<tr>
<td>3. Change a letters to more: &quot;paw.&quot;</td>
<td>✓</td>
</tr>
<tr>
<td>4. More the word &quot;road.&quot;</td>
<td>✓</td>
</tr>
<tr>
<td>5. Change another letter to more: &quot;food.&quot;</td>
<td>✓</td>
</tr>
<tr>
<td>6. More the word &quot;load.&quot;</td>
<td>✓</td>
</tr>
<tr>
<td>7. Change another letter to more: &quot;round.&quot;</td>
<td>✓</td>
</tr>
<tr>
<td>8. More the word &quot;proud.&quot;</td>
<td>✓</td>
</tr>
<tr>
<td>9. Secret word: Playground</td>
<td>✓</td>
</tr>
</tbody>
</table>

"Miss Lewis, it's a compound word too!"

"Created all words correctly in this lesson!"

"Wow--it is in the ou word family!" -- may be helping another classmate.
### Observation Protocol

**Date:** 6-12-13  
**Making Words Lesson Number:** 59  
**Word Study- Weekly Word Feature:** Jugglers  
**Week:** 5

<table>
<thead>
<tr>
<th>Description of Activities</th>
<th>Field Notes</th>
</tr>
</thead>
</table>
| 1. Trace the word 'vive!'  | ✓ helped show  
| 2. Odd-better trace 'vive!' | another child to use a  
| 3. Use (✓)  | capital 'G', as it is a  
| 4. Sue (✓)  | name and "proper noun"  
| 5. Leg (✓)  |  
| 6. Rug (✓)  |  
| 8. Swing (✓)  |  
| 9. Juice (✓)  |  
| 10. Rule (✓)  |  
| 11. Sure (✓)  |  
| 12. Juggle  | ✓ very strong  
| 13. **Secret word: jugglers** | understanding  

*secret word: jugglers*  

✓ **"Just add an r and an s."**

---

**Note:**
- Made on first attempt:  
  - "Juggle" - looks like jungle  
  - "Juggle" - I think that  
  - "Juggle" - looks right.
Appendix P

Ryan’s Weekly Observation Data

Observation Protocol

<table>
<thead>
<tr>
<th>Description of Activities</th>
<th>Field Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spell 'on'</td>
<td>*rice to independently make these first two words.</td>
</tr>
<tr>
<td>- Add a letter to make 'ron'</td>
<td>(S)</td>
</tr>
<tr>
<td>Spell cot</td>
<td>Initially spelled 'son' - needed to have the word re-ssixed and then self-corrected.</td>
</tr>
<tr>
<td>Spell soon</td>
<td>spelled as 'cost'</td>
</tr>
<tr>
<td>Use 4 letters to spell 'orn' (✓)</td>
<td>consistent in long vowel patterns of V.C.E.</td>
</tr>
<tr>
<td>Spell</td>
<td>- able to correctly spell on 1st attempt.</td>
</tr>
<tr>
<td>- corn (✓)</td>
<td></td>
</tr>
<tr>
<td>- cool (✓)</td>
<td></td>
</tr>
<tr>
<td>- coast (✓)</td>
<td></td>
</tr>
<tr>
<td>- coast</td>
<td></td>
</tr>
<tr>
<td>Secret word: 'Cartoons!'</td>
<td></td>
</tr>
</tbody>
</table>

Behavior: Engaged and excited
- Very happy to shift touching the letter cards and using the privacy folders as well.
**Observation Protocol**

Date: 5-30-13  
Making Words Lesson Number: 88  
Word Study- Weekly Word Feature: snowflake  

<table>
<thead>
<tr>
<th>Description of Activities</th>
<th>Field Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Make the word &quot;saw&quot; (*)</td>
<td></td>
</tr>
<tr>
<td>- raw (✓)</td>
<td></td>
</tr>
<tr>
<td>2. Change a letter to make &quot;law&quot; (✓)</td>
<td></td>
</tr>
<tr>
<td>- slow (✓)</td>
<td></td>
</tr>
<tr>
<td>3. Change a letter to make &quot;slow&quot; (✓)</td>
<td></td>
</tr>
<tr>
<td>- lawn</td>
<td></td>
</tr>
<tr>
<td>4. Snow, flow (✓)(✓)</td>
<td></td>
</tr>
<tr>
<td>5. Recall, week</td>
<td></td>
</tr>
<tr>
<td>Secret word: snowflake</td>
<td></td>
</tr>
</tbody>
</table>

