

THE EFFECTS OF TEACHING SPELLING IN CONTEXT  
IN A PRIMARY CLASSROOM

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## **Abstract**

The effects of teaching spelling in context in a primary classroom

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The research done in this paper seeks to determine a more effective way of teaching spelling than the current “traditional” method, which consists of handing out a list of words on Monday that are tested on Friday and usually forgotten shortly after. This was a quantitative correlational study, which used the scores on student spelling assessments to determine if there was a correlation between teaching spelling in-context and improved spelling skills and if the knowledge learned in spelling would transfer to other subjects. The research found that teaching spelling in-context did lead to improved spelling scores for students, and data was inconclusive about whether or not it helped students transfer learning to other areas. These results led to the conclusion that spelling should be taught in-context and in conjunction with reading in order to be most effective.

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## **Introduction**

Many who grew up in the American education system, likely remember the all too familiar scenario of leaving school on Monday with a list of ten to fifteen spelling words that would be tested on Friday. The response to this list varies from student to student, often depending on the parents and their ability to help students study. Some students practice the list each night with their parents, taking mock spelling tests and rewriting words to ensure memorization. Other students may not look over the words until Friday morning, right before the routine spelling test. Although these students differ in their study habits and the amount of time spent with the words, it is likely that all students will receive a similar score on the test, missing only one or two words. However, the next hour, these same students are spelling the same words incorrectly in their writing, demonstrating that the words have not been committed to long term memory.

Most students have the ability to memorize a short list of spelling words for the time needed in order to take a test. The current spelling programs seem to have shifted from testing the ability to spell and are now testing the ability to simply memorize the spelling of a few words for fifteen minutes at the end of the week. This method of teaching spelling may be creating students who learn to “cram” for tests at a young age rather than students who have a solid foundation in spelling. Although students may be able to spell the words for one test, they have not committed the words to long term memory and will continue to spell them incorrectly in everyday use. Additionally, even if students are committing the words to long term memory, the words being used on spelling tests are related to the curriculum or stories being read. Most of these words are

not frequently used and will not benefit students as much as having a solid foundation of frequently used words committed to long term memory. As teachers, our goal should be to create lifelong spellers, and not simply students who can spell a list of words correctly for a short period of time. The traditional spelling tests often seem ineffective, as students continue to misspell an increasing amount of words, including those tested on the “Friday Test.”

The following literature discusses some of the common methods of teaching and assessing spelling and the struggles that teachers often have with these approaches.

### **Literature Review**

Research related to spelling instruction covers many areas. It is important to understand and explore past research to fully comprehend the issues currently associated with spelling instruction. This review will provide information on teachers’ current beliefs and attitudes towards spelling, current classroom practices, how children learn to spell, and what the latest research suggests are the most effective ways of teaching spelling.

#### *Teacher Beliefs About Spelling*

It should come as no surprise that the attitudes and beliefs teachers hold toward spelling vary a great deal depending on many factors. Although most teachers acknowledge the importance of spelling, it tends to be an area of instruction that is often pushed aside. Many teachers attribute this to a lack of spelling curriculum, instructional time, time for grading, and uncertainty of the best spelling practices. In recent research by Mary Jo Fresch, teachers completed a survey about spelling beliefs and practices (2007). The results from this survey demonstrated that while teachers believed in many

spelling practices such as using student writing and word sorts, there was a great discrepancy in their actual practices. A significant majority of teachers agree that their current curriculum does not adequately teach spelling and that students today are spelling worse than students in the past (Fresch, 2007). Teachers also seek to meet the needs of all students and are unsure of how to best adapt a spelling curriculum to reach all students. Additionally, as technology becomes more prevalent, some teachers believe that the only reason spelling is still taught is because of state standards. According to the research done by Andrea Ickes-Dunbar, these teachers believe that spelling instruction is becoming obsolete, and is not a valid use of instructional time (2006). Regardless of the progress made by technology, Susan Glazer contends that spelling is not obsolete and is necessary for students to understand, as there will always be circumstances without technology (2003). Another recent study asked teachers to voice their largest concerns with teaching spelling. The largest response was from about 36 percent of teachers, who expressed that they were most concerned with professional issues, such as lack of curriculum or time (Fresch, 2007). The next largest concern among teachers, eliciting a response from 34 percent of teachers, was the concern that students would not retain or apply spelling words (Fresch, 2007). This concern is common among teachers, and demonstrates that there is much work to be done in the area of teaching spelling and learning practices that are effective and produce long-term results.

