Spelling Tests: Teacher-Chosen Words vs. Student-Chosen Words

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Spelling Tests:
Teacher-Chosen Words vs. Student-Chosen Words

By

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ABSTRACT

This study investigated student-selected spelling words and teacher-selected spelling words. The subjects consisted of 14 urban second graders. Each week students took a spelling test of five teacher-selected words and five student-selected words. The scores on these tests were used to determine which type of spelling words the students performed better on. This study lasted four months. The data was analyzed using a t-test with dependent means. A descriptive analysis of the types of words selected was also performed.

The data from this study indicated that there is a statistically significant difference between the scores of the teacher-selected words and the student-selected words. The students performed better on the portion of the test with the teacher-selected spelling words. Students had a tendency to choose words that were very difficult to spell. They chose words that were concrete, of low frequency, and were mostly nouns.
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CHAPTER I

INTRODUCTION

Purpose

The purposes of this study were to investigate and contrast the effectiveness of a student-selected spelling word list (SS) and a teacher-selected spelling list (TS). A secondary purpose was to qualitatively analyze the properties of the words selected by the students. For example, are the words a particular part of speech, concrete/abstract, high frequency/low frequency, high visual imagery/low visual imagery, phonically predictable/not phonically predictable.

Need for the Study

Spelling continues to be an important aspect of the instructional day. Many teachers and districts have different philosophies of how to instruct in the area of spelling. Many teachers utilize a formalized spelling program while some choose words from the reading selections in the classroom. Other teachers work with spelling during writing and do not
have a set time during the day for spelling instruction. It seems as though teachers often wonder if their spelling program is effective in teaching spelling to children.

Butyniec-Thomas and Woloshyn (1997) conducted a study that consisted of 37 third grade students. The purpose of this study was to explore whether explicit-strategy instruction combined with whole-language instruction would improve spelling more than explicit-strategy instruction alone or whole-language instruction alone. The results showed that students performed better on spelling tests when the explicit-strategy instruction was combined with whole-language instruction.

Rymer and Williams (2000) conducted a nine month study that involved 10 first grade students. Through the study, they examined the children's journal entries and their formal spelling tests. The results showed that children learned to spell words through the whole-language approach (reading-writing workshop, exposure to literature, shared reading, and interactive writing) rather than through explicit instruction with formalized spelling tests. On average, the children learned to spell 65 spelling works that were explicitly taught and learned 184 that were not explicitly taught.
The findings of these studies leaves many unanswered questions. Should we teach formalized spelling? Is a formalized spelling program effective in teaching spelling? Does a formalized spelling program have a place in a whole-language classroom? Would children learn weekly spelling words if they had some ownership in choosing the words they were learning? This researcher was unable to find studies that involved children choosing their spelling words from authentic literature.
CHAPTER II
REVIEW OF LITERATURE

Purpose

The purposes of this study were to investigate and contrast the effectiveness of a student-selected spelling word list (SS) and a teacher-selected spelling word list (TS). A secondary purpose of the study was to qualitatively analyze the properties of the words selected by the students. For example, are the words a particular part of speech, concrete/abstract, high frequency/low frequency, High visual imagery/low visual imagery, phonically predictable/not phonically predictable.

Review of Literature

Introduction

As referenced in Wirtz and Gardner, et al (1996)(sic), spelling is defined as the formation of words through the meaningful arrangement of letters. The question to be answered is how do we teach children how to
spell? According to Sitton (1996), teachers everywhere are wrestling with this very question and many emphasize a traditional approach while others utilize a language centered curriculum. Many companies have published spelling programs that teachers can utilize in the classroom. Districts have adopted reading programs that incorporate spelling instruction into their series. Just because a district adopts a program, it does not mean it will be the best way to teach spelling to children.

