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ABSTRACT

A study described and evaluated a program for increasing student retention and transfer of weekly spelling words into daily writing. The targeted population consisted of second-grade students in two different middle-class communities. One community was growing, while the other was more established; both are located in suburbs of Chicago, Illinois. The problems of low retention and transfer of spelling words were documented through teacher observation, assessment of student writing samples, and data collected from pretests. Analysis of probable cause data revealed that spelling programs placed little or no emphasis on previously learned words. It was reported that students were not required to use these words for authentic purposes outside of the spelling lessons, and that spelling programs did not emphasize needed spelling, editing, and reference skills. Teachers had observed that students often misspelled words in writing even after the words had been presented in spelling lessons. A review of solution strategies combined with an analysis of the problem setting results in the selection of three major categories of intervention: requiring students to apply spelling words in authentic writing assignments; editing for spelling during the final stage of writing; and creating a personal spelling dictionary. Post intervention data indicated an increase in student ability to retain and transfer weekly spelling words during authentic writing assignments. Students also demonstrated an increase in the use of various spelling strategies. (Contains 31 references, and 8 tables and 8 figures of data. Appendixes present the pretest, a spelling trend assessment sheet, and a "Spelling Stars" worksheet.) (Author/RS)

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**IMPROVING STUDENT SPELLING SKILLS THROUGH THE USE OF
ACTIVITIES FOCUSING ON RETENTION AND TRANSFER**

by

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Submitted in partial fulfillment of the requirements for the
degree of Master's of Arts in Teaching and Leadership

**Saint Xavier University & IRI/Skylight
Field-Based Master's Program**

**Action Research Project
Site: Elk Grove, Illinois
Submitted: April, 1996**

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Abstract

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Date: April 23, 1996

Title: Increasing Student Retention and Transfer of Spelling Words in Writing

This report described a program for increasing student retention and transfer of weekly spelling words into daily writing. The targeted population consisted of second grade students in two different middle class communities. One community was growing, while the other was more established; both are located in suburbs of Chicago. The problems of low retention and transfer of spelling words were documented through teacher observation, assessment of student writing samples, and data collected from pretests.

Analysis of probable cause data revealed that spelling programs placed little or no emphasis on previously learned words. It was reported that students were not required to use these words for authentic purposes outside of the spelling lessons, and that spelling programs did not emphasize needed spelling, editing and reference skills. Teachers had observed that students often misspelled words in writing even after the words had been presented in spelling lessons.

A review of solution strategies suggested by knowledgeable others, combined with an analysis of the problem setting, resulted in the selection of three major categories of intervention: required students to apply spelling words in authentic writing assignments, edit for spelling during the final stage of writing, and create a personal spelling dictionary.

Post intervention data indicated an increase in student ability to retain and transfer weekly spelling words during authentic writing assignments. Students also demonstrated an increase in the use of various spelling strategies.

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Chapter 1
PROBLEM STATEMENT AND CONTEXT

General Statement of Problem

The students of the targeted second grade classes are unable to retain and transfer weekly spelling words to written work. Evidence for the existence of the problem includes teacher observation of daily written work, and assessment of student writing samples.

The Immediate Problem Context: School A

School A is a 1-6 elementary school located in a northern suburb of Chicago, Illinois, consisting of 484 students. This elementary school, along with four other 1-6 buildings and one K-only building, feeds into one junior high school.

The student population is 64.7 percent White, 30.0 percent Asian/Pacific Islander, 4.1 percent Hispanic, 0.6 percent Black, and 0.6 percent Native American. Two point nine percent of the students are low income students with three point one percent of the students being Limited English Proficient (LEP). Limited English proficient students are those who have been tested and found eligible for Bilingual Education. Low income students are pupils from families

receiving public aid or being supported in foster homes with public funds or eligible to receive free or reduced-price lunches. The attendance rate at this school is 96.2 percent. The student mobility rate is 11.8 percent. This school has no chronic truants.