### *Current Classroom Practices*

It is also important to examine the current classroom practices that are common in teaching spelling in order to recognize the need for change. A study conducted by Robert Hillerich examined teachers for an extended period of time and their practices in teaching

spelling (1982). Hillerich noted that each of the teachers spent only approximately an hour each week on spelling curriculum. Within this hour, students were assigned worksheet pages, worked on them independently, and then graded the pages as a class. Actual instruction on spelling was only observed in one of the six classrooms. All other classrooms spent their time filling out, grading, and reporting grades on the worksheets. Of their total time devoted to spelling, the classes only spent 50 percent of the time doing work related to spelling (Hillerich, 1982).

Other research has found that while 93 percent of teachers use some kind of spelling program, the vast majority were using spelling programs that centered on rote memorization (Fresch, 2007). While memorization is one strategy for spelling, research has shown that it cannot and should not be the only method utilized. The memorization method may also be one of the reasons that spelling words are often misspelled in other areas. Fresch notes that when students receive 100 percent on a spelling test, the notion is reinforced that “spelling correctly” is only demonstrated and measured on a test. In addition, Jonathon Wheatley describes the memorization approach as remembering “dead symbols with no bridge between facts and...experiences” (1968, pg.3). It is not surprising that students who have experienced spelling in this setting have not found it meaningful or engaging. This method also does not encourage students to strive for accuracy in spelling in their everyday work.

Min Hong and Patsy Stafford define effective spellers as students who are aware of spelling patterns and letter frequency, have strategies for figuring out how to spell a word, and have visual and phonetic knowledge (1997). These qualifications of an



effective speller go beyond simply scoring well on a weekly test and require more than just worksheet pages to attain.

Research also demonstrates that spelling at its current state is not as effective as it could be because it is not meaningful to students. Jill Scott found that students need to develop spelling skills in context in order to retain their learning and use it appropriately in order for it to have meaning and be memorable (1994). Another reason students may not find spelling meaningful is related to the source from which teachers extract their spelling words. According to one study, a reported 62 percent of teachers use words from a basal spelling program (Fresch, 2003). While these words are related to the stories students are reading, they are not as commonly used in the English language. As Philip DiStefano and Patricia Hagerty found, even if students retain the memorization of these words, it will not serve them as well as learning words that are more frequently used (1983). Overall, there are a wide variety of methods employed to teach spelling. All teachers devote different amounts of time and effort to spelling instruction, but the theme that seems common among most teachers is dissatisfaction at the inadequacy of their current spelling program.

#### *How Students Learn to Spell*

The next important key in unlocking the spelling dilemma is understanding how researchers believe students learn how to spell. There are a wide variety of beliefs on this subject. I will explore some of the most common here. Most researchers would agree that the process of learning to spell does not look the same for every student. It is not a series of strict steps that each student passes through in the same order to eventually achieve understanding. Rather, as Olivia O'Sullivan found, learning to spell is a complex

process which relies on many factors and looks different for each individual (2000).

Students learn to spell in a variety of ways, and begin to draw on their knowledge from other areas to begin to piece together this complex development.

Most researchers agree that spelling is a developmental process. As students pass through this development, they are able to use more sources of information in the spelling process. Eventually, students are able to effectively use “sound, visual cues, meaning, and kinesthetic knowledge” to help them move through the stages of spelling development (Wheatley, 1968, pg. 3). Researchers may call these stages different things, but overall, there is an agreement on the process students go through when learning to spell. These are the spelling stages as described by Wheatley. The first stage is the emergent stage, when students are beginning to write letters, but there is no connection between the letters and sounds. The second stage is known as the letter name stage. At this point, students are beginning to use sounds to spell, but write each sound as one individual letter. In the third stage of spelling development, students begin to recognize patterns within words. They have an awareness of sight words and can spell most single-syllable words with short vowel sounds correctly. The fourth stage is known as the syllable juncture stage. In this stage, students can spell most single-syllable words correctly and are learning how to spell multi-syllable words. The final stage of spelling development is the derivational constancy stage. At this final stage, students are aware of root words, connections between words, and prefixes and suffixes (Wheatley, 1968).