Spelling is a developmental process (Anderson, 1985; DiStefano & Hagerty, 1985). Children go through different stages of spelling. Children begin at the "magic writing" stage (non-letters) and progress through many stages of invented spelling (DiStefano & Hagerty, 1985). Having proceeded through the stages of invented spelling, children move toward traditional spelling. It is at this point that spelling instruction becomes crucial.
Types of Spelling Instruction

Spelling instruction remains one of the most debated aspects of the language arts. Parents often argue that formal spelling programs are necessary. Some teachers have abandoned the formal speller in the belief that spelling is learned best in the context of reading and writing. (Heald-Taylor, 1998, p.404)

With all of the differing views, how can it be ascertained which is the best practice? Research by Heald-Taylor (1998) has identified three main spelling perspectives form diverse philosophical and research foundations that appear to parallel particular spelling practices. The three types are defined by her as follows:

Traditional spelling (p. 405) is generally taught formally as a separate subject with word lists form commercially graded spelling texts that emphasize instruction in phonetics and spelling rules in preparation for weekly tests (supported by DiStefano & Hagerty, 1985).

Transitional spelling (p. 406) is distinguished by two main features: (a) the integration of numerous spelling strategies (phonetic, graphic/visual, syntactic/word patterns, semantic/meaning); and (b) the significance of reading in learning to spell.

Student-oriented spelling (p. 409) takes the perspective that phonetic, visual, and semantic functions are continually valued, and that
spelling and reading development are mutually supportive. There are three main differences: (a) learning to spell is often seen as a developmental process, (b) reading provides a context for learning to spell, and (c) spelling is a functional component of writing (supported by Dulaney, 1987).

Heald-Taylor (1998) found that no spelling program is likely to fit neatly into any one of these since recent evidence suggests that teachers choose strategies from all three.

Funk and Funk (1987), of the opinion that learning should be an active process, state that children should be actively involved in deciding their spelling words. Word lists may be group or individually chosen. The words should be chosen based on interests and needs. (findings supported by Sitton, 1998)
Explicit Instruction vs. Whole Language

In looking at the research, studies were found that compared explicit instruction to whole-language instruction. The purpose of a study conducted by Butyniec-Thomas and Wolochyn (1997) was to explore whether explicit strategy instruction combined with whole-language instruction would improve third-grade students' spelling more than either explicit-strategy or whole-language instruction alone.

The students in the strategy conditions received explicit instruction in the use of word building, syllabic segmentation, and imagery as spelling strategies as well as information about why, when, and where to use each strategy. The students in the explicit-strategy plus whole-language condition studied target words in the context of a story, whereas strategy-only students studied the target words in isolation. Students in the whole-language condition used the target words as they completed meaningful reading and writing activities. The students in the explicit-strategy plus whole-language condition outperformed students in the other two experimental conditions on a spelling dictation test. For every posttest measure, the spelling performance of the students assigned to the explicit-
strategy-plus-whole-language condition was superior to the performance of the students assigned to the whole-language condition, smallest (q=5.46, p<.01). The students assigned to the explicit-strategy-plus-whole-language condition also outperformed the students who received explicit-strategy instruction, smallest (q=2.90, p<.05). The findings suggested that young children learn to spell best when they are taught a repertoire of effective spelling strategies in a meaningful context.

Similarly, in looking at research from two other studies, the findings support those of Butyniec-Thomas and Woloshyn (1997). The suggestions from Berninger, Vaughan, Abbott, Brooks, Begay, Curtin, Byrd, and Graham (2000) were that (a) a systematic spelling curriculum be used at all grade levels, (b) daily writing from dictation, child-generated composing, and reading, and (c) explicit instruction and feedback at multiple levels.

The purpose of a study conducted by Rymer and Williams (2000) was to examine the relationship between explicit spelling instruction and weekly spelling tests and spelling in children's self-selected writing. The study consisted of 10 first grade students from Rymer's first grade
literature based classroom. The data were collected for nine months. During the sixth week of the study, a formal spelling program was implemented. They looked at the children's journal writing to see if the explicitly taught words from the formal spelling program carried over into their writing. The results showed that spelling words written in their daily writing did not carry over. The students were misspelling the words that they had spelled correctly on their spelling test. Apparently, the students memorized the correct spelling. The average number of words learned from the spelling program was 65. The average number of words learned without explicit instruction was 184. The findings from Rymer and Williams (2000) supported the use of a whole-language approach to spelling and found that a formal spelling program had little impact on the students' spelling achievement.

