A Textbook Approach to Spelling vs. A Teacher Directed Approach

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A Textbook Approach to Spelling
vs.
A Teacher Directed Approach
THESIS
Submitted to the Graduate Committee of the
Department of Education and Human Development
State University of New York
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by
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Brockport, New York
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Abstract

The purpose of this study was to examine the effect of two teaching approaches in spelling. The first teaching method was guided by the spelling textbook and the second was a teacher directed approach. In this study, the students were divided into two equal ability groups and were instructed using the assigned teaching approach. The 26 subjects used in this study were heterogeneously grouped and attended an urban school in the city of Rochester. The study began with the administration of a seventy five word pretest to determine the group compositions and the forty most frequently misspelled words. After calculating the results of the teacher made instrument, the subjects were divided into two equal ability groups. Each group received twelve weeks of instruction based on the assigned teaching modality. Weekly tests scores, pre and posttest scores, and the sum of the weekly tests scores were all studied to determine which teaching method produce significant performance results. The results were determined with the use of a two-tailed t test. The statistical results indicated that there was a significant difference between the teacher directed approach and the textbook approach when comparing the sum of the weekly test scores. The results also indicated that no significant difference existed between the two teaching method when long term retention was compared. Therefore, it was concluded that the teacher directed approach did produce better results than that of a textbook.
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Chapter I

Statement of the Problem

Purpose

The purpose of this study was to examine the effect of two teaching approaches in spelling. The first teaching method was guided by the spelling textbook and the second was a teacher directed approach.

Need for the study

For many teachers and students “spelling” is a word that conjures up nightmares. Students continue to ask “Does spelling count?” Why do teachers and students dread the task of spelling instruction? What do researchers say about the teaching of spelling? Are spelling textbooks really teaching spelling, or should teachers find their own methods? Have educators blindly relied on spelling textbooks? It is important
for educators to know how effective spelling textbook programs are if they intend to improve spelling performance in their classrooms. Many teachers today will say that students perform well on weekly spelling exams, yet will misspell those same words on writing activities. Researchers have stated that most commercial spelling books fail to teach spelling. Seda (1991) found that "a great majority of commercial spelling books emphasize learning rules and studying ways of spelling speech sounds" (p.321). For teachers who continuously rely on their spelling textbooks for the majority of their spelling instruction, this may be detrimental. Cates (1988) stated that "Spelling textbooks often concentrate on vocabulary and basic-skills tasks to the exclusion of spelling activities, and when they do address spelling, they often select inappropriate words for study" (p.102).

If spelling textbooks are not meeting the needs of students, what methods have educators used in order to improve spelling proficiency? Writing has been a tool that
educators have relied on in the teaching of spelling. Does writing down a word five times each improve spelling proficiency? Should students practice their spelling words by writing them in sentences and paragraphs? Does knowing the definition of the spelling word improve spelling ability? Teachers have used these strategies for many years. In order for teachers to improve teaching methods they must first determine which methods are more effective.

There are very few studies that directly compare the effectiveness of a textbook approach to a teacher directed approach. Seda (1991) states that “a more effective approach, that maximizes the transfer effect, is to provide writing practice activities that enable students to use words in meaningful context such as occurs when they write the words in sentences and paragraphs” (p.214). She also states that “much of what is done in spelling instruction at best, is a waste of time” (p.210).

The studies that have analyzed spelling textbook
programs all have one thing in common; they believe that spelling textbooks fail to teach important spelling skills. It should also be stated that most researchers who study spelling include writing in one form or another in their methods to improve spelling proficiency. Many researchers do agree that writing continues to be the best educational method in spelling instruction. Seda (1991) makes reference to previous research done by Graves (1976) on spelling textbooks. Graves stated that spelling is for the purpose of writing. Real writing is what should be emphasized rather than having students practice word lists. This view is shared by many researchers who believe that writing is the key motoric element when teaching spelling. Students must use spelling words in a meaningful task. Writing provides the students the opportunity to see the words in print and also use it in a format that provides meaning. Pearson (1991) stated “when it comes to spelling proficiency, repeating words through writing them down does enhance spelling performance, and when coupled with
meaning promulgation, it further enhances spelling proficiency” (p.137). Seda (1991) makes references to previous research conducted by Horn (1960) that supports Pearson. Horn (1960) stated that “when faced with the task of writing, individuals will select only words that are available to them from their individual store of vocabulary. That is, they will choose words the meaning of which they already know” (p.317).

