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Mandy Lea Strange

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THE MOST EFFECTIVE WAY TO TEACH SPELLING

A Project
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
in
Education:
Reading/Language Arts

by
Mandy Lea Strange
June 2005
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June 1, 2005
ABSTRACT

Teachers strive to teach their students a variety of tools for a variety of situations, and spelling should be no different. However, which of these numerous strategies are the most effective, and what is the best way to teach them? There are a variety of spelling strategies and techniques in circulation. The question is, which ones are truly effective? The research shows that spelling needs to be taught through patterns, rhymes, and the use of analogies. Weekly spelling tests are appropriate only if they are assessing spelling patterns instead of a predetermined collection of random words. Also, spelling activities need to be manipulation of the words verses writing each word multiple times. Finally, spelling needs to be taught within writing, not as a completely separate subject. Explicit instruction does need to occur, but the reinforcement and practicing of those strategies need to occur while students are writing. Spelling should be a study of word patterns and not just words.
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CHAPTER ONE

INTRODUCTION TO THE STUDY AND PROBLEM

What is the most effective way to teach primary students how to spell? Currently most teachers pass out a spelling list each Monday with daily spelling to be completed as a part of their homework activities. This is then followed by a spelling test on Friday that is corrected and returned to the student. The problem with this is that the spelling words from these weekly tests are not transferring into students’ writing where it is the most important. Since the weekly spelling lists and tests are not effective for most students, it is essential to discover what will improve primary students overall spelling achievement.


The current English spelling system is based primarily on the earlier pronunciations of words. The many changes that have occurred in the sound system of English since then are not reflected in the current spelling, which was frozen due to widespread printed material and scholastic conservatism. (p. 509)

Many researchers believe that there are simply too many rules for spelling. As a result they feel that spelling should be simplified by changing it to match the way we
pronounce words today. This is not a proper solution because we would end up with the same problem that initiated the entire spelling movement. Instead we need to discover a different way to simplify spelling so that students can achieve spelling mastery.

Rationale for the Study

The desire to find the most effective way to teach spelling is rooted in my multiple years of teaching experience. I used to administer the weekly spelling lists and tests. Typically, I found that the majority of my students would pass the tests, yet those same students would have numerous spelling errors when they were writing. In addition, some of those misspelled words, if not most of them, would be words they were capable of spelling correctly on a prior weekly spelling tests. I began to get frustrated with spelling. It was obvious that the weekly spelling lists and tests were not teaching my students to spell. However, I did not know any other way to teach spelling. So, I decided to begin to research this subject area, in order to be a better teacher and to help my students become better spellers.
Question to be Answered
What is the most effective way to teach spelling?

Importance of the Study
There are many benefits to this study on spelling. Currently spelling instruction time is being wasted, with ineffective lessons. This study plans to rectify this problem. Secondly, it is assumed that students spelling within writing will improve, and as a result test scores will also improve. Thirdly, another underlying assumption is that students reading levels will also increase as a consequence of the proper spelling instruction. Lastly, it is posited that students writing will also improve. Then as an added bonus student self-esteem will rise and their desire to attend school and learn will grow because they are feeling more successful.

Assumptions and Limitations
For this study I am assuming that I will find research that supports what I see in my classroom, that weekly spelling lists and tests do not work. I also anticipate finding a few methods that have been extensively researched to prove their level of effectiveness.
One of the major limitations I will have for this study will be time. Ideally, I would have liked to be able to collect an entire school years worth of data. In addition, I would have liked to compare Houghton Mifflin's spelling program to Rebecca Sitton's, *Spelling Sourcebook*, over the course of a year. However, in the school district that I currently work in I am mandated to faithfully replicate Houghton Mifflin. Although, I do have a short period of time that I can teach through Rebecca Sitton's *Spelling Sourcebook*, I do not know if it will provide me with sufficient data to come to a firm conclusion.

**Organization of the Study**

The remainder of chapter one will focus on the history of spelling, so that we may understand how spelling instruction arrived to where we are today. In chapter two I will be discussing a variety of literature on spelling. Then, in chapter three spelling methods will be shared with an outline of how I will be teaching spelling within my classroom for this study. You will also find information on the students I will be working with along with the types of data I will be using and how the analysis will be conducted. In chapter four I will have my
data and findings followed with my conclusions in chapter five.

Development of Spelling

According to Fromkin (1998), before the 18th century words were not spelled with a great deal of consistency. People would just write down the sounds they heard in words. As a result the spelling of one word appeared in many different forms since it was based on pronunciation, which is altered, and still does, from one region to another. This made reading difficult, if not impossible at times. To help alleviate this problem many steps were taken to unify spelling.

Noah Webster (1754-1843) was the first prolific textbook writer in America. He strongly believed that spelling was important and that it needed to be universal. As a result he developed the first American dictionary in 1783. Following this, Webster went on to write many more things to help people spell with accuracy. In conjunction with Webster, many other people began to produce spelling books. Caleb Bringham, in 1792, wrote The Child's Companion, Being an Easy and Concise Reading and Spelling Book, to be followed with The New, American Spelling-Book by John Pierce in 1795. These texts were in use until 1809
when the Sundry Experienced Teachers wrote The United States Spelling Book.

In 1886 the American Philological Association (APA) issued a list of 3,500 respellings of common words. This was the beginning of spelling reform. Initially most people were indifferent or were against spelling reform. As a result, Webster’s book was not popular until around 1906. “In the period from Webster’s first speller in 1783 to Roosevelt’s executive order in 1906, the unique character of American spelling was firmly implanted, and the U.S. publics attitude toward spelling reform was clarified” (Venezky, 1999; p. 217). At this point the public finally acknowledged the spelling reform movement and supported it. Following this, the National Education Association (NEA) board of directors adopted 12 simplified spellings of well-used words. At this point President Roosevelt became intrigued with the spelling reform. Some say it was due to his personal difficulty with spelling. Later in 1906 Andrew Carnegie began to donate $10,000, which was later increased to $25,000, per year to help create and maintain the Simplified Spelling Board. Once established, they instantly altered 300 words. These words were then published and President Roosevelt ordered the U.S. Government Printing Office to begin following it
immediately, which greatly supported and propelled the spelling reform movement. Since then Webster has revised his dictionary numerous times and the APA continues to update its’ publications.

By the late part of the 20th century the level of interest in spelling declined once again. Venezky (1980) found that spelling reform was not a major concern of the public.

Neither spelling instruction nor spelling reform occupies central roles today in education or in public life. No major funding agency in the last 25 years has included among its highest priorities the improvement of spelling instruction or the development of a simplified spelling system...The public schools exhibit limited enthusiasm for spelling. Some have no systematic spelling instruction at all while the average class offers perhaps two or three 15-minute periods for it each week. (Venezky, 1980; p. 10)

This allows too many variables within the teaching of spelling. Therefore, it does not permit solid research to be conducted in order to improve instruction this subject area.

Past Spelling Research

A variety of research has been conducted over the years on a range of spelling methods in order to find the most effective way to teach spelling. At different points in time, assorted methods of teaching spelling were found
to be the most effective. Templeton and Morris (2000) found that when they looked at spelling research throughout the 20th century, it suggested that there were three successive periods, each characterized by a distinct theoretical perspective that affected classroom instruction: a) spelling is a process of rote memorization, b) spelling is a process of abstracting regular sound/spelling patterns, and c) spelling is a developmental process.

In addition, "The implications of this research were far-reaching, but perhaps most notably they led to the realization that young children are capable of constructing knowledge about the relationships between sounds and letters without explicit instruction" (Templeton & Morris, 2000, p. 530).

Vacca, Vacca, and Gove discuss in their book, Reading and Learning to Read (2000), that over the past three decades, spelling researchers have explored the developmental relationship between spelling ability and reading and writing. From this work it is clear that young children apply systematic strategies to relate speech sounds to print. These strategies are applied through definable developmental stages of spelling.
How Spelling Has Been Taught in The Past

According to Henderson (1990) and Venezky (1980) in the United States, for much of the nation’s history, spelling and reading were taught together. Beginning in the 20th century a shift occurred and the teaching of spelling and reading were largely separated. According to Templeton and Morris (2000) only recently have they once again begun to merge. The era of rote memorization with spelling being taught through word lists, self-corrected pretests, and 60 to 75 minutes a week of instruction came to an end. Following this, spelling was seen as a process of abstract regular sound/spelling patterns. At this time spelling began to focus on patterns instead of one letter/one sound correspondences. Finally, spelling as a developmental process came forward which encouraged the use of invented spelling.