**Spelling and Phonemic Awareness**

"It is now well established that there is an intimate and probably causal relationship between children's phonological skill and the ease with which they learn to read." (Nation & Hulme, 1997, p. 154) Not much
research has been conducted on the relationship between phonemic-awareness and spelling. This researcher found two studies that focus on phonemic-awareness and spelling.

The purpose of a study conducted by Nation and Hulme (1997) was to examine the relationship between different types of phonological awareness and reading and spelling ability. Three groups of children, from grade 1, grade 3, and grade 4, were given a variety of phonological awareness measures. Two tests of segmentation were administered so that onset-rime segmentation and phonemic segmentation could be assessed in directly comparable tasks. In addition to the two segmentation tests, two sound categorization tasks (rhyme and alliteration) were administered so that they could assess the relationship between segmentation and sound categorization skills in the same children. They aimed to relate performance on these different measures of phonological skill to attainment in both reading and spelling. Reading ability was assessed using the British Ability Scales (BAS) and spelling ability was assessed using the Vernon Graded Spelling Test. Four phonological awareness tasks were administered.
After the tests were administered, the data were compiled. The results show that sound categorization and phonemic segmentation scores were highly and significantly correlated with each other, with age, with reading, and with spelling ability. However, onset-rime segmentation failed to show a significant correlation. Phonemic segmentation was shown to be the best predictor for spelling and reading ability. Therefore, phonemic awareness plays a role in children’s spelling ability.

A study was conducted with kindergarteners by O’Connor and Jenkins (1995) to see if teaching spelling to kindergarteners would increase their phonemic awareness. The study consisted of 10 children with developmental delays enrolled in a full-time integrated kindergarten. In the spelling treatment, children received individual spelling instruction daily for 10 minute sessions. For the first two sessions, tasks involved children using magnetic letters and selecting a letter that represented the sound the instructor asked for. For the following 18 sessions, children would spell words using the magnetic letters and then write two or three of the same words on paper. The intent of the reading control was to provide a similar amount of reading exposure to that received by the spelling treatment. The study showed that the spelling had no impact on their
phonemic awareness. The children did not learn any new letter-sound correspondences or phonic rules as a result of participation in the spelling treatment. Thus, it can be assumed that children need to have some sense of phonemic awareness in order to be successful spellers.

**Spelling Strategies**

What strategies can be taught to children that will help them become better spellers? This question is not easy to answer. Many studies have asked the same question. In a study conducted by Darch, Soobang, Johnson, and Hollis (2000), data revealed 4 categories of spelling strategies: (1) rule-based, (2) multiple, (3) resource-based, and (4) brute force. The purpose of the study was to find out what strategies students with learning disabilities used when they attempted to spell a word. The study revealed that they used all of the above strategies but inappropriately. A second part of the study was to find out if a rule-based strategy for spelling or instruction in a commercial program would ensure that they became more proficient spellers.

For the second part of the study, 30 students with LD were the subjects. The students were randomly assigned to either group and
received instruction for 12 sessions. Tests were administered. The results showed the superiority of a rule-based spelling instructional program when compared to the effectiveness of an instructional program that relies on the use of motivational spelling activities and intensive practice writing words and sentences without systematic introduction of spelling rules with carefully sequenced practice. The students taught with the rule-based program became more proficient in spelling words of the word types taught.

Suits (1998) reported in her study on spelling strategies that children rely on a variety of cues when they attempt to spell a word. They may use a picture of the word, recall a phonetic or spelling rule, or even guess. Through her use of Try-It-Out-Sheets, where students make three attempts to spell a word, she was able to determine the spelling knowledge that students already had. Through her study, she found that if teachers analyze students' attempts to spell words, they can accurately assess the strategies they are using or misusing. Chandler (2000) suggests generating a list of spelling strategies to utilize in the classroom. This will give teachers the opportunity to teach students the strategies and
the correct way to use them. She also suggests that students monitor their own use of the strategies.