The staff of this school includes one principal, eighteen first through sixth grade teachers, three special education teachers and three assistants, one full-time librarian and an assistant, one full-time physical education teacher, one full-time art teacher, one full-time music teacher, one full-time social worker, one full-time speech therapist, one full-time reading coordinator, one half-time teacher of the gifted, one full-time learning disability resource teacher and an assistant. Auxillary personnel include two secretaries, one full-time health aid with a full-time nurse available, and three custodians. There are two full-time psychologists and part-time translators available upon request. There is a half-day ESL Program available for non-English speaking students. There are self-contained classrooms for K-3 learning disabled students, and the Regular Education Initiative Program which involves mainstreaming learning disabled students in grades 4-6 into the regular classroom. Kindergarten through third grade learning disability classrooms are located in other district schools.

The school's teaching staff has an average of seventeen and a half years teaching experience. Seventeen percent of the teachers have a Bachelor's Degree, forty-three percent have a Bachelor's Degree with an average of forty-nine extra hours, seven percent have a Master's Degree, and thirty-three percent have a Master's Degree with an average of forty-eight extra hours. The average teacher salary is \$46,096.

The average time allocated to core subjects per week includes fifty-five minutes devoted to mathematics, twenty-nine minutes devoted to science, twenty-nine minutes devoted to social studies, and one hundred thirty-seven minutes devoted to language arts including reading, English, and spelling. The school curriculum also provides computer assisted instruction, a gifted program for students in grades four through six, foreign language at the junior high level, health instruction, and instrumental music for students in grades four through eight. The average class size is 25.3 students.

The school adopted a new literature-based reading series for the 1993-1994 school year. This new reading series, an English textbook, and a spelling textbook are used separately to teach language arts. Spelling is currently being taught using a published series which provides a weekly list of words. Several words within the list often have a phonetic relationship to one another. Students complete spelling workbook pages daily, and take a test on the words on Friday.

The Immediate Problem Context: School B

School B is a K-4 elementary school located in a western suburb of Chicago, Illinois, consisting of 778 students. This elementary school, along with five other K-4 buildings and one 5-6 building, feeds into one junior high school.

The student population is 73.4 percent White, 16.6 percent Asian/Pacific Islander, 5.0 percent Black, 4.9 percent Hispanic, and 0.1 percent Native American. One point eight percent are low income students with seven point six percent of the students being Limited English Proficient (LEP). The attendance

rate at this school is 95.6 percent. The student mobility rate is 13.9 percent. This school has no chronic truants.

The staff of this school includes; one principal, one assistant principal, twenty-eight kindergarten through fourth grade teachers with one aide for an inclusion student, one librarian and two full-time library assistants, one part-time library assistant, one full-time physical education teacher, one part-time physical education teacher, one full-time music teacher, one part-time music teacher, one part-time social worker, one full-time speech therapist, one part-time speech therapist, one full-time reading coordinator, one full-time special education resource teacher, one teacher of a self-contained behavior disorder class with one assistant, one part-time psychologist, two full-time bilingual assistants, and one part-time bilingual assistant. Auxillary personnel include; two secretaries, one part-time nurse, one part-time health aide, and three custodians. There is one gifted coordinator available upon request. There is a full-time assistant available to work with first and fourth grade students exhibiting difficulties in reading and math.

The school's teaching staff has an average of nine years teaching experience. Twenty-six percent of the teachers have a Bachelor's Degree, twenty-nine percent have a Bachelor's Degree with an average of twenty-three extra hours, twenty-four percent of the teachers have a Master's Degree, and eighteen percent have a Master's Degree with an average of thirty-one extra hours. The average teacher salary is \$33,084.

The average time allocated to core subjects per week includes forty-five minutes devoted to mathematics, thirty minutes devoted to science, thirty minutes devoted to social studies, and one hundred fifty minutes devoted to

language arts including reading, English, and spelling. The school curriculum also provides computer assisted instruction, art instruction, and health instruction. The average class size is 26.1 students.