Researchers have combined other methods with writing in efforts to improve proficiency and retention of spelling words. One popular method used in many classrooms today is the write-say approach. This dual sensory approach has been examined many times. Kearney and Drabman (1993) stated that “a write-say approach to teaching spelling was effective for children with learning disabilities” (p.55). This method has been successful because it addresses the learning styles of many students. Another method frequently used by many teachers is that of dictation. Dictation includes writing, which researchers
believe to be the essential motoric element. Murphy and McLaughlin (1990) found that

"dictation produced several benefits not directly measured. It was noticeable that the subject’s spelling accuracy of frequently used utility words was much improved and retention of these words was high. Hand-writing previously untidy with poorly formed letters, was markedly improved." (p.211).

Spelling has been widely researched and many teachers and students have benefited from the studies. The researchers must continue to look for methods that will produce better spellers. Until then spelling proficiency will continue to be an area of concern for many educators. It is due to these needs that the following research was developed. The following is an effort to gain a better understanding and develop a better approach to spelling instruction.

**Definition of Study Terms**

*textbook approach* - In this study, this term refers to
approach used by a teacher guided by a text book and or spelling basal series. It is an approach used regardless of students’ abilities and or individual needs.

**write-say approach** - In this study the write-say method refers to a dual sensory approach to spelling instruction. The teacher, in this approach has students use variations of writing the word and saying the word.

**teacher directed approach** - In this study, this term refers to an approach used by a teacher not guided by any text or basal series. It is an approach a teacher may use based on the needs of the students in the classroom.

**invented spelling** - The prereader’s and beginning reader’s spelling of words using symbols that they associate with the sounds they hear in the word they wish to write (Clarke, 1988, p. 282).
Limitation of the Study

There are several limitations in this study that should be kept in mind. Although the classroom instructional time and materials have been controlled, the time that students study independently could not be monitored. Many students will prepare more than others in order to master spelling items.

The results of this study may be related to the limited number of subjects. It should also be stated that this group is not totally representative of all sixth graders.

Summary

Spelling is a skill that many teachers and students struggle with on a daily basis. It is also a subject that teachers continue to investigate. In this study, the results of two approaches were compared.
Chapter II
Review of the Literature

Purpose

The purpose of this study was to evaluate two teaching approaches for teaching spelling in order to determine which approach was more effective. It compared the results of a spelling textbook program and a teacher directed approach in a sixth grade classroom.

Spelling, it is defined by the Webster's dictionary as "the forming of words from letters according to accepted usage: a sequence of letters composing a word." It was defined by a first graders as "hard." When asked to elaborate, he stated "spelling is very hard to do." For many students, spelling has been as difficult as it has been for teachers searching for the best teaching strategies. Researchers, as well as spelling textbook companies, have had difficulties coming up with the best strategy for teaching spelling. There are many variables that affect a student's ability in spelling. Students may lack the
phonetic awareness that is necessary in becoming a good speller. Some students simply lack the educational background and exposure to print. A child who has had very little exposure to literature and print will lack the experiences necessary to spell. DiStefano and Hagerty (1985) stated that “the first step in teaching spelling is to let the students experiment with language while writing and not worry about their spelling.” (p.373).

This chapter focuses on the research into spelling improvement and the problems that spelling textbooks present in meeting individual needs. It will describe in detail some of the studies that have been done on spelling and how those techniques may be implemented in any classroom. The importance of phonetic awareness and its relationship to spelling, gender differences, and the effects of summer vacation will also be discussed.

**Strategies for Improving Spelling Performance**

Researchers have concluded that having students write,
write and say, work in cooperative groups, use a computer, and or use tactile and kinesthetic approach in spelling produces significant outcomes in spelling performance. Cronnell and Humes (1980) have stated "that 90 percent of what is done in classrooms is based on commercially prepared materials. Consequently what students learn is often what their textbooks present." (p.59). Many have also stated that educators who have solely relied on textbooks may be doing more harm than good. Seda (1991b) stated "despite the existence of such information much of what is done in classrooms vis-a-vis spelling instruction across the United States continues to be at best, a waste of time and at worst, counterproductive."(p.210). It appears that although educators have been provided with many insightful strategies, they continue to rely on spelling textbooks for their spelling instruction.