Around the 1980s and 1990s, many educators adopted a new conception of the role of spelling. Instead of considering spelling as an indicator of general literacy competence or a form of orthographic knowledge, these educators focused more narrowly on the role of spelling as a tool for writing (e.g., Calkins, 1996; Graves, 1983; Wilde, 1991). One of the results of this was a decline in the number of textbook sales. Teachers were now just using
the resources the students brought with them; their writing. This did not make book publishers and economists very happy.

So, in response, education has been forced to go back to the weekly abstract spelling lists and tests provided by reading textbook companies like Houghton Mifflin and Open Court. Although teachers are finding these to be ineffective, buying the textbooks causes revenues for publishers to increase. Money controls the education system. Once a school district spends the millions of dollars needed to adopt a textbook, teachers are required to follow them, even if they are showing evidence of not working properly.

Conclusion

Although spelling lists are the method that teachers have typically utilized in teaching spelling in the past, there is no research to support its' effectiveness. On the contrary, there is such little information that no conclusion can be made on the effectiveness or lack there of on spelling lists. However, there is widespread information to support other spelling strategies, such as rhyming words, and utilizing patterns, and analogies.
CHAPTER TWO
REVIEW OF THE LITERATURE

Introduction

Teachers strive to teach their students a variety of tools for a variety of situations, and spelling should be no different. However, which of these numerous strategies are the most effective, and what is the best way to teach them? Thomas Gunning (1991) stated in his book *Assessing and Correcting Reading and Writing Difficulties*,

Just as students are shown how to use word-analysis strategies when they encounter difficult words, they should also be taught how to use spelling strategies when they are attempting to spell a difficult word. Possible spelling strategies include best spelling, think how it sounds, think how it looks, try it out, analogy, think of its parts, use a rule, use a reference, and ask for help. (Wilde, 1992; Snowball & Bolton, 1999) (pp. 488-489)

There are a variety of spelling strategies and techniques in circulation. The question is, which ones are truly effective? Is encouraging young children to use invented spelling helpful or harmful? Should students be writing each spelling word five times each as a means to enhance their spelling skills? Should students start to learn to spell using word families and patterns? When students are attacking a new word do they use prior knowledge and analogies? If they do, is that something
that teachers should be explicitly teaching? Should spelling be connected to their writing or do abstract weekly spelling lists work just as well? Do students need to have weekly spelling tests to learn how to spell? All of these are questions that need to be thoughtfully considered and researched. All of the questions form the foundation to any spelling program, whether it is published or teacher generated. Before going any further an analysis of the foundation must occur.

Through the research we will discover many answers to the above questions. However, there are still some gaps. When referring to the *Handbook of Reading Research: Volume 3*, Shane Templeton and Darrell Morris (2000) wrote the article, *Spelling*, that states,

> With respect to specific instructional practice, it is hardly surprising that research does not unambiguously support a specific type of instructional activity or systematic program. Given the studies that have investigated the effect of examining words in the context of an active search for pattern, however, there are some general conclusions that are at least strongly suggested: for most students, an inductive or exploratory approach is appropriate; for severely struggling spellers who are working at an appropriate developmental level, a more deductive, systematic, and direct approach is preferred, an emphasis on the interrelatedness of spelling and phonics, morphology, and vocabulary. This emphasis includes the explicit presentation and discussion of how morphology is represented in the spelling system; this allows a significant
merger of spelling and vocabulary instruction, and an emphasis in teacher preparation and professional development programs on the need for developing teachers' knowledge base about word structure, thus being empowered to facilitate students' development of word knowledge. (p. 538)

There are many pieces of research that prove some methods may be more effective than others, but there is not enough research to support any one method one hundred percent of the time. It is also imperative to remember that what works for one student may not work for another. Teachers need to ultimately rely on their professional judgment after they have obtained all of the information. When doing that, teachers need to rely on their core beliefs and teaching philosophies.

Teaching Philosophies

There are three major theories about the way children learn how to read. There is the decoding theory, skills theory and the socio-psycholinguistic theory. The basis of the socio-psycholinguistic theory is that learning should happen naturally through context that makes sense to the students. Through this theory concepts should intertwine and connect. Nothing should be taught as an isolated activity. As long as students are constantly reading and writing, they are constantly learning. Skills theory
believes that students need to practice direct skills and this will usually result in students doing lots of worksheets and drills to practice and prove that they have learned these skills. With the decoding theory students must learn individual letters, and then words, then they may read sentences. This theory believes that there are specific steps students must learn in a particular order to learn how to read.

Most spelling instruction in the past would be classified under the decoding and skills theory. However, past spelling instruction practices have not proven to be effective. So, in researching new teaching techniques for spelling, we will lean towards the socio-psycholinguistics theory.

Stages of Spelling

Patricia Cunningham (1991, 1994) and Thomas Gunning (2002) along with many other researchers have studied the different developmental stages of spelling. They have all arrived at the same conclusion, which is that there are five developmental stages in spelling acquisition. Although the labels for each stage vary from one researcher to the next, they all follow the same basic description. Gunning (2002) describes the spelling stages
as follows: “Based on the alphabetic, pattern, and meaning principles, spelling development is divided into five broad states: prephonemic, alphabetic (letter-name), word pattern (orthographic, within-word pattern), syllabic (syllable juncture), and morphemic (derivational constancy)” (p. 140). It is believed that students move through these stages and that teachers need to assist their students in progressing through each one.

Thomas Gunning, in his book, Assessing and Correcting Reading and Writing Difficulties (2002) refers to Henderson and Templeton (1986) who say, “Because spelling is constructive, conceptual, and progresses through various phases, it is important that spelling instruction match students’ level of word knowledge” (p. 142). Teachers need to assess students to establish which spelling stage they are functioning at and then scaffold their instruction from there. Instruction also needs to be differentiated since each child develops at their own individual pace. Figure 1 shows the Stages of Spelling Development from Gladys Rosencrans’ The Spelling Book (1998). These five stages are the same as Gunning’s (2002) description as discussed earlier, but are referred to by different names.
Figure 1. Spelling Stages
Ethel Buchanan, author of *Spelling for Whole Language Classrooms* (1989), also talks about the stages of spelling development. These stages are described along with strategies that can be implemented within the classroom to support spellers at the various stages of development. The complete list is located in appendix A. Buchanan (1989) also includes two graphs for educators to use as a guide to evaluate their student’s progression through the developmental spelling stages, which you will find in Figure 2. The first graph shows a typical students’ progression through each developmental stage across the grade levels. The higher the line within the stage shows full immersion and implementation of that stage while a low line shows the students on the edge of either the beginning or end of that particular stage. The second graph shows the overall growth for the average student on the numbers of words they have mastered across the grade levels.
Now that the developmental spelling stages for the students have been established, spelling instruction must begin. Phonemic awareness is important for students to be able to spell and read. Phonemic awareness is the ability to recognize the sounds that the letters and chunks
produce. Alan Farstrup and Jay Samuels (2002) discuss phonemic awareness in regards to spelling in their book, *What Research Has to Say About Reading Instruction* (2002). They found that,

> Whereas some studies show that PA (Phonemic Awareness) instruction facilitates learning to read and spell, other studies show that learning to read and spell enhances children’s’ PA skills. It is important to recognize that the relationship between acquiring PA and acquiring literacy is interactive and reciprocal. (p. 124)

The study actually shows that they are dependent upon each other. As a student is learning to read, write, or spell they are growing in the other academic areas as well. This tells us that students do not have to learn phonemic skills explicitly prior to beginning to learn about spelling. Instead they should be occurring simultaneously.

In addition Richard Gentry (1987) states, “...knowledge of phonics enables a person to spell only one of every two words” (pp. 32-33). So, while phonics is beneficial, it is not the complete independent answer.

**Phonics**

In connection with phonemic awareness we need to look at phonics and it’s relationship to spelling instruction. Although they are closely linked together, it is still unclear which one affects the other and if students must
learn these in a particular order to be a successful speller. According to Goodman (2003),

...phonics instruction teaches the processing of language to get to sounds or to get to words. Such instruction at best introduces many strategies, which either has to be subsequently unlearned or which will interfere with the effectiveness of the reading process. (p. 398)

So, phonics instruction is helpful but only to a point. Once the students have mastered the basics, direct phonics instruction needs to be let go or it will interfere with further progress.