A different type of strategy was implemented by Fresch and Wheaton (1997). They used Sort, Search, and Discover to help children become better spellers. The strategy encourages children to explore language outside their daily work and share their discoveries. This strategy involves 5 days of activities. Day 1 was the pretest/word selection day. The weeks spelling focus is chosen by the teacher, depending on the students' needs. Day 2 is word sort and word hunt day. Students identify common sounds and patterns. Day 3 is using the words in context. The ability to read and write words comes from understanding its meaning in context. Day 4 is a combination of various activities. The activities depend on the words being studied and change form week to week. Day 5 is a buddy posttest using words in context. Students pair up and test each other on their lists.

Fresch and Wheaton (1997) found that Sort, Search, and Discover is useful in measuring growth. It is a child-centered program that the children have all enjoyed and learned from. One student stated, "I like
having a rule in the spelling words I have." Another student stated, "You teach spelling in a good but different way. I learn more sound strategies."

(Fresch & Wheaton, 1997)

According to Sitton (1998) visual skills are important to spelling success. Children often remember what a word looks like in order to remember it (visual imagery). Adults utilize the same strategy when they attempt to spell a word. Thus, an important strategy is to provide students with visual skill building practice where students practice writing words from memory.

Children need to be taught many strategies when trying to figure out how to spell a word. According to Snowball (1997) there are three main strategies that will help ensure spelling success. First, educators need to help children develop phonemic awareness (findings supported by Nation and Hulme, 1997). Snowball found that children develop the ability to hear sounds in words when they are involved in shared reading of poems, chants, songs, and big books with repetitive refrains and rhyme. She also suggests that teachers select words children know and discover
together how knowing one word can help with the recognition or writing of others.

The second strategy Snowball suggests is exploring sounds. Help the children discover how different sounds can be written and help them identify the letters that represent the sounds. Then, ask children to find other words they know with the same sounds and add them to a class list.

The third strategy suggested by Snowball (1997) is discovering spelling patterns. Thinking about what a word looks like is a useful spelling strategy. Teachers should explore with children common spelling patterns. Finding patterns with text and underlining or highlighting them is useful. Then, have children identify word patterns by finding other words with the same pattern.

In using the above strategies, children are learning to spell in a contextualized manner. They are finding words within the context of their reading selections and the teacher is explicitly teaching them what to look for.
Spelling Checkers

MacArthur and Graham (1996) reported on the use of spelling checkers with learning disabled children in grades 6-8. The purpose of the study was to describe and compare the performance of common spelling checkers on the task of suggesting correct spellings for words misspelled. They also wanted to investigate how successful students with LD were at using a spell checker to fix their errors. A list of misspelled words was compiled from two assigned writing pieces of 55 students identified with LD. The list of misspellings were analyzed using 10 different spelling checkers. When the data were collected, MacArthur and Graham noted whether correct spellings were given, how long the list of suggested words was, and where the correct word was in the list.

In the second part of the study, they wanted to know how successful LD students were with using the Spell Checker. The study included 27 students in middle school with severe learning disabilities. The students in the study were writing regularly on a variety of self-selected and teacher-selected topics in a writing workshop format. Students did most of their writing using a word processor with a spelling
checker. Data were collected after the students had been using the spell checker regularly for five months. Data on the number of words and spelling errors, independent spelling corrections, and corrections with the spelling checker were analyzed.

The results indicated that students were able to use the spell checkers but not well enough to be used without some frustration. Success in suggesting the correct spelling was limited and varied depending on the severity of the misspelled words. Contrary to expectations, spelling achievement was unrelated to the proportion of errors that students were able to correct with or without the spelling checker. The success of the spelling checker in identifying misspelled words and suggesting the intended spelling was unrelated to spelling achievement. Spelling achievement was unrelated to the success, or lack of success, in correction errors when the spelling checker did not suggest the intended spelling. Therefore, spelling checkers can be used to assist with spelling, not as a strategy to teach spelling.