**Writing**

Teachers often make students write their spelling words
over and over. This is done in hopes that the student will memorize them. In a recent study of early spelling acquisition Stanovich (1990) observed that "training involving writing results in better spelling performance than that attained when training was carried out with tiles and did not involve handwriting." (p. 160). In this study, Stanovich compared the spelling performances of twenty-four students. They were divided into three groups, each group received a different training. One group was trained with the use of a computer. The second group was to use letter tiles in order to spell and the third wrote down the words. The results showed that writing down words proved to have better outcomes.

In a similar study Pearson (1991) found that "writing the word list down seemed to markedly improve students' spelling proficiency." (p. 136). This study involved inmates of a correctional facility. Further evidence showed that when the inmates wrote the meaning of the spelling word, it proved to have a better outcome. Pearson (1991) stated that "when it
comes to spelling proficiency, repeating words through writing them down does enhance student spelling performance, and when coupled with mean promulgation, it further enhances spelling proficiency."(p.137). Anderson (1985) also stated that students “need to do varied and purposeful writing so they can experiment with the meaning and syntax of words.”(p.145). In a separate study Seda (1991) stated “a more effective approach, that maximizes the transfer effect, is to provide writing practice activities that enable students to use the words in meaningful context such as occurs when they write them in sentences and paragraphs.”(p.214). DiStefano and Hagerty (1985) also concluded that “skills should be taught and practiced in the context of writing so students can use the language in a natural way.”(p.375).

Another benefit to having students write down words is handwriting. In a study by Murphy (1990) handwriting was improved during this spelling task. In the primary grades, handwriting takes time to develop. Using the writing activity
with spelling and other subjects allows for the students' continued practicing of letter formation. Students who have been observed practicing their spelling words by repeatedly writing them down have shown significant improvement and mastery in spelling tasks. Students can practice spelling with the use of writing for homework and during free time at the chalkboard. Having students write on the board can be a very motivating activity. All students enjoy playing and writing on the chalkboard. Lehr (1986) makes reference to a previous statement by Piaget (1977) who maintained that "in order for a child to understand something, he must construct it for himself, he must reinvent it." (p.454). This opinion is echoed through many studies.

Write and Say

Although writing words has proven to enhance spelling proficiency, researchers continue to test and improve upon this method. The write-say method is said to improve immediate
feedback to dual sensory modalities. The added component to writing helps those students who are auditory and visual learners. Drabman and Kearney (1993) found "a significant increase in spelling accuracy from baseline/control procedures (i.e., unstructured studying) following the introduction of a modified write-say intervention for children with learning disabilities." (p.55). In this study, a control group was given a list of words on Monday and asked to prepare for a test on Friday. This assignment was in line with the normal class routine. The experimental group was given a list of words on Monday. Tuesday, they were tested and asked to write-say the words misspelled letter by letter. After being tested on Wednesday, the students had to write any misspelled words ten times each. Thursday, the students were tested again and then asked to write and restate misspelled words fifteen times each. As previously stated, Drabman and Kearney were able to conclude that the write-say method was successful when dealing with students who had learning disabilities. The study
by Tranyelis-Yurek (1988) implemented a similar method to increase spelling proficiency. Students had to stand by the chalkboard with their eyes closed. They were then asked to visualize the letters when they were called out by the instructor. They then would have to spell the word as the instructor proceeded to spell it. Teachers have used the write-say method their classes and have also found it to increase spelling accuracy. Reading and writing the word allows the students to internalize the correct spelling.