Theodore Clymer wrote the article, The Utility of Phonic Generalizations in the Primary Grades (1963). This article was regarding his study on phonic generalizations taught in elementary schools. He realized that teachers couldn’t teach phonic rules because almost all of them will have one or more exception, which negates the definition of rule. So instead he referred to them as generalizations. However, his study tried to locate generalizations that held a 75% consistency rate, and it turned out to be very frustrating and difficult. Numerous times he found a generalization that he believed would work only to discover numerous exceptions. His findings showed that many of the generalizations that are taught in the classroom hold very little value due to the enormous
amount of exceptions. He was unable to locate a substantial amount of phonic generalizations that met his criteria.

Finally, Gentry (1987) leaves us with this piece of information.

Evidence seems to indicate that phonics instruction does help spelling achievement. At least it provides an effective scheme for organizing word lists in the spelling series used in early elementary grades. But words studied formally should also be considered for frequency and meaning. Direct, systematic teaching or word study, including phonics, should supplement learning to spell through reading and writing, but it should be kept in proper perspective. Formal spelling study should be limited to about seventy-five minutes per week. The real foundation for spelling is frequent writing. (p. 33)

So, ultimately phonics has some benefits, but teachers need to teach spelling through other routes of instruction as well. These other instruction methods will be discussed next.

Invented Spelling

Invented spelling has been a controversial topic for quite some time. This method is when teachers encourage students to write what they hear then accepting that as the correct spelling instead of fixing it. Some researchers believe it to be effective while others believe it to be damaging. In addition to its' level of
effectiveness, appropriate age levels also need to be discussed. Patricia Cunningham (1991, 1994), Alan Farstrup and Jay Samuels (2002), Thomas Gunning (2002), Shane Templeton and Darrell Morris (2000), JoAnne Vacca, Richard Vacca, and Mary Gove (2000) all agree that encouraging young children to use invented spelling is not damaging, but on the contrary is extremely helpful with phonetic development. They all believe that up through first grade students should be encouraged to use invented spelling for a number of reasons. First, using invented spelling keeps students writing instead of stopping for correct spelling. Second, it is one of the main ways teachers can help children develop their understanding of how words are made up of phonemes. Thirdly, those students who are encouraged and allowed to "invent spelling" phonemic awareness develops early and strong. The results show children who used invented spelling were superior to others on decoding measures at the end of the school year. Patricia Cunningham, in her book, *Phonics They Use: Words for Reading and Writing* (1991), and Alan Farstrup and Jay Samuels, *What Research Has to Say About Reading Instruction* (2002), refer to Clark (1988) who did a study comparing two groups of first graders at the end of one school year. One group used invented spelling, while the
other group emphasized accurate spelling. He found that the group of students who used invented spelling were superior at decoding words at the end of the year.

Thomas Gunning (2002) believes that when students use invented spelling, they explore the nature of the spelling system, which advances their ability to spell and to decode printed words. Through their attempts at spelling, students will provide themselves with a valuable analysis of letter-sound correspondences and relationships. And finally, while students are writing they make important discoveries about letter-sound relationships. This is why students who are at the beginning stages of spelling development should be allowed to use invented spelling. Invented spelling is a crucial developmental step for all students in learning how to spell. Teachers need to make sure that they are allowing their students these important opportunities.

In support of Gunning (2002), Richard Gentry (1987) shares that,

Allowing children the freedom to take risks in their own writing is the best technique I know of. Children learn to speak by speaking, making mistakes and refining their language as they communicate. So they learn how to spell by writing, inventing spellings, and refining their understanding of print. (p. 27)
In conclusion, Templeton and Morris (2000) found that the implications of the research most notably led to the realization that young children are capable of constructing knowledge about the relationships between sounds and letters independently. Teachers need to give students credit for what they are capable of doing, because they come with a wealth of abilities and knowledge. Things students learn through self-motivation and discovery hold far more meaning and therefore the students will have a longer retention period for the new knowledge. With all of this new information we need to evaluate how spelling has been taught for years; weekly spelling lists and tests.

Weekly Spelling Lists

Weekly spelling tests have been a part of education for quite some time. However, just because it has always been done this way before, does not mean that it works or that it is the best practice. Pauline Gibbons (2002) found through her research that learning to spell is mainly a reasoning process and is based on the student’s ability to develop generalizations. In her book, *Scaffolding Language Scaffolding learning: Teaching Second Language Learners in*
the Mainstream Classroom (2002) she went on to discuss that,

...providing lists of thematically related words to be learned by rote (perhaps related to a topic being studied) may assist in the learning of new vocabulary, but it may not be helpful in teaching about spelling, since thematically related words are unlikely to have a spelling pattern in common. (p. 138)

Typically, when teachers give weekly spelling lists one of the activities they require the students to complete is to write the words multiple times. Templeton (2000) comes forth to say that this practice stems from the belief that the only way to remember a word’s spelling is somehow to permanently form an imprint on the brain through repetition spelling. In actuality, this practice is one of the least effective approaches teachers could possible use. Students need to be focused on the detection of spelling patterns that will apply to multiple words instead of just learning how to spell that one specific word.

According to Bean and Bouffler (1987) when students are given weekly lists and tests they view spelling as a completely separate task from writing. There is no correlation between the two for these students. In addition, Buchanan (1989) says that words for spelling must come from student’s writing. Superimposing word lists
are hazardous. If teachers want students to spell within content then their spelling words need to come from that same location. This method of teaching spelling related closely to whole language.

Spelling through Whole Language

Tradition has very strong roots, which is the main reason spelling continues to be taught today like it was in the past. However, over the years research has been done to prove the inadequacies of past practice and to support new ones. One of the new methodologies for teaching is whole language. Yet, before we go to far, whole language needs to be defined. According to Froese (1990) whole language is considered to be child-centered, and a literature-based approach to language that immerses students in real communication situations whenever possible.

Debbie Miller, author of Reading with Meaning: Teaching Comprehension in the Primary Grades (2002) discusses numerous ways to teach reading and spelling within a whole language classroom. She believes that when a lesson is made within context it allows the students to connect new knowledge with prior knowledge more readily. This makes the lessons more meaningful which results in
retention of information. In regards to spelling, Miller (2002) believes the following.

In small-group meetings, we often work with spelling patterns or word families. We begin by talking about a particular spelling pattern, such as ight. I find several examples in a couple of books and, after discussing the words, I send the children off to collect their own words with the same pattern. We chart and share out learning. When children recite and read nursery rhymes, play with tongue twisters, and read snippets of text I’ve retyped from favorite read-alouds they develop a sense of the predictability of language, the repetitive nature of words, and the relationships between letters and sounds. (p. 50)

Also, while walking around the school, Miller would point out words that the students know and encourage the students to be constantly word hunting in their environment. This aspect helps students to remember and recall high-frequency words that tend to not follow any word patterns. In addition, it teaches them to be resourceful and to use their surrounding environment.

Thomas Gunning (2002) and Donald Graves (1994) believe that spelling should stem from students writing. Ultimately writing is the reason that spelling is important. It does not matter if a child can spell a word correctly on a weekly spelling test; they need to be able to spell when they are actually writing to communicate. Graves (1994) said, “Cohen’s research showed quite clearly
that using words in the children's own writing was the strongest contributor to spelling power" (p. 264). Gunning (2002) agrees with this statement. He believes that, writing provides opportunities for students to apply their skills. Constant writing is essential for students to develop spelling strategies and skills. Finally, he believes that constant writing provides students with a purpose of spelling. Students need to have real reasons for learning, and preferably they need to come from them. When students are writing, they want to be able to spell. However, they only want to know how to spell the words that they need to use. Teachers need to take those words and teach spelling strategies through them. Having abstract weekly spelling lists will not help students learn to spell. Instead, "Words chosen for spelling instruction should be those that students need in their writing" (Gunning, 2002, p. 487). This is practical and meaningful to students.

Richard Gentry (1987) also says that there are five guidelines for having an effective spelling program. He believes that teachers should teach spelling as part of the whole curriculum, have them write frequently, encourage invented spellings for words they may not have learned to spell, de-emphasize correctness, memorization,
and writing mechanics, and respond to student’s writing in ways that help them discover more about spelling. In your response, build interest in words, make word study fun, answer questions about spelling, and teach spelling skills. Help young writers develop a positive spelling consciousness. To encourage this, it is useful to teach spelling through word patterns, rhymes, and analogies.