Research has shown that although students move through spelling stages, they view and learn spelling in different ways. Some students take an auditory approach, while others learn spelling best through a visual approach. Several researchers agree that the

amount of time a teacher spends on direct instruction of spelling or other literacy components directly affects students' progress in spelling. Studies have also shown that when a teacher demonstrates excitement about spelling or takes time to show students the importance of spelling, students show improvement in their ability to spell (O'Sullivan, 2000). In his book, Richard Hodges explains what a complex process it is for students to learn to spell. If there is one thing spelling research has shown, it is that it is difficult to understand how students learn to spell. Because of this and because students grasp spelling concepts in such a wide variety of ways, as teachers it is important to provide students with many different types of activities in spelling in order to increase the amount of students reached (1981). Additionally, it is important to recognize how important spelling is, and to begin spending focused class time developing spelling skills and knowledge. Although students learn to spell in a variety of ways, as teachers, we should make a great effort to help students increase their spelling ability.

When students are learning anything, the common theory among brain researchers is that information they are processing begins in short term memory and from there may either be transferred into long term memory or lost from memory altogether. In their research, Thomas Nelson and Michael Lawson found that information could be lost from short term memory within 30 seconds of ceasing rehearsal or repetition (1972). Most students, when studying for a traditional spelling test, repeat and practice the words just long enough to remember them for the spelling test. Once the test is over, the words are quickly forgotten because they have not been transferred to long term memory. Providing students with context for learning is one proven way to help them transmit information into long term memory. By learning spelling words in context and revisiting

them periodically throughout the year, students have a much better chance at transferring their learning into long term memory and using the words correctly in the future.

### *Effective Techniques for Teaching Spelling*

Finally, there is a great deal of research on what are believed to be the most effective techniques and strategies for teaching spelling. Spelling will always be learned both incidentally and intentionally. Students pick up the spelling of many words incidentally based on what they are reading and writing. However, there also needs to be spelling that students learn intentionally through the instruction and experiences provided in the classroom, as many students struggle to spell regardless of how many times they come across the word in reading and writing (Wheatley, 1968). This section describes and explores many of the researched ideas for helping students to learn spelling intentionally.

In his research, DiStefano notes that the most important aspect of a spelling program is that it focuses on teaching students to spell words that are of the highest frequency for both children and adults (1983). Because these words occur most often in written and spoken language, it will benefit students to understand and be able to spell these words accurately.

O'Sullivan found in her research that the most effective teaching of spelling is integrated with all stages of the writing process and explicit exploration of common spelling patterns in words (2000). She also believes that at the early ages students need to acquire skills in phonics, visualization, pattern-making, and vocabulary in order to become effective spellers. Brain research has shown that the brain is continually searching for patterns and ways to make connections (O'Sullivan, 2000). When these

connections are made, the learning is more likely to become a part of long term memory. The more that teachers can help students recognize these patterns and make these connections, the more likely that students will retain the information taught (Wheatley, 1968).

As mentioned earlier, many researchers believe that long-term retention of spelling words is best achieved by learning the meanings of words, or learning the words in context (Scott, 1994). There are many strategies aimed at providing students with these authentic exposures to language, such as journal writing, labeling classroom items, wall charts, one-on-one spelling conferences, proofreading, and many more. Hodges describes an effective environment for learning to spell as one that “provides numerous and varied opportunities to master the patterns...of the writing system,” and “demands an active involvement with both spoken and written language” (1981, pg. 11). It is imperative for students to be exposed to words and to consistently work with the words and their meanings. Rebecca Treiman has found that one of the most effective ways to increase spelling ability is simply having students practice it in writing (1993). Using the words in context encourages students to take risks and use resources to figure out how to spell words. By completing the writing process and editing words, students interact with the correct spelling of the word and have immediate feedback. This has proven to be an effective way for students to remember how to spell words, because it has meaning to them personally.