**Cooperative Groups and Spelling**

Educators have always said that "two heads are better than one." This philosophy holds true for cooperative groups. Having students work in cooperative groups allows for students with high abilities to verbalize their explanations to students of lower abilities. This process allows the lower functioning students an opportunity to receive more clarification. Having a student work in a cooperative group
also increases self-esteem. A student who has struggled while working independently loses his confidence to volunteer or participate in classroom activities. When a lower functioning child is placed in a group of students who have had some success in school, the focus of failure decreases. The lower functioning student's self-esteem will increase as his team succeeds. In the research "Student Effects of Cooperation and Shared Feedback on Spelling Achievement" conducted by Van Oudenhove, Van Berkum & Swen Koopmans (1987) "cooperation is defined by the promotive interdependence of members. The contribution of one member affects the fate of all. This means that as students cooperate, they will stimulate each other more to do their best than if they worked individually."(p.92). In efforts to improve spelling proficiency among first graders, teachers have implemented cooperative groups. This method has proven to be successful with reading. Although some teachers have not had the opportunity to monitor the results of cooperative spelling groups for a long
period of time, in its brief implementation period, they have seen some improvement. Dyson (1984) has concluded that "children must read and write however they are able, and, with the assistance of interactions with peers and adults, they will come to new understandings." (p.267).

**Computers and Spelling**

Now that computers are readily available to most teachers and school districts, teachers are tapping this valuable resource in order to improve spelling proficiency. The enthusiasm of students when working on a computer is very high. This motivational task has many benefits. Students enjoy working on computers and teachers are creating a new attitude towards spelling with the help of computers.

McClendon (1989) observed her first graders exhibiting positive behaviors in spelling. She states "imagine first graders coming in from recess anxious to get started on their spelling lesson." (p.35). It's hard to imagine first graders
excited about spelling; yet because of the computers, she was able to create an exciting environment to learn in. In her study, she used the traditional method of teaching spelling. McClendon would say the word, the students would then repeat it and then write it down. In the second half of the school year, she implemented the use of computer. McClendon (1989) observed the following "Attitudes improved dramatically when the combined method was used during the second half of the year." (p.36). She was not the only one to notice the positive results. Parents also commented on the increase success rate. Their children were doing much better on testing.

In the study by Cunningham and Stanovich (1990), the researchers concluded that writing was superior to computer based spelling instruction. Although these findings were as a result of their research, they were quick to point out the following: "We do not intend to argue that early word learning tasks for children that are centered on computers and keyboard
responses are bad. Perhaps the computer is a motivational tool that spurs children to practice more with words and letters than they otherwise would."(p.162). It should be mentioned that this study used non-handicapped students. In the study by Hall (1989) of the effects of computer assisted drill and practice on spelling performance with mildly handicapped students, the outcomes of computer assisted instruction were compared to that of a traditional model. In this study, the students received instruction in spelling with traditional methods and then with computers. Hall (1989) observed that "computer assisted drill and practice improved the percent correct on six week unit tests when compared to traditional classroom instruction. Poor spellers were able to experience success in spelling. On the average, spelling scores were higher during computer assisted instruction."(p.48).

In the study by Hall (1989), computer assisted instruction improved student spelling proficiency. The use of computers and the value they hold for teachers go beyond this purpose.
Watson (1988) observed "the use of the computer enables the teacher to give her or his attention to the rest of the class while the pupils in the program engage in an interesting, individually paced, immediately corrected spelling activity."(p.88). This element to computer-assisted instruction is vital to today's ever changing classroom size. Teachers must now struggle with large classrooms. The increasing amount of students in classrooms creates less one-on-one possible attention. Educators can use computer time to devote extra teaching opportunities to those students who are struggling in large group settings.

Researchers Cunningham and Stanovich (1990) and Hall (1989) arrived at similar conclusions. Computer assisted instruction had little, if any, influence on spelling scores for non-handicapped students. They did agree that computers were a motivational tool.

**Tactile and Kinesthetic Approach**

In the study by Murphy (1990) of the effects of tactile and
kinesthetic learning in improving spelling performance of a special education student, the teaching methods resembled those used in Drabsman and Kearney (1993) report. The student in this study was asked to look at the word, say it, trace it, and then write it. Murphy (1993) states "the use of multisensory approach in the teaching of reading and spelling to learning disabled students has been found to be effective by many educators."(p.207). In this study, the question as to whether or not the visual modality was the disturbing element in processing information was addressed. In order to control for that factor, dictation was implemented. In this study, the students' misspelled words were written three time each. They would also participate in games to reinforce the correct spelling. Four days a week, the students also went to the resource room where they had to look at the word, say, and trace it with a finger. Murphy (1990) observed that "it was noticeable that the subject's spelling accuracy of frequently used utility words was much improved and retention of these
words was high. Handwriting, previously untidy with poorly formed letters, was markedly improved."(p.211). The results of this study mirrors some of the results in Cunningham and Stanovich (1990) research. They both saw increases in students' spelling proficiency when writing words.