**Behavior** - Engaged!

Ryan was observed as being engaged today. He was sitting at the desk, writing, and responding to the teacher prompts. He used his fingers to spell the words "snow" and "law." He attempted to spell "lawn" but made a mistake. He corrected his spelling and spelled it correctly. He seemed focused and engaged throughout the lesson.
Observation Protocol

Date: 5-30-13
Making Words Lesson Number: Lesson 80 ("Shouting")
Word Study-Weekly Word Feature: OIl, Oo

<table>
<thead>
<tr>
<th>Description of Activities</th>
<th>Field Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Spell 'pop'</td>
<td></td>
</tr>
<tr>
<td>2. Spell 'lip'</td>
<td></td>
</tr>
<tr>
<td>3. Spell 'oil'</td>
<td></td>
</tr>
<tr>
<td>4. Add a letter to make 'soil'</td>
<td></td>
</tr>
<tr>
<td>5. Spell 'poor'</td>
<td></td>
</tr>
<tr>
<td>6. Spell 'more'</td>
<td></td>
</tr>
</tbody>
</table>

Secret Word: lolipops

1st Attempt- lolipop
- needed to be reminded he should not be using the 'y' letter card.

2nd Attempt- lolipops

3rd Attempt- lolipop

Behavior - engaged + excited.

- "i i i - short i" (✓)
- "oil" - needed to be reminded to take off the ending 'e'.
- spelled 'poor'
- discussed difference between meaning.

(✓)
### Observation Protocol

Date: 6-5-13  
Making Words Lesson Number: 79  
Word Study- Weekly Word Feature: "playground"  
(Silent beginning consonants: kn, ln, wr-)

<table>
<thead>
<tr>
<th>Description of Activities</th>
<th>Field Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. spell &quot;play&quot;</td>
<td>✓</td>
</tr>
<tr>
<td>2. add a letter to make &quot;play&quot;</td>
<td>✓</td>
</tr>
<tr>
<td>3. change 2 letters to make &quot;pony&quot;</td>
<td>✓</td>
</tr>
<tr>
<td>4. make the word &quot;road&quot;</td>
<td>✓</td>
</tr>
<tr>
<td>5. change a letter to make &quot;load&quot;</td>
<td>✓</td>
</tr>
<tr>
<td>6. make the word &quot;loud&quot;</td>
<td>✓</td>
</tr>
<tr>
<td>- change a letter to make the word &quot;around&quot;</td>
<td>✓</td>
</tr>
<tr>
<td>7. make the word &quot;proud&quot;</td>
<td>✓</td>
</tr>
<tr>
<td>8. secret word: Playground</td>
<td>✓</td>
</tr>
</tbody>
</table>

---

**Behavior:** Actively engaged  
- Interested in learning the differences between Road and Road.
**Observation Protocol**

Date: 6-12-13  
Making Words Lesson Number: 53  

<table>
<thead>
<tr>
<th>Description of Activities</th>
<th>Field Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Make the 'us'</td>
<td></td>
</tr>
<tr>
<td>2. Add a 'er' to make 'bus'</td>
<td></td>
</tr>
<tr>
<td>3. Use (✓)</td>
<td></td>
</tr>
<tr>
<td>4. Sue (✓)</td>
<td></td>
</tr>
<tr>
<td>5. Leg (✓)</td>
<td></td>
</tr>
<tr>
<td>6. Rug (✓)</td>
<td></td>
</tr>
<tr>
<td>7. Rug (✓)</td>
<td></td>
</tr>
<tr>
<td>8. Sug (✓)</td>
<td></td>
</tr>
<tr>
<td>9. Glue (✓)</td>
<td></td>
</tr>
<tr>
<td>10. Sure (✓)</td>
<td></td>
</tr>
<tr>
<td>11. Juggler</td>
<td>Spelled 'rool' - changed immediately, ruled</td>
</tr>
</tbody>
</table>

Behavior: Disengaged, non-attentive, needed reminders to focus.
Appendix Q

Joey’s Weekly Observation Data

Observation Protocol

Date: 3-10-13
Making Words Lesson Number: Lesson 88 (snowflake)
Word Study: Weekly Word Feature:

<table>
<thead>
<tr>
<th>Description of Activities</th>
<th>Field Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. saw</td>
<td>1. sawd</td>
</tr>
<tr>
<td>2. law √</td>
<td>* did not ask to take at 1st attempt - √</td>
</tr>
<tr>
<td>3. low √</td>
<td>2nd attempt - √</td>
</tr>
<tr>
<td>4. slow √</td>
<td>6. lawn</td>
</tr>
<tr>
<td>5. slaw √</td>
<td>* that does wrong - law... (changing syllables) lawn √</td>
</tr>
<tr>
<td>6. lawn</td>
<td>7. teach. @ teach &amp; teach √</td>
</tr>
<tr>
<td>7. snow √</td>
<td>8. wice</td>
</tr>
<tr>
<td>8. snow √</td>
<td></td>
</tr>
<tr>
<td>9. lea</td>
<td></td>
</tr>
<tr>
<td>10. wince</td>
<td></td>
</tr>
</tbody>
</table>

Secret word: snowflake (√ on 1st attempt)

Behavior: Non Engaged for most prompts - needed redirection / refocusing - fell behind most hands.
<table>
<thead>
<tr>
<th>Description of Activities</th>
<th>Field Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spell U.S.</td>
<td></td>
</tr>
<tr>
<td>Gus</td>
<td></td>
</tr>
<tr>
<td>Spell use</td>
<td></td>
</tr>
<tr>
<td>Sue</td>
<td></td>
</tr>
<tr>
<td>Leg</td>
<td></td>
</tr>
<tr>
<td>Jug</td>
<td></td>
</tr>
<tr>
<td>Jug</td>
<td></td>
</tr>
<tr>
<td>Slug</td>
<td></td>
</tr>
<tr>
<td>Slug</td>
<td></td>
</tr>
<tr>
<td>Secret Word: Jugglers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gus * self-corrected to GUS.</td>
</tr>
</tbody>
</table>

Behavior: More engaged than usual. Not fully paying attention 100% of the time.
**Observation Protocol**

**Date:** 5-30-13  
Making Words Lesson Number: **Lesson 24; Flashlights**  
Word Study: Weekly Word Feature:

<table>
<thead>
<tr>
<th>Description of Activities</th>
<th>Field Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Spell sit</td>
<td></td>
</tr>
<tr>
<td>2. Spell fit</td>
<td></td>
</tr>
<tr>
<td>3. Spell fist</td>
<td></td>
</tr>
<tr>
<td>4. Spell fust</td>
<td></td>
</tr>
<tr>
<td>5. Spell list</td>
<td></td>
</tr>
<tr>
<td>6. Fill</td>
<td></td>
</tr>
<tr>
<td>7. Gill</td>
<td></td>
</tr>
<tr>
<td>8. Hill</td>
<td></td>
</tr>
<tr>
<td>9. High</td>
<td></td>
</tr>
<tr>
<td>10. Sigh</td>
<td></td>
</tr>
<tr>
<td>11. Sight</td>
<td></td>
</tr>
<tr>
<td>12. Night</td>
<td></td>
</tr>
<tr>
<td>13. Night</td>
<td></td>
</tr>
<tr>
<td>Secret Word: 'Flashlight'</td>
<td></td>
</tr>
</tbody>
</table>

**Behavior:** Very spacey - needed refocusing on each word prompt.
**Observation Protocol**

Date: 6-5-13  
Making Words Lesson Number: Lesson 7  
Word Study - Weekly Word Feature:  

<table>
<thead>
<tr>
<th>Description of Activities</th>
<th>Field Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 can</td>
<td></td>
</tr>
<tr>
<td>2 can</td>
<td></td>
</tr>
<tr>
<td>3 cot</td>
<td></td>
</tr>
<tr>
<td>4 not</td>
<td></td>
</tr>
<tr>
<td>5 net</td>
<td></td>
</tr>
<tr>
<td>6 set</td>
<td></td>
</tr>
<tr>
<td>7 nest</td>
<td></td>
</tr>
<tr>
<td>8 test</td>
<td></td>
</tr>
<tr>
<td>9 secret word: contest</td>
<td></td>
</tr>
</tbody>
</table>

Behavior - * - indicates refocussing prompts.