The school is currently using a literature-based reading series, and various programs to provide English instruction including the Illinois Writing Project used at the second grade level. Spelling instruction is provided through a program developed by district teachers. The program consists of a weekly word list, a pretest, daily word study, a weekly spelling page, and a posttest.

The Surrounding Community: School A

The elementary school is part of a consolidated school district located in a northern suburb of Chicago. This district serves the unincorporated areas of four surrounding communities. The administrative staff at the district level includes one school superintendent, one director of curriculum and instruction, one director of personnel and student services, one supervisor of operations and maintenance, one director of data processing, one business manager, and one half-time curriculum resource coordinator. The average administrative salary is \$75,165. The district has a population of 3,400 students. The district student population is 59.9 percent White, 27.6 percent Asian/Pacific Islander, 8.5 percent Hispanic, 3.9 percent Black, and 0.2 percent Native American. The results of a recent district survey showed that 64.4 percent of the students reside in homes where English is spoken as a second language (East Maine School District, 1994).

According to the 1990 census, the median family income is \$49,570. The median per capita income is \$20,028. Eighty-three point nine percent of the

adults are high school graduates and twenty-seven point six percent are college graduates. In the district community work force, the census reflected a total of 70,616 employed individuals out of the total population of 128,796. Thirty-four point six percent are in sales administration, 31.6 percent managerial-professional, 13.2 percent service-occupation, 10.6 percent operators-labor, 9.65 percent production-repair, 3.0 percent unemployed, and 0.4 percent farming-forestry.

The community has a total of 49,706 housing units. Seventy-four point five percent were built between 1950 and 1980. Of the available housing 60.1 percent is owner occupied housing, 23.9 percent is renter occupied housing, and 15.7 percent is condominium housing.

The Surrounding Community: School B

The elementary school is part of a consolidated school district located in a western suburb of Chicago. The administrative staff at the district level includes one school superintendent, one director of curriculum and instruction who also serves as an assistant superintendent, one assistant director of curriculum and instruction, one director of personnel, one director of special education, one supervisor of operations and maintenance, and one business manager. The average administrative salary is \$71,727. The district has a population of 4,797 students. The district population is 81.3 percent White, 10.7 percent Asian/Pacific Islander, 4.1 percent Hispanic, 3.6 percent Black, and 0.3 percent Native American.

According to the 1990 census, the median family income is \$51,537. The median per capita income is \$17,950. Eighty-seven point five percent of the

population are high school graduates and twenty-seven point three percent are college graduates. In the district community work force the census reflects a total of 56,079 employed individuals of the total population of 100,573. Thirty-two point four percent are in service-occupation, 29.1 percent managerial-professional, 16.1 percent unemployed, 15.2 percent sales administration, 11.8 percent operators-labor, 10.7 percent production-repair, and 0.8 percent farming-forestry.

The community has a total of 35,362 housing units. Forty-six point one percent were built between 1970 and 1979. Of the available housing 65.9 percent is owner occupied housing, 23.1 percent is renter occupied housing, and 10.9 percent is condominium housing.

Regional and National Context of the Problem

The problems with traditional spelling methods have generated concern at both the local and national levels. It has been found that traditional programs do not require students to apply or use their weekly spelling words in activities outside of the spelling lessons (Bos & Vaughn cited in Scheuermann, Jacobs, McCall, & Knies, 1994). In many cases spelling is not meaningful to students because they do not recognize it as a tool necessary for expressing their ideas in written language. It has been found that although students are often able to spell words correctly on a weekly spelling test, this does not ensure their ability to spell their words correctly in their written work. The inability to transfer spelling skills into daily writing has caused conflict between primary and intermediate teachers. In primary grades spelling correction is often overlooked during editing. These problems have raised national concerns.