The Importance of Phonemic Awareness

Although the term "phonemic awareness" has found its place among researchers studying the ability to read, its impact on spelling has only begun to surface. Griffith (1991) states that "the relationship that exists between phonemic awareness and spelling is a consequence of the nature of written English. English is characterized as an alphabetic script. Its written words are composed of sequences of letters which roughly correspond to the phonemes of spoken words."(p.217).

This study revealed that the level of phonemic awareness is the more powerful predictor of spelling ability in first graders. Researchers have been studying how important phonemic awareness is to reading and spelling. The results of their
studies are similar to those of Griffith (1991). In a study conducted by Ball and Blachman (1991) results indicated that "phoneme awareness instruction, combined with instruction connecting phonemic segments to alphabet letters, significantly improved the early reading and spelling skills of the children in the phoneme awareness group."(p.49).

In the study by Hoffman and Norris (1989) the researchers stated

"Because the auditory system is the primary mode of learning language for most children, the auditory-speech motor connection strengths are considered to be greater than those for the visual representation. When children then begin to represent language through writing, connection strengths from the auditory system will contribute to a greater degree to the child's spellings."(p.793).

Classrooms that provide more letter-sound instruction are said to have students who improve in reading and spelling. Ball and Blachman (1991) stated "our data suggest that the children who received training in phoneme segmentation and in letter names and letter sounds were more able than children
in either control group to match the written symbols to the sound segment of the word." This finding is duplicated in the research article by Foorman, Francis, Liberman & Nory (1991) which stated "classrooms with more letter sound instruction improved at a faster rate in correct spelling and reading." (p.456). In a recent study of the relationship of phonological awareness, rapid naming, and verbal memory to severe reading and spelling disabilities, Cornwall (1992) observed "phonological awareness enables the youngster to discover and exploit the alphabetic principle, thereby becoming able to determine individual words that he or she has not seen before." (p.537).

**Gender Differences and Summer Break**

In the study by Allred (1990) he states that "from results of research, I found that girls in general spell better than boys do in grades one through six." (p.191). These gender differences in spelling are consistent in each geographic area and for high-,
medium-, and low- achievement levels, according to student performance on both proof reading and written spelling type tests. In this study boys and girls were tested using the Comprehensive Tests of Basic Skills (CTBS), a standardized test and a test developed by the researcher. The population consisted of a sample from all across the continental United States. After a review of the results, girls out-performed boys in spelling activities.

In the research by Allinder, Fuchs, Fuchs and Hamlett (1992), the effect of summer break on math and spelling performance was studied. The population in this study consisted of two hundred and seventy five second through fifth grade students. The research concluded that "with regards to spelling, only students in the lower grades (2 and 3) exhibited regression." (Allinder et al., 1992 p. 457) Further results revealed large individual differences. The researchers pointed to the need of further investigation in order to study the effects of long breaks.
After reviewing all the research it is evident that there are many variables and strategies that effect a student’s spelling performance. It is also clear to this researcher that instruction of any kind should be individualized to meet the needs of the students. Students must also be involved in all aspects of the learning process. Hodges (1977) makes reference to previous research by Mann (1839) on spelling instruction. Mann stated that teachers usually corrected students spelling errors and that by doing this “the pupil derived as much advantage in orthography, from having the teacher spell all his words for him, as he would derive of physical strength, from having the teacher eat all his meals for him.” In study conducted by Funk and Funk (1987) they also made the following observations

“one method of applying the principle of reinforcement to spelling instruction is to allow the children to check their own spelling papers. When teacher grade the children’s papers, the positive effects of reinforcement are lost. The teachers sees the errors, not the child who has made them. If the child corrects his own paper immediately after taking the test, reinforcement for his correct answers is given and learning is enhanced
by immediate recognition of mistakes.” (p.169).