Additionally, Cynthia Yerdon found in her research that there is a strong connection between spelling ability and reading ability (1994). Often, when students improve in one area, they also improve in the other. Yerdon states that a weekly Friday

test is not enough, but that “students should be given instruction and strategies in spelling that will help to increase their reading achievement” (1994, pg. 9). Leo Fay’s research has shown that there can be a strong correlation, but not always (1971). Poor readers are usually poor spellers, but just because a student is a good reader doesn’t mean that they will be a good speller. Fay attributes this to the complexities of spelling and the inconsistencies in spelling rules. Because of this, it is important to teach students spelling within the context of reading, but also to spend time focusing on specific words, patterns, and rules.

This literature review has explored research on teachers’ attitudes towards spelling, current classroom practices, the process of learning to spell, and how current research suggests that students should be taught spelling. I am left with the conclusion that most teachers feel dissatisfied with their current spelling programs and would like to change their methods for teaching spelling. Research suggests that students should be taught to spell words by using them in context and focusing first on high frequency words. In light of these two conclusions, my project seeks to examine the effectiveness of a spelling program in practice that teaches spelling words using context and high frequency words.

### **Research Question**

This study sought to answer the question, do direct spelling instruction of high frequency words and a focus on spelling in context correlate to an overall improvement of student spelling? Furthermore, would this improvement in spelling transfer to other subjects? This study also evaluated which methods of teaching spelling seem most effective.

## **Methodology**

### *Method and Rationale*

This study is a quantitative correlational study. A quantitative study focuses primarily on numbers and experimentation. A correlational study, specifically, has both dependent and independent variables. Within the experiment, the independent variable is changed by the experimenter. The experimenter then measures and observes the independent variable's effects on the dependent variable, which is not manipulated. While correlational research is effective in determining the relationships between variables, it is important to realize that there are always other factors that can play in to a supposed correlation. As with any study done in a classroom with real students, it was impossible to completely control all variables. Therefore, the results must be examined closely in order to ensure true correlation aside from other factors. This method was effective in answering my primary and secondary research questions because it provided numerical data over a significant period of time related to the effect of teaching and assessing spelling in context.

### *Samples*

The data for this research project was based on 23 second grade students in the Washington area. Two of the students in this class were a part of the special education program, while one other student participated in a pull-out program for small group reading instruction. There were four other struggling readers in the class, and the rest of the students were at standard in reading. The data is based on artifacts of student performance, such as cloze spelling tests and a sentence dictation, which are acquired through the Sitton Spelling program (Sitton, 2006). This is an appropriate sample

because it was based on primary students, who were still in need of learning to spell high frequency words. The spelling tests assessed whether students were able to consistently use high-frequency words correctly in context. Additionally, a sentence dictation demonstrated if students were able to transfer their learning of high frequency words in spelling writing and other areas. This data shed light on the correlation between direct spelling instruction and improved spelling in all areas.

### *Instrumentation*

Data for this research project is student artifacts. These artifacts are spelling assessments as well as writing that was dictated by the teacher. Provided in the appendix is a sample of the type of spelling assessment that was used (Sitton, 2006). This is known as a “cloze test,” which requires students to listen to a story read orally by the teacher. These stories are a sample of writing with several high-frequency words left out. There is a blank space where the high frequency words belong. As the story is read, students fill in the blank spaces with the word that is said. This word must be spelled correctly, and assesses students’ ability to use words correctly in context. The aim of the cloze assessments is to determine not only if students can spell a word correctly by itself, but if students are able to use and spell the word in practical application. Additionally, writing samples were taken from students as the teacher dictated several sentences to them. Writing was looked at and examined for appropriate use of high frequency words or other words focused on during spelling lessons. As a researcher and a teacher, my goal was obviously for students to improve in their spelling abilities. This had the potential to be a bias for me, as I collected and analyzed the data. Any strategy implemented or lesson taught by a teacher is an attempt to improve student learning.



Because improvement in learning is something that I was hoping for, I needed to be aware that this is a bias and be sure to look at the data critically and analytically rather than jumping to conclusions. Additionally, as I collected data, it was important to allow students to do their own work in order to get an accurate measure of their retention of the spelling words and concepts. This system provided for credibility as it measured students' independent progress over an extended period of time. When looking at in-class assessments from one day, it is difficult to draw conclusions. A student's performance on that assessment may be affected by many factors, such as their mood that day, what they had for lunch, their home life, or even who is sitting next to them. By examining assessments over a longer period of time, the data becomes more credible and reliable. It legitimately shows if students are making progress and improving in spelling throughout the year. Additionally, by looking at student writing on the sentence dictations, I was able to determine if students were able to transfer their learning in spelling to other areas. No real names will be used in this project. All names were changed in order to protect the privacy of the students.