A person's ability to communicate effectively in written form is often based upon his/her ability to spell correctly. According to Sitton (1996):

Beyond the obvious writing fluidity that good spelling enhances, there is another advantage to spelling well in the writing process. It is acceptance. When written communications contain misspellings, their worth is diminished in the eyes of the reader... and unfortunately, so is the personal worth of the writer. Misspellings create a subtle, but certain, mindset of acceptability within the reader that serves to subvert the effectiveness of written communication. (p. 1)

"Not too long ago, it was rare indeed to find misspellings in publications and on professionally lettered signs. Unfortunately, that is no longer the case. One can now find misspellings wherever one looks, including in the Los Angeles Times, the New York Times, and, yes, even in college publications written by the faculty and the administration" (Teitelbaum, 1991, p.353). In advertising, words are often purposely misspelled. Through its inappropriate modeling, this reinforces the idea that correct spelling is not important.

Spelling has always been an area of concern. Many professional writers have raised concerns regarding the lack of student/teacher motivation and teacher preparation in the area of spelling. The fact that many words in the English language are irregular and unpredictable in their spellings, and the lack of variety in the strategies, materials, and methods available to teachers are further concerns. Teaching spelling in isolation contradicts its main purpose, which links spelling to writing. All of these concerns have been associated with the inability to transfer spelling skills into written language.

Chapter 2
PROBLEM EVIDENCE AND PROBABLE CAUSE

Problem Evidence

The students of the targeted second grade classes exhibit difficulty with spelling in written work. In order to document the extent of students' errors, students were given two pretests. The first test required the students to spell twenty-five high frequency words in isolation. For the second test the students were given six dictation sentences made up of these high frequency words (Appendix A). Another form of documentation was a writing sample collected from each student. The students were asked to write about themselves. This information provided a baseline of students' spelling ability at the beginning of second grade.

The tables on the following pages show how students performed on the three forms of documentation listed above. Each table is followed by an interpretation and analysis of this information.

**TABLE I-A
PRETEST OF HIGH FREQUENCY WORDS
SCHOOL A AUGUST 1995**

HIGH FREQUENCY WORD	NUMBER OF CORRECT SPELLINGS	NUMBER OF MISSPELLINGS
of	14	9
who	9	14
you	20	3
are	20	3
they	15	8
from	20	3
have	17	6
what	13	10
were	5	18
there	10	13
your	12	11
which	3	20
their	2	21
said	8	15
many	5	18
would	5	18
more	11	12
could	7	16
first	8	15
been	4	19
people	4	19
use	5	18
know	10	13
where	6	17
very	9	14

**TABLE I-B
PRETEST OF HIGH FREQUENCY WORDS
SCHOOL B AUGUST 1995**

HIGH FREQUENCY WORD	NUMBER OF CORRECT SPELLINGS	NUMBER OF MISSPELLINGS
of	21	5
who	8	18
you	23	3
are	17	9
they	7	19
from	9	17
have	15	11
what	6	20
were	4	22
there	3	23
your	11	15
which	0	26
their	0	26
said	4	22
many	5	21
would	4	22
more	13	13
could	5	21
first	7	19
been	3	23
people	1	25
use	4	22
know	5	21
where	1	25
very	7	19

This table indicates that School A students as a class correctly spelled 42 percent of the high frequency words when given in isolation. School B students as a class correctly spelled only 28 percent of the high frequency words when given in isolation. The significant difference in scores may be partially due to

the fact that School A begins formal spelling instruction in first grade whereas School B does not begin any formal spelling instruction until second grade. As stated by Courtney (1995) at a recent seminar, formal spelling instruction should begin at age seven or the second half of first grade. Although the first grade program in School A taught four out of the 25 words on the table listed above (of, from, what, there) many students did not retain the standard spellings of these words.