After looking at the research, it seems apparent that spelling is an important aspect in the instructional day. Many teachers utilize explicit
instruction, strategy teaching, and whole-language settings. What should be done when teachers are required to utilize a spelling program that has weekly tests? This researcher was not able to find studies that involved student-selected spelling words through authentic literature. This study will investigate student-selected spelling words and teacher-selected spelling words in preparation for a weekly spelling test.
CHAPTER III

DESIGN OF THE STUDY

Purpose

The purposes of this study were to investigate and contrast the effectiveness of a student-selected spelling word list (SS) and a teacher-selected spelling list (TS). A secondary purpose was to qualitatively analyze the properties of the words selected by the students. For example, are the words a particular part of speech, concrete/abstract, high frequency/low frequency, high visual imagery/low visual imagery, phonically predictable/not phonically predictable.

Null Hypothesis

There will be no statistically significant difference between the two posttest mean scores for the teacher-selected treatment (TS) and the student-selected treatment (SS).
Research Questions

1) Do students perform better on the TS spelling word list or on the SS spelling word list?

2) What types of words will students select from the literature as a spelling word?

Definitions

High frequency words:
Words that are used often in reading. These words are often called sight words.

High visual imagery words:
Words that can be mentally pictured by the reader easily and therefore they remember the word on sight. These words may be words such as hippopotamus and boa constrictor.

Phonically predictable words:
Words that follow basic phonic generalizations.
Methodology

Subjects

The subjects consisted of 14 urban second graders. The classroom is an inclusion classroom. The students in the classroom range in ability from average to well below average.

Materials/Instruments

The teacher utilized her Houghton/Mifflin reading series for the teacher-chosen spelling words. She kept a grade book of the scores, utilizing the same reading series throughout the study. Subjects were given a spelling word log to write down the words from the story that they want as a spelling word. All spelling words were written on cards and posted in the classroom for use throughout the week.

Procedures

For a duration of four months, a total of ten spelling tests, the teacher chose five spelling words and the class chose five, for a total of
ten spelling words. After reading the story on Monday, children looked for words that they had a hard time with or wanted to learn. They recorded their choices in their spelling log. Later, the children voted on their spelling list. Students were tested on Friday and scores were recorded. The researcher analyzed the student-selected words qualitatively.

Analysis of data

The data were analyzed using a \( t \) test of dependent means. A descriptive analysis of the types of words selected was performed.
CHAPTER IV
FINDINGS AND INTERPRETATION OF DATA

Purpose

The purposes of this study were to investigate and contrast the effectiveness of a student-selected spelling word list (SS) and a teacher-selected spelling word list (TS). A secondary purpose of the study was to qualitatively analyze the properties of the words selected by the students. For example, are the words a particular part of speech, concrete/abstract, high frequency/low frequency, high visual imagery/low visual imagery, phonically predictable/not phonically predictable.

Analysis of Data

The students were given spelling tests every Friday. Each test consisted of five teacher-chosen words and five student-chosen words. In order to analyze the data, the raw score from each student’s tests were used.

A t test was conducted to analyze the data. The mean raw score of the teacher-selected words was 4.41. In other words, on average,
students correctly spelled 4.41 of the teacher-selected words correctly.
The mean raw score of the student-selected words was 3.45. The data
are presented in the following table.

Table 1

<table>
<thead>
<tr>
<th></th>
<th>x</th>
<th>s.d.</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>TS</td>
<td>4.41</td>
<td>.93</td>
<td>9.71</td>
</tr>
<tr>
<td>SS</td>
<td>3.45</td>
<td>1.43</td>
<td></td>
</tr>
<tr>
<td>Difference</td>
<td>.95</td>
<td>1.13</td>
<td></td>
</tr>
</tbody>
</table>

Since \( p \leq .05 \), at the .05 significance level, there is evidence to
reject the null hypothesis and conclude that the mean difference between
the pairs is not 0.

Therefore, the data indicate that there is a statistically significant
difference between the scores of the teacher-selected words and the
student-selected words.