**Word Patterns, Rhymes, and Analogies**

Most of the research that I have located supports teaching spelling through word patterns, rhymes, and analogies verses weekly spelling lists and tests. It has been discovered through research that this is a more natural way for students to learn how to spell. More importantly the view of spelling needs to change. Instead of focusing on teaching spelling words every week, teachers need to teach spelling patterns. There are far fewer patterns than there are phonetic rules and words in the English language. In addition, when a child learns one spelling pattern, they are then capable of spelling multiple words. While on the other hand, when a child learns how to spell one word, they can usually only spell that one word. Spelling needs to be taught in a practical
and useful form, and that is through patterns, rhymes, and analogies.

**Word Patterns**

Lucy Calkins (2001) believes that children naturally want to learn how to spell. They have a desire to communicate through writing and they will find ways to do this independently. Teachers need to utilize this natural curiosity and build from that in teaching students how to spell. Patricia Cunningham (1991, 1994) refers to Adams (1990) in her book *Making Words* (1994) who says,

> Current theory suggests that the brain is a pattern detector, not a rule applier, and that decoding a word occurs when the brain recognizes a familiar spelling pattern or if the pattern itself is not familiar, searches through its store of words with similar patterns. (Adams, 1990, p. 2)

This encourages teachers to get rid of the weekly spelling tests unless the words are all connected by a pattern. Then in Cunningham's book *Phonics They Use: Words for Reading and Writing* (1991) she refers to Wylie and Durrell (1990) to share the fascinating fact that there are thirty-seven spelling patterns, which once mastered allow children to read and spell over 500 words. Figure 3 shows the 37 patterns from Cunningham’s book *Phonics They Use: Words for Reading and Writing* (1991).
Here are the 37 high-frequency spelling patterns (with possible key words):

<table>
<thead>
<tr>
<th>Pattern</th>
<th>Key Word</th>
</tr>
</thead>
<tbody>
<tr>
<td>ack (black)</td>
<td>ake (cake)</td>
</tr>
<tr>
<td>ame (game)</td>
<td>ake (cake)</td>
</tr>
<tr>
<td>at (cat)</td>
<td>ate (skate)</td>
</tr>
<tr>
<td>ell (shell)</td>
<td>est (nest)</td>
</tr>
<tr>
<td>iight (night)</td>
<td>ill (hill)</td>
</tr>
<tr>
<td>ink (pink)</td>
<td>ip (ship)</td>
</tr>
<tr>
<td>op (mop)</td>
<td>ore (store)</td>
</tr>
<tr>
<td>ump (jump)</td>
<td>unk (skunk)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pattern</th>
<th>Key Word</th>
</tr>
</thead>
<tbody>
<tr>
<td>ail (pail)</td>
<td>ale (whale)</td>
</tr>
<tr>
<td>an (pan)</td>
<td>ap (cap)</td>
</tr>
<tr>
<td>ank (bank)</td>
<td>ay (tray)</td>
</tr>
<tr>
<td>ice (rice)</td>
<td>de (bride)</td>
</tr>
<tr>
<td>in (pin)</td>
<td>ine (nine)</td>
</tr>
<tr>
<td>it (hit)</td>
<td>ock (sock)</td>
</tr>
<tr>
<td>ot (hot)</td>
<td>uck (truck)</td>
</tr>
</tbody>
</table>

Figure 3. 37 Spelling Patterns

This is a powerful piece of information. There are over 200 spelling rules verses the 37 patterns. Teaching the patterns would be far more manageable and practical than teaching all of the spelling rules. Thomas Gunning (2002) found that patterns are especially useful elements since once a student is capable of spelling one pattern word; they can utilize that knowledge to spell other words with the same pattern. Also, when students learn to spell a new pattern word it provides excellent reinforcement. In addition to providing an opportunity for students to apply skills, it helps them to focus on specific vowel sounds and patterns within each word. The best patterns to teach students are those that students will most likely use in their writing. Teaching spelling this way will allow you to see a great improvement in student's spelling.
Gunning's (2002) final thought is that one of the most important ways that children learn to spell is to recognize and reproduce common spelling patterns.

Gerald Coles, in his book, Reading the Naked Truth: Literacy, Legislation, and Lies (2003), was looking at prior reports on spelling and found a study, coauthored by NRP (National Reading Panel) member Linnea Ehri, that found teaching children to segment and spell helps them not only learn how to spell but also aids them in learning to read as well. The English spelling system shows that the initial consonants (onsets), final consonants, and rimes spelling-sound consistency of the written language are the greatest.

**Rhymes**

In addition to using word patterns, rhymes are also helpful and are closely connected to word patterns. Students love to listen and read poetry because of the rhyming words; they believe it is a fun and entertaining. In addition most students pick up rhyming relatively easy and enjoy doing it. This fun and easy skill can aid spelling capabilities. Pauline Gibbons (2002) found that,

Some researchers have shown a strong relationship between children's awareness of phonemic patterns (the relationships between sounds and letters) and their ability to rhyme (see Bryant and Bradley 1985; Goswani and Bryant
Analogies are when a person refers back to spelling information they already know. This could be a rhyming word, parts or words, or visual cues. In Calkin’s (2001) experience, she discovered,

I’d want the child to get used to trying words one way then another. When working with this child, teachers need to remember that there is research (Adam, 1990; Moustafa, 1998) showing that readers profit from solving new words by using the spelling patterns unfamiliar words. Rather than sounding out a word such as pike in a letter-by-letter, left-to-right fashion, readers access known patterns (ike, as in like) and figure out the unfamiliar word by analogy. (p. 170)

There are simply too many phonetic rules for them to all be remembered or utilized. However, when those rules are chunked together by patterns they are easier to remember which makes them easier to use. Dickinson and Neuman, in their book Handbook of Early Literacy Research (2002) refer to Haskell, Foorman, and Swank (1991) and Sullivan, Okada, and Niedermeyer (1971) who found that the analogy approach performed equally well, and turned out to be more effective than whole-word approaches. The old way of sounding words out one letter at a time has not proven to be very effective. Instead, chunking, rhyming and the use of analogies work better.

Then Dickinson and Nueman (2002) looked at White and Cunningham (1990) who conducted a year-long study, where
they found that analogy training produced significant effects on measures of both comprehension and word recognition. This tool will aid students in spelling more independently and accurately.

There is not one solution or way to teach spelling. Students need to possess a variety of spelling strategies. In addition, analogies by definition rely on a variety of spelling strategies. Students are unable to spell by analogy alone. However, none of these strategies seem to help in the spelling of high frequency words.

High Frequency Words

According to Patricia Cunningham (1991, 1994), Donald Graves (1994), and other researchers, there are a handful of words that do not follow any spelling pattern. In addition, these words tend to be words that students encounter frequently. These words are referred to as high-frequency words. These are words that simply must be taught and memorized. Rhymes and patterns do not tend to exist in these words. It is important that high frequency words are constantly practiced since they do have to be memorized. However, these words are the ones that are typically used frequently so practicing them is usually not a problem if the students are constantly writing.
The Spelling Sourcebook

The Spelling Sourcebook was written and developed by Rebecca Sitton (2002). She researched many ways to teach spelling then using that knowledge she developed her program. This is a researched-based program that refers to Cunningham (1991, 1994), Gentry (1987), and Templeton and Morris (2000), just to name a few. All of the strategies she uses are based on research. Throughout the program Sitton (2002) has the students constantly writing and doing word sorts. The focus of each lesson is a pattern or spelling strategy, not a list of words. It also continues to spiral and reteach along with reassessing words already learned. Spelling is taught within the context of writing and assessed that way. Students must also investigate the spelling generalizations instead of memorizing them. As a final note, the program is not only based on research but also relies on classroom practicality and common sense.