### *Procedures*

The data for this research was collected and analyzed over ten months. After doing the cloze spelling assessments, the percentage correct for that student was recorded in a table. Every week this information was collected and recorded. At the conclusion of collecting data, the student scores were recorded on a graph. Over time, I was looking for a higher percentage scored on the spelling assessment each week. If this occurred, the graph should depict an upward trend for the scores, which would demonstrate that over time, students were learning from the teaching in class and understanding how to

appropriately spell and use the high-frequency words. The spelling words used are all high frequency words, and are continuously reused through the program. I also looked at students to see if there were certain words that he or she consistently misspelled, resulting in them scoring lower on several assessments. The writing was assessed in a similar way. Each week, I dictated three or four sentences to the class, which used words we had learned before or focused on in our learning that week. As I dictated the sentences, students wrote the sentences word for word, being careful to spell each word correctly. Within these sentences, I took note of each time a student spelled one of the words incorrectly. The number of misspelled words was also recorded in a table, which was translated into a graph. In this graph, I was looking for a decrease over time to see if students were consistently misspelling less high frequency words. This decrease would demonstrate that students were improving in their ability to use high frequency words appropriately in writing and were able to transfer their learning from spelling to other areas.

## **Data**

This section will describe the data that was collected during this research project. This data is based upon student performance on both cloze spelling assessments and sentence dictations. Both the cloze tests and the sentences used for the sentence dictations were from the Sitton Spelling program.

### *Cloze Spelling Assessment Data*

The cloze spelling assessments were administered once a week, typically on Fridays. The weekly assessment focused on words that were learned or reviewed in class that week or in previous weeks. There were three additional cloze assessments

throughout the year, which were used to measure the students' growth over a period of time. These assessments are referred to in the Sitton Spelling curriculum as "Achievement Tests" (Sitton, 2006). One of these was given at the beginning of the year to find out what students already knew, another was given about halfway through the year to measure progress, and the final assessment given was cumulative to measure students' learning throughout the year. On the first Achievement Test given, the average percentage of words spelled correctly by the class was 69.86 percent. The scores on this test ranged anywhere from 20 to 100 percent. Three students in the class scored 100 percent on this assessment, with twelve students scoring below 70 percent. The second Achievement Test was given after twelve weeks of teaching using the in-context spelling curriculum and direct instruction related to spelling patterns and rules. On this Achievement Test, the average class score was 85.67 percent, with scores ranging from 46.7 to 100 percent. On this assessment, seven students received a score of 100 percent, while four students scored below 70 percent. The final Achievement Test was administered at the end of the year, after completing 27 weeks of the spelling curriculum. On this assessment, the average class score was 93.28 percent, with fifteen students scoring 100 percent and three students scoring below 70 percent. Class scores ranged from 40 percent to 100 percent.

Using the data collected, I divided the school year into three trimesters and determined what each student's average score was on the cloze spelling assessments for each trimester. From that information, I was also able to calculate the class's average score on the assessments for each trimester. For the first trimester, the class average score was 83.43 percent, with student averages ranging from 38.33 to 98.33 percent.

During the second trimester, the class average was 83.59 percent with scores ranging from 45.8 to 100 percent over about twelve weeks. In the third trimester, the average class score on the spelling assessments was 84.4 percent with scores from 28.48 to 100 percent. When looking at individual students, eleven students out of 23 showed an increase in their average percentage correct on the cloze spelling assessment from the first trimester to the second trimester. From the second to third trimester, fifteen students had an increased average score on the assessment. Nine students out of 23 demonstrated a consistent increase each trimester. The average class score for each week is shown in the table below.