All Correct

'Yontest'
- Immediately switched + self-corrected
<table>
<thead>
<tr>
<th>Description of Activities</th>
<th>Field Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>at *</td>
<td>reminiscing to begin work</td>
</tr>
<tr>
<td>as *</td>
<td>spelled 'then'</td>
</tr>
<tr>
<td>has *</td>
<td></td>
</tr>
<tr>
<td>hat *</td>
<td></td>
</tr>
<tr>
<td>sat *</td>
<td></td>
</tr>
<tr>
<td>asc</td>
<td></td>
</tr>
<tr>
<td>on</td>
<td></td>
</tr>
<tr>
<td>ton</td>
<td></td>
</tr>
<tr>
<td>them *</td>
<td></td>
</tr>
<tr>
<td>than *</td>
<td></td>
</tr>
<tr>
<td>than</td>
<td></td>
</tr>
<tr>
<td>too</td>
<td></td>
</tr>
<tr>
<td>tone *</td>
<td></td>
</tr>
<tr>
<td>sense *</td>
<td></td>
</tr>
<tr>
<td>thane *</td>
<td></td>
</tr>
<tr>
<td>thanes</td>
<td></td>
</tr>
<tr>
<td>secret word: thanks *</td>
<td></td>
</tr>
</tbody>
</table>

Behavior: non-attentive

* = (re)focusing of attention.
## Appendix R

### Katie’s Weekly Observation Data

<table>
<thead>
<tr>
<th>Description of Activities</th>
<th>Field Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Make the word SAW</td>
<td>*Attempted to spell (Sow) * - ow confusion *</td>
</tr>
<tr>
<td>2. Law (✓)</td>
<td>*need to be reminded to only use the letters mentioned (s, a, w)</td>
</tr>
<tr>
<td>3. Low (✓)</td>
<td>reversed vowel and consonant * - initial blend confusion *</td>
</tr>
<tr>
<td></td>
<td>*same mistake *</td>
</tr>
<tr>
<td>4. Slow</td>
<td>*same *</td>
</tr>
<tr>
<td>5. Slow (✓)</td>
<td>*same *</td>
</tr>
<tr>
<td>6. Lawn</td>
<td>*spelled reec *</td>
</tr>
<tr>
<td>7. Snow (✓)</td>
<td>*corrected when prompted *</td>
</tr>
<tr>
<td>8. Flow</td>
<td>*snoflak (1) snowflake (2) *</td>
</tr>
<tr>
<td>9. Learn</td>
<td>*corrected when prompted *</td>
</tr>
<tr>
<td>10. Ware (✓)</td>
<td>*corrected when prompted *</td>
</tr>
</tbody>
</table>
### Observation Protocol

**Date:** 5-20-13  
**Making Words Lesson Number:** Lesson 52  
**Word Study - Weekly Word Feature:** Short U (coo) and a (lew and we)

<table>
<thead>
<tr>
<th>Description of Activities</th>
<th>Field Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Spell us</td>
<td>✔</td>
</tr>
<tr>
<td>2. Bus</td>
<td>✔ ✔</td>
</tr>
<tr>
<td>3. Spell use</td>
<td>✔ ✔</td>
</tr>
<tr>
<td>4. Sue</td>
<td>✔ ✔ ✔</td>
</tr>
<tr>
<td>5. neg(v)</td>
<td>✔ ✔ ✔ ✔ ✔</td>
</tr>
<tr>
<td>6. Jug(v)</td>
<td>✔ ✔ ✔ ✔ ✔</td>
</tr>
<tr>
<td>7. Jug (v)</td>
<td>✔ ✔ ✔ ✔ ✔ ✔</td>
</tr>
<tr>
<td>8. Slug</td>
<td>✔ ✔ ✔ ✔ ✔ ✔</td>
</tr>
<tr>
<td>9. secret word:</td>
<td>✔ ✔ ✔ ✔ ✔ ✔ ✔</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Juggers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Jug 1</td>
</tr>
<tr>
<td>2. Jugger</td>
</tr>
<tr>
<td>3. Juggler</td>
</tr>
<tr>
<td>4. Jugger</td>
</tr>
<tr>
<td>5. Juggers</td>
</tr>
</tbody>
</table>

*Behavior - Well mannered, respectful, open to feedback, teaching, and excited.