The researcher analyzed each of the student-selected words and
placed them into categories. It was determined that each word was
concrete or abstract, high frequency or low frequency, phonically predictable or not phonically predictable, high visual imagery or low visual imagery, and either a noun, verb, adjective, preposition, adverb, or a pronoun. Thirty-two of the words were concrete and 18 were abstract. Ten of the words were high frequency and 40 were low frequency. Thirty of the words were phonically predictable and 20 were not phonically predictable. Twenty-two of the words were high visual imagery and 28 were low visual imagery. Thirty of the words were nouns, eight were verbs, three were adjectives, two were prepositions, four were adverbs, and three were pronouns. The students had a tendency to choose words that were concrete. The words were generally of low frequency and were mostly nouns. The students had a tendency to choose words that would be more of a vocabulary word rather than a spelling word.
CHAPTER V
CONCLUSIONS AND IMPLICATIONS

Purpose

The purposes of this study were to investigate and contrast the effectiveness of a student-selected spelling word list (SS) and a teacher-selected spelling list (TS). A secondary purpose was to qualitatively analyze the properties of the words selected by the students. For example, are the words a particular part of speech, concrete/abstract, high frequency/low frequency, high visual imagery/low visual imagery, phonically predictable/not phonically predictable.

Conclusions

The idea for this study came to me when I was taking a course in whole language. An aspect of whole language is for children to take ownership in their spelling words by choosing them through authentic literature. I thought this was very interesting and wanted to test the theory. I believed that the children would probably do better if they were able to choose the words. I was very surprised by the results. They did very poorly on the words that they chose. Perhaps they chose the words
that were easily read but not so easily spelled. Whenever they chose the words, I always reminded the students that the words they chose did not have to be the most difficult but ones that they wanted to learn how to spell. Even though I taught lessons on how to choose words, they always seemed to choose the most difficult words from the stories. I often wonder if they chose words that they thought I wanted them to choose. Perhaps student-selected words would be more appropriate at the intermediate level.

When the students chose their words, we did it as a full group in a voting format. Although they enjoyed choosing words and were excited when certain words became part of the list, one drawback was that some of the words might not have been the choices for some of the students. Ideally, each student should have his/her own list of words for the week that they chose. Although ideal, it is not realistic.

**Implications for the Classroom**

Although the results from this study indicate that children do poorly on spelling tests when they select the words, I do not necessarily believe that it will always be the case. Perhaps it would be more appropriate if the students were older and had a better understanding of how to choose
words. I feel teachers should try it with their students to see if they are mature enough to handle the task. Eventually, with enough practice, the students should become better at choosing the words. Just keep in mind that some students will do well no matter what the words are and some will do poorly no matter what the words are.

Further Research

In this study, students were required to choose five out of ten spelling words. They were not very successful in this task. They had a tendency to choose very difficult words and then do poorly on that portion of the test. I often wondered if this was because they were too young. I would be interested to see a study conducted that involved the same procedures but with older children. It may not be that children do not do well on self-selected words, but just primary children do poorly on self-selected words.

I would be interested to see the results of a study that involved student selected words and each child had his/her own list. This would be a difficult task from a classroom teacher, but may be possible from support staff. They may be able to have ten children in their study and they would have them choose their words and give them the test at the end of the
week. The classroom teacher would still be responsible for having the children do the activities with their words. It may be more manageable that way.

The teaching of formal spelling is useless if children do not retain and use the words they spell correctly on the test. The purpose of teaching spelling formally is so children become better spellers. If they only spell well on tests, it defeats the whole purpose and becomes a waste of time. Numerous studies need to be conducted to determine if children actually retain the words that they spell correctly on a test. Also, were the few student-selected words that were spelled correctly on the test better retained than the teacher selected words? Perhaps retention is the purpose of student-selected words and not performance on a spelling test.

The data from my study indicated that there is a statistically significant difference between the scores of the teacher-selected words and the student-selected words. The students performed better on the portion of the test with the teacher-selected spelling words. Students tended to choose words that were very difficult to spell. They chose words that were concrete, of low frequency, and were mostly nouns.
References