TABLE 2-A
PRETEST OF DICTATION SENTENCES
SCHOOL A AUGUST 1995

HIGH FREQUENCY WORD	NUMBER OF CORRECT SPELLINGS	NUMBER OF MISPELLINGS
of	21	2
who	7	16
you	22	1
are	18	5
they	12	11
from	20	3
have	16	7
what	12	11
were	9	14
there	11	12
your	15	8
which	3	20
their	1	22
said	8	15
many	9	14
would	6	17
more	16	7
could	7	16
first	12	11
been	5	18

TABLE 2-B
PRETEST OF DICTATION SENTENCES
SCHOOL B AUGUST 1995

HIGH FREQUENCY WORD	NUMBER OF CORRECT SPELLINGS	NUMBER OF MISPELLINGS
of	17	9
who	8	18
you	21	5
are	13	13
they	7	19
from	8	18
have	10	16
what	6	20
were	6	20
there	2	24
your	10	16
which	0	26
their	0	26
said	3	23
many	6	20
would	4	22
more	10	16
could	5	21
first	7	19
been	4	22

TABLE 2-A CONTINUED

HIGH FREQUENCY WORD	NUMBER OF CORRECT SPELLINGS	NUMBER OF MISSPELLINGS
people	5	18
use	7	16
know	12	11
where	7	16
very	14	9

TABLE 2-B CONTINUED

HIGH FREQUENCY WORD	NUMBER OF CORRECT SPELLINGS	NUMBER OF MISSPELLINGS
people	1	25
use	4	22
know	7	19
where	1	25
very	6	20

One significant difference found between Table 1-A and Table 2-A was a 17 percent increase in the number of overall correct spellings when the students were given the words in dictation sentences. Students at School A may be able to more easily recognize misspellings when they are written in context. This again may be a result of the formal spelling instruction given in first grade at School A.

Table 2-B reflects that when students at School B were presented with the same list of high frequency words in dictation form scores were consistent with the results of words presented in isolation as presented in Table 1-B. There was only a two percent decrease when words were used in context.

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Tables 3-A and 3-B present the individual student results of the high frequency and dictation pretests.

TABLE 3-A
STUDENT SCORES ON PRETESTS
SCHOOL A AUGUST 1995

STUDENT	HIGH FREQUENCY PERCENT CORRECT	DICTION SENTENCES PERCENT CORRECT
1	40%	60%
2	36%	32%
3	40%	64%
4	24%	24%
5	28%	32%
6	64%	60%
7	48%	60%
8	8%	28%
9	48%	56%
10	56%	80%
11	72%	80%
12	36%	24%
13	28%	24%
14	32%	52%
15	68%	52%
16	52%	60%
17	12%	20%
18	24%	28%
19	68%	56%
20	32%	52%
21	12%	8%
22	48%	56%
23	92%	92%
24		
25		
26		

TABLE 3-B
STUDENT SCORES ON PRETESTS
SCHOOL B AUGUST 1995

STUDENT	HIGH FREQUENCY PERCENT CORRECT	DICTION SENTENCES PERCENT CORRECT
1	28%	28%
2	60%	60%
3	32%	24%
4	16%	16%
5	68%	72%
6	20%	20%
7	4%	4%
8	64%	64%
9	20%	20%
10	16%	20%
11	8%	4%
12	4%	4%
13	16%	4%
14	72%	64%
15	12%	12%
16	0%	0%
17	56%	64%
18	12%	8%
19	20%	16%
20	16%	4%
21	0%	4%
22	68%	76%
23	68%	80%
24	4%	0%
25	24%	16%
26	20%	12%

When studying the tables it was found that students at School A had scores that ranged from eight to 92 percent correct. Students at School B had scores that ranged from zero to 68 percent correct. In order to determine an overall

baseline, the mean and median were found for each school. School A had a mean score of 42 percent and a median score of 40 percent. School B had a mean score of 28 percent and a median score of 20 percent. By studying the mean and median scores of both schools it can be concluded that students are able to spell less than 50 percent of the chosen high frequency words used most often in writing.