- ✔ - Spelled with a lowercase "u" then remembered bigger Ivan rules.
- ✔ - Use.
- ✔ - Had to give reminders not to take out additional letters.
- ✔ - Sew (1st)
- ✔ - Received help from a peer to fix misspelling.
- ✔ - CVCV
- ✔ - CVCV

The key that has the word "jug" in it like before words within words.
**Observation Protocol**

Date: 5-30-13  
Making Words Lesson Number: Lesson 29: Flashlight  
Word Study Weekly Word Feature: Flashlight

<table>
<thead>
<tr>
<th>Description of Activities</th>
<th>Field Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spell Sit</td>
<td>✓</td>
</tr>
<tr>
<td>Spell lit</td>
<td>✓</td>
</tr>
<tr>
<td>Spell first</td>
<td>✓</td>
</tr>
<tr>
<td>Spell-fish</td>
<td>✓</td>
</tr>
<tr>
<td>Spell-list</td>
<td>✓</td>
</tr>
<tr>
<td>Short Vowel</td>
<td></td>
</tr>
<tr>
<td>short vowel</td>
<td></td>
</tr>
<tr>
<td>high</td>
<td>✓</td>
</tr>
<tr>
<td>hill</td>
<td>✓</td>
</tr>
<tr>
<td>hill</td>
<td>✓</td>
</tr>
<tr>
<td>hill</td>
<td>✓</td>
</tr>
<tr>
<td>sight</td>
<td>✓</td>
</tr>
<tr>
<td>sight</td>
<td>✓</td>
</tr>
<tr>
<td>light</td>
<td>✓</td>
</tr>
<tr>
<td>night</td>
<td>✓</td>
</tr>
<tr>
<td>spell-word</td>
<td>✓</td>
</tr>
</tbody>
</table>

Secret word: 'flashlight'  
First attempt: ✓  
"That's a compound word!"

**Behavior:** engaged & excited to participate.

"It's time for Making Words": I can't say "Yay!!"
### Observation Protocol

**Date:** 6-5-13  
**Making Words Lesson Number:** Lesson 7  
**Word Study: Weekly Word Feature:** CVC- Short and Long

<table>
<thead>
<tr>
<th>Description of Activities</th>
<th>Field Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. on ✓</td>
<td>COTT ✓</td>
</tr>
<tr>
<td>2. com ✓</td>
<td>COTT ✓</td>
</tr>
<tr>
<td>3. cot ✓</td>
<td>knot * understanding <em>on?</em></td>
</tr>
<tr>
<td>4. not ✓</td>
<td>2nd attempt - not ✓</td>
</tr>
<tr>
<td>5. net ✓</td>
<td>attempt ✓</td>
</tr>
<tr>
<td>6. set ✓</td>
<td>&quot;St, St--&quot;</td>
</tr>
<tr>
<td>7. net ✓</td>
<td>&quot;Oh I have to see all the letters.&quot;</td>
</tr>
<tr>
<td>8. secret word: contest</td>
<td></td>
</tr>
<tr>
<td>1st contest</td>
<td></td>
</tr>
<tr>
<td>2nd contest</td>
<td></td>
</tr>
<tr>
<td>3rd contest</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Behavior:** Engaged
**KINESTHETIC APPROACH TO WORD STUDY**

---

**Observation Protocol**

Date: 6-12-13  
Making Words Lesson Number: Lesson 13 - T-ons/  
Word Study - Weekly Word Feature: [REMOVING VOWELS FROM STUDY WORDS]

<table>
<thead>
<tr>
<th>Description of Activities</th>
<th>Field Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. o+t ✓</td>
<td>correct!</td>
</tr>
<tr>
<td>2. as ✓</td>
<td></td>
</tr>
<tr>
<td>3. ras ✓</td>
<td></td>
</tr>
<tr>
<td>4. rat ✓</td>
<td></td>
</tr>
<tr>
<td>5. sat ✓</td>
<td></td>
</tr>
<tr>
<td>6. o+st ✓</td>
<td></td>
</tr>
<tr>
<td>7. o+t ✓</td>
<td></td>
</tr>
<tr>
<td>8. t+on ✓</td>
<td></td>
</tr>
<tr>
<td>9. tan ✓</td>
<td></td>
</tr>
<tr>
<td>10. t+ose ✓</td>
<td></td>
</tr>
<tr>
<td>11. tone ✓</td>
<td></td>
</tr>
<tr>
<td>12. tone ✓</td>
<td></td>
</tr>
<tr>
<td>13. t+one ✓</td>
<td></td>
</tr>
<tr>
<td>14. thone ✓</td>
<td></td>
</tr>
<tr>
<td>15. thone ✓</td>
<td></td>
</tr>
</tbody>
</table>

Secret Word - thanks - Correct on 1st attempt.