Conclusion

The research shows that spelling needs to be taught through patterns, rhymes, and the use of analogies. Weekly spelling tests are appropriate only if they are assessing spelling patterns instead of a predetermined collection of random words. Also, spelling activities need to be
manipulation of the words verses writing each word multiple times. Finally, spelling needs to be taught within writing, not as a completely separate subject. Explicit instruction does need to occur, but the reinforcement and practicing of those strategies need to occur while students are writing. Spelling should be a study of word patterns and not just words.
CHAPTER THREE
STUDENT PROFILES

Introduction

Teachers strive to teach their students a variety of tools for a variety of situations, and spelling should be no different. However, which of these numerous strategies are the most effective, and what is the best way to teach them? There are a variety of spelling strategies and techniques in circulation. The question is, which ones are truly effective? The research shows that spelling needs to be taught through patterns, rhymes, and the use of analogies. Weekly spelling tests are appropriate only if they are assessing spelling patterns instead of a predetermined collection of random words. Below in Figure 4 you will see the goals that every effective spelling program should contain.
Figure 4 comes from The Spelling Book: Teaching Children how to Spell, Not What to Spell (1998) by Gladys Rosencrans. Through this diagram we can see the five elements that all effective spelling programs should possess. Students need to have a positive attitude towards spelling. One way to do this is through constant encouragement and scaffolding learning for success. Once this is established the focus may move to another aspect like developing strategies to use during writing. These strategies are using sound-symbol relationships and
understanding some spelling rules. Finally, students need to learn how to monitor their own spelling in their own writing.

There are numerous texts available with a wide collection of lessons for teachers to use in order to teach spelling. As we discovered through the literature review, abstract weekly spelling lists do not prove to teach spelling. Instead, there is a lot of support for teaching spelling through patterns, rhymes and analogies. Spelling also needs to be connected to students writing and be meaningful to them. Below is an outline of Rebecca Sitton’s Spelling Sourcebook: For Second Grade Teachers (2002). I will be following her program since it utilizes all of the activities I have discovered to be effective in teaching spelling and meets Rosencrans’ (1998) qualifications for an effective spelling program.

Following that is an additional list of a variety of individual activities that I will utilize in addition to Sitton’s (2002) program.

Methodology

This study will be conducted as a case study. Case studies focus on one or a group of students. There is a pre and post assessment with periodic assessment through
the duration of the study. The person in charge of the study will reflect both throughout and at the conclusion of the study on methods that he/she feels are working and what their next steps should be.

The Spelling Sourcebook Program

Sitton’s (2002) program is not designed to begin on Monday and end on Friday. Teachers can be flexible with this program in order to increase its effectiveness. I will spend 6-7 days per unit. Below is a list to demonstrate the format of each unit.

Day 1: Build Visual Skills

Build Spelling and Language Skills

Day 2: Build Basic Concepts

Day 3: Build Basic Concepts

Day 4: Build Assessment Readiness

Day 5: Assess Spelling Progress

Assess Skill Application

Day 6: Extend Spelling Assessment

I will spend 15 minutes a day on these activities followed immediately by my writing time. Building Visual Skills takes five minutes or less and the objective is to have the students recall high-frequency words from their visual memory. This activity is not a test, it is meant to increase the visual spelling strategy. The teacher says
the word, uses it in a sentence, then the teacher repeats
the word. Following that the students write the word on
the left side of their paper. Then the teacher spells the
word one letter at a time while the students point to the
word they wrote. If a child misspells part of the word
they circle that part, not the entire word. Next, the
teacher writes the word on the board while saying each
letter. Finally, the students rewrite the word on the
right side of the paper.

Building Spelling and Language Skills has six
different activities for the teacher to choose from. The
teacher may divide the students into groups depending on
their needs or do an activity whole class. Each unit
provides the same types of activities so the students can
become independent with them over time. The activities
include Stretch It (adding to a sentence), Fix It
(correcting a sentence), Sort It (sorting words by
patterns), Add It (adding words to a sort that is already
complete), Finish It (completing a sentence), and Find It
(making a list of rhyming words). Again, each of these
activities should only take about five minutes.

Days 2 and 3 focus on Building Basic Concepts. This
portion is where you will find the content for each unit.
Here is where the teacher will address a spelling concept
like short vowel sounds. Each unit contains three to four concepts followed by two to four lesson ideas on how to teach it. This provides a lot of variety for the teachers. To teach each concept should take between five to ten minutes so I will do two a day.

Day 4 we will Build Assessment Readiness. In this section there are two portions, one for school and one for the students to complete at home. The activities vary from one unit to the next depending on the concepts being taught.

Finally, the Assessing Spelling Progress and Assessing Skill Application occurs on days 5 and 6. On day 5 students will do a cloze story word test, to assess the high-frequency words and a skill test, which assesses the skills concepts that were taught for that unit. The last step is on day 6 when the students do the Extending Spelling Assessment by completing a sentence dictation test, which pulls everything all together.

Included in this program are over-arching ideas. The students should know the high-frequency words for not only their grade level but also all of the ones that came before that. As a result the assessments will continue to retest all of those words. There are no weekly spelling lists to study from. Instead they are learning concepts,
which are assessed on the skill test, while the cloze story word test assesses the high-frequency words for their present grade level and all prior levels. Also, since the students are working towards mastery of those high-frequency words each student is individually responsible for a specific list of words that are called their "No Nonsense" words based on that child’s spelling capabilities. No matter what they are writing throughout the day they must spell these words correctly all of the time. Students should be encouraged to write across the curriculum on a daily basis and are held accountable for their “No Nonsense” words on all written work.

Writing Conferences

When beginning spelling instruction, the first step needs to be assessment so teachers can be informed as to the developmental spelling stage their students are at in order to guide their instruction. Patricia Cunningham (1991, 1994) encourages teachers to conduct writing conferences. This will provide 1:1 time between the teacher and each student which will allow teachers to get a good assessment of each child’s spelling abilities. Following this, writing conferences continue to lend a hand by allowing 1:1 instruction that is specific to each
child's needs to help further the student's progress throughout the year.

Making Words

We will begin with Patricia Cunningham's (1991, 1994) work on spelling instruction. She is the author of Making Words (1994), and Phonics They Use: Words for Reading and Writing (1991). In each of her books she discusses a variety of activities to do with students to build their knowledge of spelling patterns, rhymes, and analogies. All of these activities are active and therefore hold the student's attention. Students also appear to enjoy these activities. One of her most well known spelling strategies is called Making Words.

Patricia Cunningham and Dorothy Hall developed Making Words (1991) to teach students spelling through words patterns. Each activity begins with students receiving a set of letters that when all used together form the 'secret word'. Through guidance from the teacher students use those letters and begin making two and three letter words that the teacher says. Each word builds off of the one before by adding or altering one to two letters at a time. For example a student would have the word 'bat' and the next word could be 'cat' or 'bats'. As they progress
through the lesson the words get longer and more challenging. At the culmination of the activity the students then must sort all of the words they made into categories. Typically they are sorting by rhyming words and onsets. This helps them to connect the words and store them more easily for future analogy use. According to Farstrup and Samuels (2002) Making Words (1991) by Patricia Cunningham is the first of three activities teachers should be doing with their students for spelling instruction.

Using Words You Know

This activity begins with taking a word that students already know how to read and spell and using that word to have them use rhymes to develop a list of other words. For example, a student who knows the word cat can write sat, pat, fat, mat and at (Cunningham; 1991, 1994).

This activity is the second one to be recommended by Farstrup and Samuels (2002). This activity has students refer back to words they already know how to spell in order to help them spell a new word. They rely on spelling patterns and rhymes to develop the new word.

Changing a Hen to a Fox

From Cunningham’s book Phonics They Use: Words for Reading and Writing (1994) you will find this activity on
This activity is similar to *Making Words* (Cunningham, 1994) but does not include the sorting activities. For this activity she takes the word, hen and has the students change one letter at a time to end up with the word fox. In Figure 5 you will see seven other similar lessons.

```
Here are seven other Changing a Hen to a Fox lessons.

<table>
<thead>
<tr>
<th>pig</th>
<th>bug</th>
<th>pig</th>
<th>cat</th>
<th>fox</th>
<th>bug</th>
<th>cat</th>
</tr>
</thead>
<tbody>
<tr>
<td>rig</td>
<td>dug</td>
<td>big</td>
<td>bat</td>
<td>box</td>
<td>hug</td>
<td>hat</td>
</tr>
<tr>
<td>rid</td>
<td>dig</td>
<td>wig</td>
<td>hat</td>
<td>bop</td>
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<td>rib</td>
<td>pig</td>
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<td>rob</td>
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<td>mop</td>
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<td>bag</td>
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<td>Bob</td>
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<td>pet</td>
<td>map</td>
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<td>cat</td>
<td>hen</td>
<td>cat</td>
<td>cat</td>
<td>pig</td>
</tr>
</tbody>
</table>
```

Figure 5. Changing a Hen to a Fox

This is a great activity to build students phonemic awareness. There are many more activities that follow which also aid students in spelling.