TABLE 4-A
NUMBER OF SPELLING
ERRORS IN STUDENT
WRITING SAMPLES
SCHOOL A AUGUST
1995

STUDENT	NUMBER OF ERRORS	TOTAL NUMBER OF WORDS IN STORY
1	10	45
2	11	42
3	7	66
4	18	55
5	13	52
6	8	33
7	5	49
8	5	39
9	5	50
10	1	39
11	8	75
12	11	36
13	12	54
14	14	52
15	16	65
16	9	66
17	15	79
18	7	24
19	9	71
20	2	55
21	15	38
22	5	31
23	5	65
24		
25		
26		

TABLE 4-B
NUMBER OF SPELLING
ERRORS IN STUDENT
WRITING SAMPLES
SCHOOL B SEPTEMBER
1995

STUDENT	NUMBER OF ERRORS	TOTAL NUMBER OF WORDS IN STORY
1	6	29
2	7	36
3	12	27
4	4	11
5	11	73
6	1	14
7	8	21
8	7	62
9	7	16
10	9	45
11	1	3
12	11	29
13	7	15
14	8	46
15	9	30
16	N/A	0
17	4	42
18	6	25
19	3	11
20	1	19
21	2	5
22	5	71
23	0	18
24	3	5
25	5	11
26	1	11

When studying Table 4-A it was found that students at School A had a range in the number of errors from one to 18. The total number of words used ranged from 24 to 79. Students at School B had a range in the number of errors from zero to 12. The total of number of words used ranged from zero to 73. It should be stated that for Student 16 from School B the number of errors could not be calculated because the student wrote a series of 11 letters with no spacing or distinguishable words, therefore N/A (not applicable) was recorded on the table.

In order to determine an overall baseline for student writing samples, the mean and median were found for each school. School A had a mean score of 51 words used in the writing samples with a mean score of nine errors. School B had a mean score of 26 words used in the writing samples with a mean score of five errors. The median scores for School A were 52 words used in the writing samples with nine errors. The median scores for School B were 19 and 21 words used in the writing samples with five and six errors.

Factors that need to be taken into consideration when observing the decrease in the number of errors include the fact that students repeat words they are more familiar with and have an easier time spelling. These factors may also have an affect on the total number of words used because each word was counted each time it was used. Misspelled words were also counted each time they were misspelled.

Probable Causes

It is important that students learn to become more than just good spellers. They need to become real-world spellers and be able to retrieve words from long-term memory, spot spelling errors when proofreading their work, and be able to use a dictionary (Angeletti & Peterson, 1993).

So often children are considered good spellers when words are spelled correctly on a weekly test. Manning and Manning (1994) challenge that these same "good spellers" are often unable to retain and transfer the words correctly when writing for a variety of purposes. This is also supported by the students' writing samples that were collected at the beginning of second grade.

The current series, Houghton Mifflin Spelling and Vocabulary, 1994, used at School A exposes students to 18 words per week, many of which are not high-frequency words. Therefore, the words are less meaningful to students, and are difficult for students to transfer to writing. The number of words is often overwhelming to students.

School B does not begin formal spelling instruction until the second grade. Both Gentry (as cited by Sipe, 1994) and Cramer (1978) state that formal spelling programs should begin when students reach a first grade reading level. It is at this stage that formal spelling programs may be most beneficial because students are ready to begin using various strategies to improve spelling ability.

When reviewing the current literature many causes were presented which might explain students' difficulties with being able to transfer and retain spelling words. Due to the increase of misspellings found in numerous publications and the outcry of businesses and higher educational institutions,

there has been an increase in research concerning spelling (Sipe, 1994). Many of the traditional approaches have proven to be ineffective at helping students become proficient spellers.

Teacher and student motivation towards spelling is often low. The teaching of spelling is often routine and thought of as unimportant, or as Matz (1994) states:

Although separate and distinct in the curriculum, spelling is something of a "nonsubject." You don't really teach it so much as you test it, and the weekly cycle is so deeply ingrained in educational practice that even preservice teachers can describe the weekly "pretest-study-posttest" approach. (p. 70)

Schlagal and Schlagal (1992) also point out that teacher reliance on published spelling programs, lacking instructional strategies, tend to discourage teachers from giving actual spelling instruction.