Table 1  
*Average Class Scores on Cloze Spelling Assessments*

<b>Week Number</b>	<b>Average Percent</b>	<b>Week Number</b>	<b>Average Percent</b>	<b>Week Number</b>	<b>Average Percent</b>	<b>Week Number</b>	<b>Average Percent</b>
1	69.86	8	81.16	15	82.64	22	76.65
2	80.00	9	90.59	16	84.48	23	82.63
3	82.32	10	82.25	17	79.83	24	83.99
4	88.10	11	81.88	18	89.44	25	82.35
5	88.70	12	85.67	19	82.00	26	85.89
6	90.91	13	84.03	20	86.97	27	85.07
7	80.43	14	82.30	21	83.18	28	93.28

As is depicted by the table, the average class score could fluctuate greatly from one week to the next. From week one to week six, there is a consistent score increase each week. Then, in week seven, the average score drops by almost ten percent and until week

twenty five, the scores don't seem to show a consistent pattern. From week twenty five to week twenty eight, there is again a consistent increase in scores shown.

Overall, when examining the data from the cloze spelling assessments, it is evident that there was an increase in the class average on the scores of the Achievement Tests, with more students receiving 100 percent each time and less students scoring below 70 percent. When looking at the class average by trimester, the percentage increased slightly each time. About half of the class showed an increase in percentage individually from one trimester to the next. The class mean did not show a consistent trend throughout the year on the weekly cloze assessments, but did show some trends at the beginning and end of the school year.

#### *Sentence Dictation Data*

The sentence dictation was another assessment tool, which was also typically administered once a week. During this assessment, the teacher would read several sentences that the students are expected to write on their paper, being careful to spell words correctly. After grading the students' writing, the number of words that they spelled incorrectly was recorded in a table. Similar to the cloze spelling assessments, the sentence dictation data was separated into the three trimesters. This made it possible to find the mean for each student in each trimester as well as a class average of misspelled words for each trimester. The class average of misspelled words per week for the first trimester was 3.37, with a range of .25 and 12 average words misspelled each week. The class average of misspelled words each week for the second trimester was 3.64, with individual students misspelling on average between 0 and 16.125 words each week. In the final trimester, the class average of misspelled words was 3.94, while individual

students averaged between .11 and 16.67 misspelled words each week. Between the first and second trimester, eleven students individually misspelled less words on average. From the second to third trimester, twelve students misspelled less words on average. Most students who had an increase or decrease in words misspelled on average had only a marginal change in scores. Out of 23 students, only two students had a change in the average amount of words misspelled that was greater than two.

Overall, the data gathered from the sentence dictation assessments demonstrated a slight increase as a class in the amount of words misspelled on average. Individually, most students did not show a significant change, but about half decreased the average number of misspelled words between each trimester.

## **Analysis**

### *Cloze Spelling Assessment Analysis*

The data on the cloze spelling assessments was collected based on student scores on weekly spelling assessments as well as three Achievement Tests that were administered throughout the year. The Achievement Tests were used as a pre-assessment before students were exposed to the in-context spelling curriculum, a check point to see how students were progressing, and a post-assessment to see what students learned and retained through the year. At the beginning of the year, the class average score on the Achievement Test was 69.86 percent. By the second achievement test, the class average score was 85.67, and by the final assessment, the class average was 93.28 percent. When just looking at these benchmarks, a clear upward trend is apparent. Because most students had never completed an assessment in this format before, an increase in scores from the first assessment to the second assessment was anticipated, as students may have

still been familiarizing themselves with this form of assessment when the first Achievement Test was administered. By the time students took the second assessment, they had completed over twelve similar assessments and the format of the test was not likely hindering their performance. The increase between the second Achievement Test and the third, however, is still significant and demonstrates that the students were retaining more of their learning and were increasing their understanding of how to correctly spell and use the high frequency words. In addition to the overall class average improving, the amount of students scoring below 70 percent decreased on each of the Achievement Tests, while the number of students scoring 100 percent increased with each assessment. On the final assessment, only three students scored below 70 percent, and two of those students are in the special education program for reading. This demonstrated how much progress the class as a whole made and the effectiveness overall of the spelling in-context program was for the general education students.

The special education students did not show a consistent trend through the year. This may be caused by several different factors. One thing I noticed in the special education students was a loss of motivation as the year went on. Because these two students were not at the second grade reading level, they had a difficult time following the story during the cloze spelling assessments, which usually resulted in them taking a longer amount of time to complete the assessment. These students did not seem to be embarrassed by this, but simply wanted to finish the task so that they could move on to the next thing. This could have significantly impacted their scores on the assessments, as they may have been trying to complete the assessment without thinking carefully about how to spell each word. Additionally, because these two students struggled in reading,

teaching spelling in-context may have been more difficult for them. It was already a struggle for them to read and understand something at grade level without focusing on specific words and what are appropriate contexts to use them. It is important for struggling readers to have this kind of training, but it may have been more discouraging and too difficult for these two students to grasp at their level of reading development.