**Rounding up the Rhymes**

Cunningham (1991, 1994) also suggests that after reading a book that contains a number of rhyming words students should go back through to find them. The first time a student reads a book, it should be for enjoyment and context. The second time the students can go through
and pull out the rhyming words and make a list or chart. For example, after reading the book The Cat in the Hat by Dr. Seuss students can produce a list with the words; cat, hat and sat, just to name a few.

Word Sorting and Hunting

In this activity the teacher begins by picking two patterns, typically they are vowel patterns, suffixes, prefixes, or endings. However, any patterns that the students need work on may be selected. Then the teacher develops a list of words that follow these patterns. Following this the students sort the words into columns by patterns. Once students finish with the list of words the teacher gives them, they go hunting through other texts to add to their lists (Cunningham, 1994).

Reading/Writing Rhymes

This activity is based on spelling patterns and rhymes to help students spell new words correctly. Students write a list of rhyming words based on a pattern that the teacher provides. This could be an ending, vowel pattern, or anything else the teacher feels would be beneficial. They will then turn them into a complete rhyme or poem that they exchange with other students to read. "Because writing and reading are connected to every lesson, students learn how you use these patterns as you
actually read and write" (Farstrup & Samuels, 2002; p. 103-104). This helps to make spelling more meaningful and practical. Students also really enjoy writing and reading these poems (Cunningham, 1994).

**What Looks Right**

Cunningham (1991, 1994) acknowledges that patterns can have more than one sound. In response to this quandary she also wants students to learn to spell the same word several times using multiple spelling patterns and then must be able to distinguish the correct one by looking at all of their options.

To help students learn to discover if a word is spelled correctly, Cunningham (1994) encourages using the "What Looks Right" lesson on page 122 in *Phonics They Use: Words for Reading and Writing* (1994). This encourages students to spell a word two or three ways using the different spelling patterns they know. Then they must look at all of the ways they spelled the word and decide which one is actually correct, followed with using a dictionary to verify their choice. For example, vote and voat could be the two words. A student would need to pick one of these choices and verify it by looking in a dictionary.
Words Their Way

This book was written by Bear, Templeton, Invernizzi, and Johnston (1996). This text is full of a variety of activities to improve spelling strategies. These activities range from sorts, games, and songs for students to sing.

Word Sorts

There are multiple ways of doing words sorts. Bear, Invernizzi, Templeton, and Johnston (1996) discuss the eight types you see below.

- Picture Sorts: Sorts that are done by sorting similar beginning or ending sounds using picture cards.

- Words Sorts: Sorts that are done by sorting similar beginning or ending sounds using word cards.

- Word Hunts: These extend off of word sorts by having students go hunting through a variety of text for more words that fit into these categories.

- Closed Sorts: Teachers set the parameters and guide students through the process by providing the categories/patterns and a list of words for the students to use.
- Open Sorts: Students are given a list of words and are then asked to create their own categories to sort their words.

- Blind Sort: This is a version of closed sorts because the teacher establishes the categories, however instead of giving a list of words the teacher calls out a word and the students then point to the category the word belongs in.

- Writing Sort: This extends off of blind sorts. After the teacher says a word aloud, the students write the words into the categories instead of just pointing.

- Speed Sort: (This sort should only be done after students feel comfortable with the other types of sorts.) The goal is to complete any type of sort as fast as possible.

**Rhyming Games**

Another spelling activity is playing rhyming games. This is from the book *Words Their Way* (1996) and it is the game Concentration. The teacher makes pairs of rhyming words on cards like boat/goat. Then students lay all of the cards face down. The students flip two cards over at a time and if they rhyme the student gets to keep those cards.
Spelling within Writing

Part of learning how to spell is being able to recognize when you have written a word incorrectly, spelling consciousness. For young children especially this is a difficult task. Graves (1994) suggests that students begin at the end of the paper and read their work backwards with a focus on spelling. Doing this helps them to focus on individual words instead of the content. This will typically result in the students finding more errors. Once students locate misspelled words they can work with the teacher to reinforce spelling strategies they have learned to correct their spelling.

Human Scrabble

In the book, Differentiated Instruction: Different Strategies for Different Learners (2002), by Char Forsten, Jim Grant, and Betty Hollas they developed a game called Human Scrabble on page 57. For this the teacher needs to make two complete sets of the alphabet on two different colored cards. Divide the class up into two teams and distribute the letters as evenly as possible. Next, the teacher will say a word like, jump. Any students who have any of the letters that are needed to spell this word will go to the front of the room to build the word. The team that spells the words correctly first gets the point. This
activity can also be used in conjunction with any other making words activities.

Now that the spelling strategies have been discussed and used, it is important to look at data to discern the effectiveness of these types of strategies verses the weekly spelling list and test.

Data Source

For this study I will be using my second grade class in my Title I school located in Southern California. There are eighteen students, six are boys and twelve are girls. Eleven students out of the eighteen are enrolled in the English as a Second Language (ELD) program. Their levels of English are the following: there are no students who are considered a level one (who is just beginning to learn English and usually communicates through gestures); one who is at level two (who is capable of identifying common objects and people); five students who are at level three (beginning to speak in sentences although they may not be grammatically correct); two who are at level four (who are capable of speaking in complete sentences with few mistakes and using more vocabulary); and two students who are at level five (who are able to manipulate the English language with very few errors).
Table 1. Student Profiles

<table>
<thead>
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<th>Student Number</th>
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<tr>
<td>16</td>
<td>M</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>F</td>
<td>2</td>
<td>Yes</td>
</tr>
<tr>
<td>18</td>
<td>F</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

Prior to the implementation of the Sitton's (2002) Spelling Sourcebook the students had been receiving spelling instruction from the Houghton Mifflin program. However, they had not been given weekly lists and tests during this school year. They had focused on the spelling skills and completing the worksheets from Houghton Mifflin.

Data Collection Procedures

The data collected included all of the students completing a pre-writing assessment about something they
had done or wished they had done over their break. When they were done writing, they went back and edited for spelling independently by going backwards and circling words that they thought would be spelled wrong. After they were done circling, they went back and attempted to correct their spelling using only the knowledge in their heads, no resources. Throughout the study, the students were given Rebecca Sitton’s (2002) Cloze Story Word Assessment, Skills Assessment, and the Sentence Dictation Assessment for each unit we completed. At the end of the study, the students were given a post-writing assessment on what they wanted to do over their next break and independently edited for spelling in the exact same fashion as the pre-writing assessment.

Data Analysis Procedures

The writing samples were graded by using the 6 Traits of Writing by Vicki Spandel (2002), which you can find in Appendix D. The Conventions trait was only graded because that was the trait that addressed the use of spelling conventions. The weekly spelling tests were marked on a percentage scale. To compare and analyze the data two charts were made. One contains the scores from the weekly spelling tests for each student over the course of the
entire study, while the other one consists of the pre and post writing assessments based on the Conventions Trait.

Conclusion

Over the course of this study, I not only hoped to conclude that the weekly spelling lists and tests were/are not effective in teaching students to spell. As a result, I anticipate being able to fully implement Rebecca Sitton’s (2002) program in lieu of the Houghton Mifflin’s spelling portion. I wanted my students to learn how to spell, so no matter what the results were I see myself becoming a better teacher of spelling conventions and therefore my students becoming better spellers.
CHAPTER FOUR
ANALYSIS OF THE DATA

Over the course of two months I fully implemented Rebecca Sitton's (2002) Spelling Sourcebook in my second grade classroom. My students engaged in all of the activities that are described in chapter three and took all of the assessments. These assessments include: 1) Pre and Post Writing Samples and Achievement Assessment; 2) Cloze Word Story Assessment; 3) Skills Assessment; and 4) Sentence Dictation Assessment. Over the course of the two months the students completed four units of the program.

Description of the Assessments

Pre and Post Writing Samples and Achievement Assessment

The students participated in two pre and post assessments. The first was a writing sample that was evaluated using the 6 Traits Writing Rubric, and the second was the Achievement Assessment from Spelling Sourcebook. I chose the writing sample assessment in order to find a way to assess if students spelling transferred into their actual writing. I used the 6 Traits of Writing Rubric to analyze the samples because my school site
currently uses this assessment. The Achievement Assessment was also chosen because Sitton (2002) has designed this measure as the program's benchmark assessment. There are three total. Each one is a Cloze Word Story format that tests the exact same words, but in a different story. This allows for comparison over the entire course. The first Achievement Test is administered after the students have completed Unit 2. This allows the students to become accustomed with the format. The second Achievement Test is administered at a half way point through the year or program, and the third Achievement Assessment is given at the conclusion of the program or school year. However, due to the short time frame of this study the first Achievement Test was administered after Unit 2, as instructed by the program, and the second one was administered after Unit 4, since it was the end of my study.