Hodges (1977) stated “as we look ahead in our efforts to improve the outcomes of spelling instruction, we must not forget to look back, as well, for hindsight can help us to avoid repeating many questionable practices carried on in the name of good intentions.” (p.24). This statement holds as true today as it did almost twenty years ago. Hodges and many researchers continue to provide educators with the studies necessary to improve spelling instruction, but unless they begin to apply and build on this research, spelling proficiency will continue as it has in the past.
Chapter III
Design of Study

Purpose

The purpose of this study was to evaluate two teaching approaches for teaching spelling in order to determine which approach was more effective. It compared the results of a spelling textbook program and a teacher directed approach in a sixth grade classroom.

Hypotheses

1. There is no statistically significant difference between a teacher directed approach to spelling and a textbook approach when measured by a post test of 40 targeted spelling words.

2. There is no statistically significant difference between a teacher directed approach to spelling and a textbook approach when measured by the total score of the weekly 20-word spelling tests.
Methodology

Subjects

This study involved twenty-six sixth graders from a public elementary school in western New York. The subjects in this study were heterogeneously grouped and their ages ranged from 10 to 12 years old. After a pretest had been administered to all the students in this study, they were divided into two equal ability groups.

Materials

The 40 target words for this study were chosen from the sixth grade spelling curriculum, Working Words in Spelling by D.C. Heath and Company (1990). These target words were identified by a pretest administered to all the subjects involved in the study. The pretest was created by randomly selecting seventy five words from the sixth grade spelling textbook. The purpose of the pretest was to identify the forty most frequently misspelled words. This pretest was also used in order to divide
the 26 subjects into two equal ability groups. The subjects also took weekly spelling quizzes after working in their respective groups. A posttest was also administered in order to determine which teaching method produced the best spelling outcomes. This posttest consisted of the forty previously identified target words.

**Procedures**

This study began with a pretest of seventy five randomly selected spelling words, which were taken from the students' spelling text. The results were calculated and the forty most frequently misspelled words were chosen as the target words for this study. Students' scores on the pretest were also used in order to divide the class into two equal ability groups.

In this 12-week study, one group received the teacher directed spelling approach and the other group received spelling instruction in the form of a spelling workbook. The teacher directed spelling group used writing centered spelling
activities. These activities included tasks such as creating sentences, writing words five times each, writing stories, and looking up the definitions to the assigned words. The textbook group completed spelling exercises from the published series. The activities from the textbook consisted of fill in the blanks to complete the sentences, using a code to write the spelling words, crossword puzzles, and finding the missing vowels.

In this study, weekly quizzes were given in order to determine which method had proven to be the most effective. The target words were included with other weekly spelling words from the spelling series. The students in this study were all given the same 20 weekly spelling words. The number of target words which have been identified varied from lesson to lesson. Some lesson contained more target words than others, yet all the words received equal attention. A posttest of the targeted words was also given in order to determine which method produced better long term retention. The pretest and
The posttest in this study was administered in more than one sitting. The 75 word pretest was divided into three 25 word quizzes and the 40 word posttest was divided into two 20 word quizzes. This was done in order to keep the quality of the students' work as high as possible.

**Analysis of Data**

An independent t test was used to determine whether there was a significant difference between a teacher directed approach and a textbook approach to spelling.
Chapter IV
Statistical Analysis

Purpose
The purpose of this study was to examine the effects of two teaching approaches in spelling. The first teaching method was guided by the spelling textbook and the second was a teacher directed approach.

Findings
For the purpose of determining whether there was a significant difference between the textbook group and the teacher directed group a $t$ test was used. The results of each weekly test, the sum of the weekly tests and the posttests were compared after the 12 week study.

The critical $t$ values and the $t$ stat of the 12 weekly tests, the sum of the weekly tests, and the posttests were all calculated. The following are the results of those statistical findings.
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<th>T6</th>
<th>T7</th>
<th>T8</th>
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<tr>
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<td>SUM OF WEEKLY TESTS 1-12</td>
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<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>----------</td>
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</tr>
<tr>
<td></td>
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The results of the analyses indicate that there was no significant difference between the textbook group and the teacher directed group when comparing the outcomes of the weekly tests and the posttest. It should be noted that there was a significant difference between the textbook group and the teacher directed group when the sum of the weekly tests were compared. The statistics did indicate that the teacher directed group performed significantly better than the textbook group.
Chapter V

Conclusions and Implications

Purpose

The purpose of this study was to evaluate two teaching approaches for teaching spelling in order to determine which approach was more effective. It compared the results of a spelling textbook program and a teacher directed approach in a sixth grade classroom.