When looking at the data collected from the weekly assessments, another upward trend is seen, though not as dramatic as the change seen in the class averages on the Achievement Tests. The data was separated into the three trimesters and a class average was found for each trimester. The first trimester class average score on weekly assessments was 83.43 percent, while the second trimester average score was 83.59 percent, and the third trimester average was 84.4 percent. There is a slight change between each trimester, and although it does not look like a very significant change, in each average score there are over 300 scores being used to calculate the average; thus, taking many scores to change in order to improve the overall average. When the data is examined on a week by week basis, it does not appear to demonstrate any trends, as the scores seem to increase one week and then decrease the next. This shift in scores reaffirmed the importance of collecting data over a long period of time, as it can shift so drastically from one week to the next. This fluctuation in scores each week may be caused by how students are feeling, what other things are going on that day, who is sitting next to them, and many other factors. For this reason, I separated the data into trimesters, as it helped to provide a clearer picture of what was happening during each part of the year and enabled me to see the trends that were occurring over the extended period of time. When looking at the year as a whole, and taking into consideration the average



scores from each trimester, it is apparent that students continued to show a consistent progression in their ability to spell and use high frequency words correctly in context.

### *Sentence Dictation Assessment Analysis*

The sentence dictation data was taken from another weekly assessment which required students to write a sentence that the teacher was dictating to them. These assessments were graded and the number of words that students misspelled was recorded. The data from this assessment was also divided into trimesters in order to show a clearer picture of the trends that may be occurring. For the first trimester, the average number of words that were misspelled by the class was 3.37, while the average for the second trimester was 3.64, and the average for the third trimester was 3.94. When looking at the sentence dictation data, I was hoping to see a decrease in the amount of words misspelled, but the data actually demonstrated a slight increase in the words misspelled. This would seem to indicate that although students have an increased understanding of how to appropriately use high frequency words, they are not yet transferring this learning over to their writing or other subjects. However, I believe that there are other factors leading to the increase of misspelled words, and that it doesn't necessarily indicate a lack of transfer. The sentence dictation can be extremely difficult for students, especially primary students who are still working to become comfortable in writing. At the beginning of the year, students seemed to be putting their best effort into the sentence dictation and working slowly in order to do their best work. As the year progressed, especially toward the end of the year, some students seemed to lose motivation when doing the sentence dictations and had a tendency to rush through their sentences simply

so that they could finish. This was especially evident with students who struggle more in writing or who take a longer time to process and rewrite the sentences, instead of taking time like they did in the beginning of the year, they rushed through the sentences and made simple mistakes. Additionally, the sentence dictations use more than just the high frequency words. Students may have been consistently spelling the high frequency words correctly, but missing some of the other, more difficult words. Perhaps a more accurate way to measure if students were transferring their learning to writing and other subjects would be to collect their writing journals each week. A random sample could be taken from these and looked at for only high frequency words and how many were spelled incorrectly. This would also probably help with students' lack of motivation, as they wouldn't be simply rewriting sentences that were dictated to them, but they would be writing about what they wanted. Because this project did not include any research or data of this nature, the sentence dictation data alone did not prove to be substantial evidence to determine whether or not teaching spelling in-context helps students to transfer their learning to writing or other subjects.

### **Implications/Recommendations**

In light of the data and analysis gathered from this research, I am left with several implications for the future as well as questions to research further.

The first implication I am left with is that teaching spelling in-context helps students develop a firm foundation in spelling with knowledge of the high frequency words. While using this method of teaching spelling, it became evident that students were remembering the words they were learning and actually using them appropriately. This leads to the conclusion that words are more effectively taught within a sentence than

in a list of single words. The list of single words doesn't teach students anything about the meanings of words and is more easily forgotten. However, when students first hear a word in a sentence, practice writing the word several times, take note of the patterns in the word, and practice using the word, they are much more likely to attach significance to that word and remember and spell it appropriately. Additionally, when spelling patterns and rules are taught in conjunction with this, students are able to take their learning and understanding of the high frequency words and apply it to other words in writing.