Below Graph 1 and 2 show the results from both of the pre and post assessments (the writing sample and the Achievement Assessment) that were administered. These graphs show the pre and post scores for each student.
In Graph 1, Pre and Post Writing Samples, we can see that five out of eighteen students improved their rubric score by one level, two dropped one level, and the remaining eleven stayed the same. When looking at the rubric, which you can find in Appendix B, you will notice that each score level allows for movement within the level. This could possibly explain why some of the eleven students stayed at the same rubric level. Those students may have actually improved in their spelling from the pre to the post assessment, yet it may not have been enough to move them to the next rubric level. This assessment is important since it is the one I must use at my site and it assesses spelling within writing, which is the main focus.
of this study. Perhaps it would be beneficial to document the student’s growth within the level.

Graph 2. Pre and Post Spelling Achievement Assessment

Graph 2, Pre and Post Spelling Achievement Assessment, shows the comparisons between the two tests that include the exact same high frequency words from the beginning of second grade down through first grade. The only difference is that the words were within a different story. Thus, we can see that eight students improved in their spelling capabilities of the high-frequency words, five dropped and five stayed the same. From the five students who showed no improvements one of them achieved a score of 100 percent on both the pre and post so they had no room to improve.
In addition to the pre and post assessments, the students also took three different assessments for each unit. The students completed a Cloze Word Story Assessment, Skills Assessment, and a Sentence Dictation Assessment. All three of these are part of Sitton’s program. According to her manual the students first take the Cloze Word Story Assessment, then the Skills, followed by the Dictation test.

**Cloze Word Story Assessment**

The purpose of the Cloze Word Story Assessment tests is to assess the students’ knowledge of the high-frequency words for second and first grade. Each unit selects ten words from that list and blocks them out of a story. The teacher reads the entire story, including the blocked out high-frequency words and the students are suppose to fill in the blanks. This way the assessment is on the student’s capability to spell the words instead of trying to deduce what word goes in the blank, then spelling it. Words are repeated every couple of units to reinforce them. When a child misses a word he/she are supposed to write the word down in their spelling journal and they then become their “No Nonsense” words. These words must always be spelled correctly whenever they are writing. This will motivate the students to constantly check the word’s spelling, and
since they are high-frequency words, they will occur often.

Graph 3. Cloze Word Story Assessment

Graph 3, Cloze Word Story Assessment, shows the scores from Unit 1 and Unit 4 for each student. The students did take the test for each unit; however, for reporting purposes only the first and last units are included. From this chart we can see that four students improved, eight dropped, and seven showed no movement. Of the seven that showed no movement, four of them received 100 percent on both Unit 1 and Unit 4's assessment. Also, among the eight students whose scores dropped, seven of them had a score of 80% or above on Unit 1 and typically only dropped 10-20% on Unit 4. In looking at Unit 1, only
two students scored below 70 percent with a score of 30 and 40 percent respectively, while on Unit 4 the two students who scored below 70 percent received a 50 and 60 percent. Overall, this shows growth from Unit 1 to Unit 4. This may have resulted from different words used in each of the tests. This assessment assessed the high-frequency words that were proven in chapter 2 to be the most difficult words to master. These words follow no spelling patterns or rules; they need to simply be memorized. This process takes longer to master, so growth on this assessment will take longer to show.

Graph 4. Cloze Word Story Assessment Average

This graph takes the average from the entire class for each unit and shows the overall change from each of
the four units. From Unit 1 to Unit 2 there was a slight drop; however the scores went back up for Unit 3 then leveled out in Unit 4. Overall, the class seemed to maintain, if not slightly improve.

Skills Assessment

Another assessment the students took was the Skills Assessment. This assessment tested spelling skills instead of actually spelling words. These tests assessed the spelling strategies that were taught within each unit.

Graph 5. Skills Assessment

This particular assessment shows that the students greatly improved. In comparing Unit 1 to Unit 4, we see that nine students improved, six remained the same, and only three dropped. The group of students who remained the
same, it shows that five of them achieved 100% on Unit 1 and Unit 4. Thus, only one student lacked improvement. Also, note that two students (#1 and #9) scored zero on unit one. The skills that were taught within each unit also spiral like the high-frequency words do. This, of course, is demonstrated in the assessment scores. The spelling skills, as discussed in chapter 2, are far easier to learn and retain than a list of spelling words.

Graph 6. Skills Assessment Average

Graph 6 shows the class average for each unit on the Skills Assessment. This graph also shows an increase over the course of the four units. This data supports the findings from researchers who found that teaching spelling
strategies is far more effective than memorizing lists of words.

**Sentence Dictation Assessment**

The third and final assessment for each unit was a Sentence Dictation Assessment. The teacher reads three to four sentences to the class that has both high frequency words and challenge words. The only words that are scored for accuracy are the high-frequency words. Below are two graphs that demonstrate the results from this test.

![Sentence Dictation Assessment Graph](image)

Graph 7. Sentence Dictation Assessment

This graph shows that six out of eighteen students improved, seven showed no change, and five dropped in their scores. In regards to the seven students who demonstrated no change, it should be noted that they all
received 100% on both the Unit 1 and Unit 4 test; therefore, they had no room to improve, they were proficient. Among the five students who dropped, two of them only dropped by ten percent, while the other two only dropped by twenty percent.

I consider this assessment to be just as valuable as the pre and post writing sample, because it assesses spelling within the context of writing.

Graph 8. Sentence Dictation Assessment Average

The average score from the class for each unit’s assessment are reflected in the graph. The data shows the students having a strong start in Unit 1 with the average score being in the mid 90’s then dropping for Units 2 and 3. However, Unit 4 shows the average coming right back up
to where they were in Unit 1. This may be as a result of the words varying from unit to unit.

Overall, the assessment, show some growth in the students. The growth that is visible at this time is a small amount, but they have only been working with this program for a short period of time (2 months).

Among the four tests given, three show consistent improvement in the spelling of high frequency words across contexts. From the four tests, the Closed Word Story, did not show consistent growth. However, given the short duration of the study, these data still initially show that Sitton’s (2002) Spelling Sourcebook program indeed facilitate the students growth.
Summary

Finding a way to help students communicate effectively through writing was the driving point of this study. In order for them to be able to accomplish this, they must be able to spell words correctly. Teachers want to have their students spell words correctly when they are writing. However, this is not what is occurring in the classrooms. Instead, students are given weekly spelling lists and tests, that they can pass, then are unable to spell when they are writing a story for an assignment.

In the literature review I discovered that spelling needs to be taught through patterns, rhymes, and the use of analogies. Weekly spelling tests are appropriate only if they are assessing spelling patterns instead of a predetermined collection of random words. Also, spelling activities need to engage students in the manipulation of the words verses writing each word multiple times. Finally, spelling needs to be taught within writing contexts, not as a completely separate subject. Explicit instruction does need to occur, but the reinforcement and practicing of those strategies need to occur while
students are writing. Spelling should be a study of word patterns and strategies, not just words in isolation.

Rebecca Sitton’s (2002) Spelling Sourcebook program was implemented in my second grade classroom. I found that her program matched what the research said to be the most effective way to teach spelling. The data showed some growth in some areas or no movement at all. This was due mostly because of students who were proficient at the beginning of this study. That is, they scored 100% on both the pre and post assessments. Overall the students improved in three of the four assessments. This is remarkable given the short duration of the study.

Conclusions

Based on the assessments, I believe that more time would allow for more improved growth. Two months may have been too short of a time frame to really see any substantial growth. In regards to the pre and post writing samples, it does take time for students to progress from one rubric level to the next since there is room for movement within. The same can apply to the Achievement Tests from Sitton’s program. The students only had two units in between the two assessments. This does not provide enough opportunity or practice from the individual
units to show any significant growth. In analyzing the Cloze Word Story Test, we again face the problem of not having sufficient time to see significant growth. In addition, whenever a new program is being implemented, it is expected to see a drop in student’s work at the beginning. I am not sure if this study was long enough to make it past the dropping time frame to begin showing significant improvement. I predict that a year long implementation would show significant improvement for all students.