**Behavior** - engaged, attentive.  
Happy / Smiling - when introducing the lesson.
Appendix S

Tyler’s Weekly Observational Data

<table>
<thead>
<tr>
<th>Description of Activities</th>
<th>Field Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. at</td>
<td></td>
</tr>
<tr>
<td>2. pat</td>
<td></td>
</tr>
<tr>
<td>3. pet</td>
<td></td>
</tr>
<tr>
<td>4. ne +</td>
<td>+ reversed -</td>
</tr>
<tr>
<td>5. ten</td>
<td>bat</td>
</tr>
<tr>
<td>6. tan</td>
<td>Self-corrected</td>
</tr>
<tr>
<td>7. ant</td>
<td></td>
</tr>
<tr>
<td>8. sent</td>
<td></td>
</tr>
<tr>
<td>9. nest</td>
<td></td>
</tr>
<tr>
<td>10. pest</td>
<td></td>
</tr>
<tr>
<td>11. past</td>
<td></td>
</tr>
<tr>
<td>12. pant</td>
<td></td>
</tr>
<tr>
<td>13. plant</td>
<td></td>
</tr>
<tr>
<td>14. planet - secret word</td>
<td></td>
</tr>
</tbody>
</table>

Behavior - engaged - appeared to rush through lesson.
## Observation Protocol

**Date:**
Making Words Lesson Number:

Word Study - Weekly Word Feature:

<table>
<thead>
<tr>
<th>Description of Activities</th>
<th>Field Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. hop</td>
<td>&quot;Sh - sn - sh&quot;, attempt to sand out sh digraph</td>
</tr>
<tr>
<td>2. shop</td>
<td></td>
</tr>
<tr>
<td>3. chop</td>
<td></td>
</tr>
<tr>
<td>4. chip</td>
<td></td>
</tr>
<tr>
<td>5. ship</td>
<td></td>
</tr>
<tr>
<td>6. picic</td>
<td></td>
</tr>
<tr>
<td>7. ticic</td>
<td></td>
</tr>
<tr>
<td>8. sicic</td>
<td></td>
</tr>
<tr>
<td>9. socic</td>
<td></td>
</tr>
<tr>
<td>10. shock</td>
<td></td>
</tr>
<tr>
<td>11. stocic</td>
<td></td>
</tr>
<tr>
<td>12. stick</td>
<td></td>
</tr>
<tr>
<td>13. chip</td>
<td>Speculate as ticic, immediately added the &quot;h&quot; - thick</td>
</tr>
<tr>
<td>14. thinic</td>
<td>correction 1st attempt</td>
</tr>
</tbody>
</table>

Secret Word: 'Chopstick'

Behavior: Engaged - went very fast

Missed "i" and "h", together (his hand) and sanding cut - "th", "th", "th"
## Observation Protocol

**Week 5**

**Date:**

**Making Words Lesson Number:**

**Word Study- Weekly Word Feature:**

<table>
<thead>
<tr>
<th>Description of Activities</th>
<th>Field Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>se+</td>
<td></td>
</tr>
<tr>
<td>pet</td>
<td></td>
</tr>
<tr>
<td>pot</td>
<td></td>
</tr>
<tr>
<td>Pep</td>
<td></td>
</tr>
<tr>
<td>step</td>
<td></td>
</tr>
<tr>
<td>stop</td>
<td></td>
</tr>
<tr>
<td>spot</td>
<td></td>
</tr>
<tr>
<td>tops</td>
<td></td>
</tr>
<tr>
<td>pots</td>
<td></td>
</tr>
<tr>
<td>pets</td>
<td></td>
</tr>
<tr>
<td>pest</td>
<td></td>
</tr>
<tr>
<td>stopped</td>
<td></td>
</tr>
<tr>
<td>secret word</td>
<td></td>
</tr>
</tbody>
</table>

- **Tyrer:**
  - You are correct.
  - 0 stopped
  - 0 stopped

**Behavior:** Engaged

- Still busy - Excitingly writing to hear letters + words.
  - When I told the children to take all letters - S, E, T, Tyrer rushed to be the first one to race them and attempted reading.
# Appendix T

## Gary’s Weekly Observation Data

**Observation Protocol**

Date:  
Making Words Lesson Number: **Lesson 1**  
Word Study: Weekly Word Feature: **Planets**