Spelling is a subject often taught in isolation, and not as a tool for writing. Therefore, students do not recognize the primary purpose of needing to spell correctly, which is to be able to communicate effectively (Allred, 1993; Marlow & Ediger, 1994; Scott, 1994). As Cramer (1978) points out:

Textbooks tend to rely on spelling exercises and activities that emphasize either the teaching of linguistic rules, or the teaching of visual-tactile techniques, or a combination of the two. Linguistic rules and visual-tactile techniques alone are not sufficient to develop spelling competence.

Spelling achieves functional meaning only through writing. The final test of good spellers is how well they spell words in compositions, not how well they spell words on tests or in spelling bees. (p.104)

Many words presented in traditional spelling programs are unfamiliar to students and are not used frequently in students' writing, or as Marlow and Ediger (1994) state:

It makes no sense for children to learn to spell a word that is not in their speaking or writing vocabulary. There is no point in teaching children to spell words that they are unlikely to use in the near future. (p. 4)

In many cases, the number of words presented to students on a weekly basis can be overwhelming. Second grade students may be exposed to as many as 16 to 18 words. Students are also placed in spelling programs according to grade level. This uniform placement does not take into account the students' individual development levels.

Many spelling errors can be due to the various levels of students' language development (Invernizzi, Abouzeid, & Gill 1994; Treiman, 1994). As a result of the complexity of the English language students may lack the knowledge of how to encode words into English orthography (Cooksey, Freebody, & Bennett, 1990).

As stated above, there are many probable causes as to why students are unable to retain and transfer weekly spelling words into written work. These may include:

1. lack of motivation,
2. current spelling programs do not require students to use spelling words outside the context of the spelling lesson,

3. correct spelling is not meaningful to students because it is not seen as a tool for writing,
4. the complexity of English orthography makes correct spelling difficult to learn,
5. many words presented in spelling lessons are unfamiliar and/or out of context,
6. an overwhelming number of words presented in a weekly spelling list,
7. spelling programs put little emphasis on maintaining previously learned words,
8. and spelling programs do not provide a large variety of strategies that could be used when learning to spell.

In the next chapter solutions will be presented to address probable causes effecting the targeted second grade classes.

Chapter 3

THE SOLUTION STRATEGY

Review of the Literature

The research continually stated the importance of relating spelling to writing. Spelling must be thought of as a tool that writers need in order to be able to express themselves and communicate effectively and accurately in written form (Allred, 1993; Scott, 1994; Sipe, 1994). Teachers need to help students recognize spelling as a tool by providing students with opportunities to use weekly spelling words outside the context of a spelling lesson. Teachers can accomplish this by providing students with daily opportunities to write for authentic purposes (Barone, 1992). Providing students with opportunities to write thank you notes, letters to parents or friends, journals, original stories, and poems are some of the ways in which students can write for authentic purposes. When students are given authentic purposes for writing, students will become more aware of the need for spelling accuracy. Students may also become more motivated.

Since the main purpose of being able to spell correctly is to be able to communicate effectively in writing, students need to be exposed to words that are most frequently used in writing (Angeletti & Peterson, 1993). In order for

students to develop a high degree of retention, students must repeatedly practice using spelling words in original writing. According to Sipe (1994):

Too often, words that were spelled correctly on Friday's test show up misspelled on Monday's writing assignment. Students need repeated practice to assure long-term retention, and this practice must be in the context of their own writing. While the traditional method of writing each word ten times has no proven effect, using spelling words in original writing correlates to a high degree of retention. (p.3)

Teachers need to be responsible for making sure that the students correctly spell previously learned words.