Again, as time progresses, I would predict that the students spelling will improve. I have already noticed within the classroom that my students are more aware of their spelling and some of the high-frequency words that challenge them. As a result of this awareness, I have noticed my lower spellers becoming proficient at one or two high-frequency words that in the past have constantly given them difficulty.

Recommendations

Conducting this study has showed me that teaching spelling thru spelling lists is not effective and can be damaging for some kids. I learned that spelling consists of learning patterns and strategies. Thus, those
components need to be deliberately taught to our students. Most of my second graders only use the phonetic hypothesis to spell. Of course, this greatly hinders them in learning how to spell. Visual memory strategy is key to their spelling success. The following recommendations are given as a follow up to further study.

1. If I were to do this study again I would allow one entire school year to collect data. In addition, I would also administer the pre and post writing samples and the three Achievement Assessments to another second grade class at the same school site that is not using Rebecca Sitton's (2002) *Spelling Sourcebook* program. This would allow for comparison of Sitton's (2002) program to the Houghton Mifflin spelling program that consists of the weekly spelling lists and tests.

2. In addition, I would propose analyzing the students qualitatively use of standard spelling within each rubric level. This would document their growth and also allow us to see their use and misuse of spelling strategies and patterns.

3. I would also recommend exploring the development of the children's spelling consciousness. That
is, how does one learn to recognize that a word is misspelled.
APPENDIX A

DEVELOPMENTAL SPELLING STAGES
Pre-Phonetic Stage

*To encourage the child to continue “Writing.”*
- make sure writing materials are available and encourage their use by modeling writing,
- respond to the child’s comments about his or her writing,
- do not inhibit or interfere with the writing unless the child requests you to do so,

*To help the child to move to the next stage, that is to use letters to represent words not things.*
- use children’s names to identify possessions, name cards on lockers and so forth,
- write their names on their papers, they will soon do it for themselves,
- demonstrate writing by taking dictation from children for experience charts or captions for their pictures,
- comment on environment, print, encourage and respond to child’s comments about print,
- extend their view of the world, talk to them, ask for their ideas,
- broaden their experiences with field trips, films, and other media.

Early Phonic

*To help the child use sound-production cues for spelling.*
- let children play with alphabet cards, magnetic letters, and alphabet blocks,
- sing alphabet songs, have songs on experience chart paper,
- categorize name cards by initial letters,
- construct a class alphabet book with pictures beginning with the same initial consonant,
- always have paper, pencils, chalk and chalkboards for children to use.

*To help students move to the next stage by using more letters.*
- take dictation from child for drawing captions and experience charts,
- brainstorm,
- read Big Books and alphabet books,
- recite poems and nursery rhymes from charts,
- have children rebuild nursery rhymes or short poems by matching,
- encourage children to use what they know, before supplying words they have asked you to spell.
Advanced Phonetic

To help the child use sound-production cues.
- use alphabet cards, draw attention to words and names beginning the same, and encourage the child's observations, have children match alphabet cards with letters in words,
- have children write every day, sometimes using U.S.S.W.,
- use sentence patterns,
- model poems.

To help Advanced Phonetic spellers realize the importance of actual sounds for spelling.
- combine brainstorming with the use of alphabet cards,
- have students read together orally in a number of ways: read Big Books, chant from charts, cook form recipes prints on charts,
- use poems, nursery rhymes, or songs,
- talk to parents about misspellings and their role in learning to spell.

Phonic Stage

To help students use sound cues more effectively.
- help them collect words having the same orthographic pattern as a word they have a problem with,
- help students form categories of words that represent the same sound spelled in different ways when these are a problem for them; example weight, sleight, eight, and plate, slate, mate,
- help students collect words with the same letter strings representing different sounds when this area is a problem; example, bough, rough, though, thought,
- encourage students to form hypotheses about difficult spelling patterns such as ei and ie,
- accept misspellings but supply appropriate feedback,
- use poetry to demonstrate different or similar spellings for the same sound,
- encourage playing with spoonerisms,
- post a snare board,
- categorize brainstormed words according to spelling patterns,
- have students write every day,
- talk with students about standard and functional spelling,
- help students use visual imagery,
- encourage use of auditory memory for those who would benefit,
- have students play word games.
To help Phonic spellers move into using syntactic and semantic cues.
- encourage them to read a variety of books, use U.S.S.R.,
- model interest in words and their structure,
- make sure students write every day,
- provide meaning and syntactic cues in your feedback to students when possible,
- use opportunities to develop concepts and expand vocabularies.

Syntactic-Semantic Stage
- provide time for students to read, have book discussions,
- have students write every day,
- encourage discussions about a variety of topics,
- extend students' vocabularies, model the use of words,
- make up and administer a spelling inventory,
- use Minimal Cues,
- do Daily Edits,
- assist students with using meaning for homophones,
- schedule brief spelling conferences with each child,
- have students keep spelling notebooks,
- engage in some fun activities with words.
APPENDIX B

6 TRAITS WRITING RUBRIC
<table>
<thead>
<tr>
<th>IDEAS AND CONTENT</th>
<th>DEVELOPING 2</th>
<th>MINIMUM STANDARDS 3</th>
<th>PROFICIENT WRITING 4</th>
<th>EXCEPTIONAL</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>The heart of the writing is clear and focused, and has a central theme.</td>
<td>Some ideas go together but may not be related to the topic.</td>
<td>Ideas follow the writing topic. Text and pictures are related.</td>
<td>Ideas are well developed and follow the writing topic. Text and pictures are related.</td>
<td>Ides are strong and follow the writing topic. Text and pictures are related.</td>
<td>Topic is focused and clear. Ideas are exceptional/original.</td>
</tr>
<tr>
<td>INFORMATION</td>
<td>ucas and focused, and has a central theme.</td>
<td>Some ideas go together but may not be related to the topic.</td>
<td>Ideas follow the writing topic. Text and pictures are related.</td>
<td>Ideas are well developed and follow the writing topic. Text and pictures are related.</td>
<td>Topic is focused and clear. Ideas are exceptional/original.</td>
</tr>
<tr>
<td>ORGANIZATION</td>
<td>Information is presented in clear sequence, making connections and transitions among sentences and paragraphs.</td>
<td>Begins to organize ideas.</td>
<td>Like ideas are grouped.</td>
<td>Like ideas are grouped.</td>
<td>Idea are organized with a beginning, middle, and end.</td>
</tr>
<tr>
<td>WORD CHOICE</td>
<td>The writer uses words that are interesting and clearly convey meaning.</td>
<td>Copies related words, phrases, and sentences from around the room. Begins to use nouns and verbs.</td>
<td>Correctly uses general or ordinary words. Attempts to use some new or interesting words.</td>
<td>Uses new and different words with success. Attempts to use descriptive words for specificity.</td>
<td>Uses descriptive vocabulary that enhances the writing and creates vivid images.</td>
</tr>
<tr>
<td>SENTENCE FLOW</td>
<td>Develop smooth flow and rhythm in sentences.</td>
<td>Simple sentences with some run-ons and sentence fragments.</td>
<td>Two related sentences that begin different ways.</td>
<td>Three or more related sentences that begin in different ways.</td>
<td>Simple and compound sentences. Sentence lengths and beginnings are varied.</td>
</tr>
<tr>
<td>CONVENTIONS</td>
<td>Correct spelling, grammar, punctuation, capitalization, usage, and paragraphing.</td>
<td>Experiments with punctuation and capitalization, which may be randomly placed. Phonetic spelling that can be read. CVC words spelled correctly. Print is readable. Beginning to use spaces between words.</td>
<td>Most sentences are capitalized. Attempts to use end punctuation marks. Transitioning into the spelling of CVCV-long vowels, silent e, and high frequency words. Begins to print legibly and uses space between letters and sentences.</td>
<td>Capital letters used for the beginning of sentences, names.</td>
<td>Capital letters used for the beginning of sentences, names.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Correct end of sentence punctuation with an occasional error in the use of commas, apostrophe's and quotation marks. Spelling that is usually correct especially on common words. Correct capitalization. Paragraphs begin in appropriate spaces to support the overall meaning. Occasionally lapses in grammar and usage. Problems are not severe enough to distort meaning or distract the reader. Moderate need for editing.</td>
</tr>
</tbody>
</table>
REFERENCES