<table>
<thead>
<tr>
<th>Description of Activities</th>
<th>Field Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Make up lesson</strong> -</td>
<td></td>
</tr>
<tr>
<td>- Not much engagement</td>
<td></td>
</tr>
<tr>
<td>- Complined to using letter tiles</td>
<td></td>
</tr>
<tr>
<td>- Spelled list words</td>
<td></td>
</tr>
<tr>
<td>- Seemed to just copy from</td>
<td></td>
</tr>
<tr>
<td>- Spelling list 10 letter tiles</td>
<td></td>
</tr>
<tr>
<td>- &quot;Oh, it's kinda like when we use magnet letters&quot;</td>
<td></td>
</tr>
</tbody>
</table>
### Observation Protocol

**Date:**

**Making Words Lesson Number:** Lesson 20

**Word Study - Weekly Word Feature:** Consistent Digraphs

<table>
<thead>
<tr>
<th>Description of Activities</th>
<th>Field Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>chop</td>
<td></td>
</tr>
<tr>
<td>shop</td>
<td></td>
</tr>
<tr>
<td>ch   P</td>
<td></td>
</tr>
<tr>
<td>ship</td>
<td></td>
</tr>
<tr>
<td>Pic CIC</td>
<td></td>
</tr>
<tr>
<td>tic  CIC</td>
<td></td>
</tr>
<tr>
<td>sic  CIC</td>
<td></td>
</tr>
<tr>
<td>sic  CIC</td>
<td></td>
</tr>
<tr>
<td>shoc  CIC</td>
<td></td>
</tr>
<tr>
<td>soak  CIC</td>
<td></td>
</tr>
<tr>
<td>stick</td>
<td></td>
</tr>
<tr>
<td>chip</td>
<td></td>
</tr>
<tr>
<td>thr  CIC</td>
<td></td>
</tr>
<tr>
<td>secret word - chaotic</td>
<td></td>
</tr>
</tbody>
</table>

**Behavior - engaged**

- Slow pace

(Ch) P stick

(a) (c)
### Observation Protocol

<table>
<thead>
<tr>
<th>Description of Activities</th>
<th>Field Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Used spelling list words to build activities</td>
<td></td>
</tr>
<tr>
<td>- Take out letters M, C, O, E</td>
<td></td>
</tr>
<tr>
<td>- make the word <strong>come</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Quickly and effortlessly formed **come**
- Oh, I always spell it with **O's** - but I couldn't this time.
**Observation Protocol**

**Date:**

**Making Words Lesson Number:** LESSON 10: PLANETS

**Word Study- Weekly Word Feature:** Short Vowel i

<table>
<thead>
<tr>
<th>Description of Activities</th>
<th>Field Notes</th>
</tr>
</thead>
</table>
| it, in, pin, pit, set, sit, tip, trip, strip, print, stern, insert, printers | ✓

欢呼 - 1st attempt
Cautiously self-corrected

察 - 1st attempt
Teach support to fix.

strip - 1st attempt
Self-correct

stripp - 1st attempt
Teach support to fix.

inflect - 1st attempt

**Behavior -** attentive, engaged.

*Slow working pace*

*Asked peers in group for assistance - when needed, not me - collaborating*
### Observation Protocol

- **Date:** [Date]
- **Teaching Words Lesson Number:** [Lesson Number]
- **Word Study Weekly Word Feature:** [Feature]

<table>
<thead>
<tr>
<th>Description of Activities</th>
<th>Field Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>set&lt;br&gt;pet&lt;br&gt;pot&lt;br&gt;pet&lt;br&gt;pep&lt;br&gt;stop&lt;br&gt;stop&lt;br&gt;tops&lt;br&gt;pops&lt;br&gt;pets&lt;br&gt;pest&lt;br&gt;stopped&lt;br&gt;isicetward</td>
<td>✔&lt;br&gt;✔&lt;br&gt;15th Pat&lt;br&gt;2nd ✔&lt;br&gt;✔&lt;br&gt;✔&lt;br&gt;top ✔&lt;br&gt;✔&lt;br&gt;✔&lt;br&gt;✔&lt;br&gt;✔&lt;br&gt;Stop ✔&lt;br&gt;Stop ✔&lt;br&gt;Stop ✔&lt;br&gt;Stop ✔&lt;br&gt;✔ 4th</td>
</tr>
</tbody>
</table>

- **Behavior:** Engaged - Smiling throughout lesson.