Conclusions

The first null hypothesis tested in this study stated that there was no significant difference between the teacher directed approach to spelling and a textbook approach when measured by a posttest of 40 targeted spelling words. The statistical analysis of the data determined that there was no significant difference in the textbook approach and the teacher directed approach when comparing the outcomes of the posttest. Because of the results of the $t$ test analysis, it was necessary to fail to reject the first null hypothesis. In this study
the failure to reject the first null hypothesis may be attributed to the length of time between the weekly tests and the posttest. Students were also not given the list of target words to study or review before the posttest, as they had been accustomed to during the weekly tests. Unlike the weekly tests, the students were not able to study the target words before the posttest. In the end, they were not able to perform as well as they had on the weekly tests. Many students expressed anxiety before the posttest because they felt they weren’t prepared. This apprehension may have directly affected student performance.

The second null hypothesis stated that there was no significant difference between the teacher directed approach to spelling and a textbook approach when measured by the total score of the weekly 20-word spelling tests. The statistical results from the t test indicated that there was a significant difference in the sum of the 20-word spelling tests. These findings lead to rejecting the second null hypothesis. When the
weekly tests were analyzed individually, all but one showed a significant difference in the methods compared. The lack of significant difference was perhaps due to the number of target words in each weekly test. The limited number of target words in each lesson produced a wide range between the standard deviations of each test.

Implications for Research

Although much testing and study have been conducted on teaching strategies, very little has been done on the individualizing of spelling programs. Teachers already have the experience and knowledge of many successful teaching strategies. They must now be shown how to create or combine those successful methods to meet the needs of their students. If researchers continue to test and record the outcomes of combined methods, the results will lead to more successful strategies.

The ever changing classroom creates new questions for
researchers. Special education students now being blended in regular education classrooms require added attention. Research must now focus on addressing the concerns and needs of those students. Regular education teachers are now struggling to meet their needs and the needs of regular education students. Teachers and researchers must begin to focus their energies on this population. Having students with a variety of learning styles creates a problem for teachers. The task of teaching becomes a very difficult one. Many students including learning disabled students have difficulty learning through traditional methods. Multi-sensory approaches must be created and studied.

If researchers and teachers are to make advances in spelling acquisition skill development, more time must be devoted to the study of learning styles. The needs of all students must be addressed in future studies. Creating strategies that lead to the development of individualizing instruction will promote success.
Implications for the Classroom

Poor spelling proficiency has always motivated educators into exploring new strategies for the teaching of spelling. Researchers continue to test for the best methods in implementing and teaching spelling skills. The findings of researchers have created new and improved methods. Educators must begin to individualize their spelling programs to students’ learning styles. This individualized approach to instruction will improve spelling proficiency. In most of the research, writing has been singled out as a teaching tool that increases students’ scores and proficiency. We must not abandon successful teaching strategies when new methods and philosophies surface.

Researchers have shown that many old strategies, such as writing words down and using words in context, continue to be effective teaching tools. Educators must keep in mind that not all students learn through the same modality. The more a program is individualized to meet the needs of students and
their learning styles, the greater the success these students will encounter. Individualizing any program raises some concerns. Time, is perhaps, the greatest concern for educators. With the increasing class sizes and the time lost in maintaining control of the class, educators are struggling to meet basic requirements. Nevertheless, if educators use several different methods or experiment with new strategies, spelling proficiency can be attained by students.

Teaching spelling through writing activities, reading activities, or even other subjects may resolve the time factor. Students learn through many different avenues. Playing letter-sound games contributes to skills necessary to spelling acquisition skills. Researchers continue to produce positive results in studies concerning spelling. It is now up to educators to use techniques proven to have shown promise in their classrooms. Teachers shoulder the responsibility of students' success and failures. If they continue to use writing and other valuable resources when teaching spelling, students will learn to spell.