The second implication is that reading and spelling should be taught together. As the year progressed, it was evident that as students developed their reading vocabulary and skills, their spelling also improved. One student began the year lacking confidence in reading, and because of this, he did not enjoy reading. As we worked together to improve his attitude toward reading, he became more confident and excited about reading. Over time, as his reading progressed, his spelling ability also improved dramatically. By the end of the year, this student was excited about both reading and spelling and couldn't wait to take home his spelling assessment to show his proud parents. This experience demonstrated the importance of not separating reading and spelling instruction. When spelling is taught in the context of reading, it is easier for students to make connections between the two, and for improvement in one area to affect improvement in the other area as well. Spelling can easily be integrated into a reading curriculum, and should be in order to help students begin to make important connections between the two subjects.

While teaching spelling in-context proved to be successful and effective for most students, it became evident to me that some students still seemed to need to practice

words using rote memorization. The two special education students in my classroom and one other student who demonstrates signs of dyslexia were the only students whose data seemed to indicate that they had not improved in spelling throughout the year. Taking this into consideration, when beginning to teach spelling in-context, it is important to know your students and don't be afraid to modify the curriculum to fit individual students' needs. In this class, it may have been better to assess these students at a different time so that they could focus. It also may have been beneficial for them to write fewer sentences so that they weren't discouraged and had the opportunity to feel successful.

After the research that was done, I am still left with a few questions. Because the special education students in my classroom and one struggling reader were unable to find success in this spelling curriculum according to the data, what is the best way to teach spelling to students who continue to struggle with reading? Obviously, reading and spelling go hand in hand, but how can we most effectively reach these students before they acquire reading skills at grade level? There will always be students like this in every classroom, so this seems to be an essential question to answer. Additionally, because the sentence dictation did not provide sufficient evidence to determine whether or not teaching spelling in-context helps students transfer their learning to other areas, I am left wondering if this method of teaching does help students transfer spelling knowledge into other areas.

## **Conclusion**

I began the research for this paper striving to find a way to help students develop into lifelong spellers and to find an alternative to the traditional Friday spelling tests,

which for so long have seemed ineffective. Teaching spelling in-context seemed to be a great solution for this, as it requires students to learn how words are used and to practice using them rather than just learning a list of single words. As I conducted my research and began to teach using these methods, I noticed an increased interest and excitement from the students around spelling. They seemed to appreciate this method of learning spelling and actually enjoyed the consistent spelling lessons. The data from the cloze spelling assessments depicted steady growth in students throughout the year. Although the scores may have fluctuated from week to week, when broken up by trimesters, the improvement in scores was evident; leading to the conclusion that teaching spelling this way was enabling students to use the words appropriately in context. The sentence dictation data did not show similar results. Instead, the students appeared to be misspelling slightly more words each trimester, rather than improving. This led to the conclusion that further research was necessary in order to determine if students were truly transferring their learning in spelling to other subjects. Teaching spelling in-context is an effective way to help students cement spelling words into long term memory, as the words have meaning and importance to students. Spelling is also most effectively taught in conjunction with reading, which enables students to easily make connections between the two subjects. It is my hope that as I continue to teach and learn more about teaching spelling in-context, my students will be able to develop into lifelong spellers, who are confident in their ability to spell and use patterns and rules to help them determine the spelling of unknown words.

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## Appendix



### Achievement Test 3

#### *Three Pigs and a Hungry Wolf*

Once there were three \_\_\_\_\_ pigs \_\_\_\_\_  
the city. The pigs \_\_\_\_\_ "We want to \_\_\_\_\_  
country houses." So, \_\_\_\_\_ went to the country and began  
to build.

One pig built \_\_\_\_\_ straw \_\_\_\_\_  
house \_\_\_\_\_ built by noon. Another pig used sticks and  
finished his house by \_\_\_\_\_ o'clock. The third pig kept  
working \_\_\_\_\_ he wanted a strong stone house.

The third pig finished building his house of \_\_\_\_\_ stones  
just as the sun went \_\_\_\_\_. That's when \_\_\_\_\_  
usually want dinner. The wolf wanted dinner. Now, \_\_\_\_\_ do  
wolves \_\_\_\_\_ to eat for dinner?