Research shows that the number of spelling errors can be reduced if students are taught to proofread and edit before writing a final draft (Calkins, 1986 and Graves, 1983; as cited by Bradley & King, 1992). To help students focus on spelling in the editing stage of writing a spelling trend assessment sheet can be used (Appendix B). As described by both Glazer (1994) and Lacey (1994) this assessment sheet helps students identify misspelled words and correct the misspellings when used in conjunction with teacher/student conferencing during the editing stage of writing. The spelling trend assessment also helps teachers identify phonetic and orthographic skills that students are having difficulty with, and need to be addressed (Glazer, 1994; Matz, 1994).

Due to the complexity of the English language students need to be exposed to the various strategies used to figure out how a word is spelled (Bean & Bouffler as cited by Weiner, 1994). Turner and Quinn, 1986, as cited by Topping, 1995 conclude, "The learner must draw on several strategies...no single strategy can be used to overcome all irregularities in written

English" (p. 239). One strategy is to have students generate individual spelling lists (Matz, 1994; Topping, 1995). Individualized lists give students ownership and a sense of responsibility for the words being studied. A second strategy investigated by Castle, Riach, & Nicholson (1994) is to train students in phonological awareness. This may help students know where to begin when attempting to write a word not yet in the students' spelling vocabulary. A third strategy is to teach students decoding by analogy, that is, to teach students to look for familiar spelling patterns in order to identify unfamiliar words (Brown, Sinatra & Wagstaff, 1993). Another strategy is to have each student create a personal spelling dictionary. The words included in the personal spelling dictionary would be those words generated from the students' own writing, as well as, weekly spelling words (Angeletti & Peterson, 1993; Lacey, 1994; Scheuermann, et al., 1994). Angeletti and Peterson (1993) also recommend that a class dictionary be created. This dictionary would be similar to the personal dictionaries, however, the entire class would generate words to be included. Words in this dictionary may include words generated from the different content areas. A final strategy to consider would be the teaching of reference skills. Students must learn how to use a published dictionary, electronic spell checkers, human resources, or other reference materials available. The teacher should also use modeling as a means of teaching students the various strategies used to correct misspellings.

The literature suggests a variety of solutions which may better enable students to retain and transfer spelling words in writing. When spelling and writing are linked students gain a better understanding of the importance of correct spelling. Research shows that students must be given ample

opportunities to work with words using a variety of techniques and strategies. Students may become better spellers if correct spelling can be seen as a means to an end, that is, to be able to communicate effectively.

Project Outcomes and Solution Components

After researching the problem of students' inability to retain and transfer weekly spelling words, many causes were explored and possible solutions investigated. Using the information gathered during research the following terminal objectives have been formulated. Through the interventions stated in the objectives the researchers hope to increase students' ability to retain and transfer spelling words into writing.

As a result of requiring students to apply spelling words in authentic writing assignments, during the period of September 1995 to January 1996, the second graders will increase the retention and transfer of weekly spelling words as measured by teacher journaling and student spelling trend assessments.

As a result of editing for spelling during the final stage of writing, during the period of September 1995 to January 1996, the second graders will learn to identify spelling errors and be able to apply various strategies used to figure out how a word is spelled, i.e.: dictionary, other references, sounding out words, and asking others for assistance, as measured by an assessment of student writing determining the percentage of misspelled words, a posttest of high frequency words, and a posttest of dictation sentences.

As a result of creating a personal spelling dictionary, during the period of September 1995 to January 1996, the second graders will increase the frequency of spelling word use and personal word banks, as measured by teacher observation, monthly tally sheet of spelling errors, and percentage of misspelled words in student writing samples.

In order to accomplish the terminal objectives, the following processes are necessary

1. Create or acquire a spelling trend assessment.
2. Teach students to use spelling trends assessment sheets when editing writing.
3. Create or acquire a sticker chart to help motivate students to use various strategies to correct misspelled words when using the spelling trend assessment during editing.
4. Have students develop personal spelling dictionaries.
5. Create a class dictionary.
6. Give students pretests of high frequency words and dictation sentences to determine baseline.
7. Collect writing samples from students to analyze students' spelling ability at the beginning of second grade.
8. Create or acquire a monthly tally sheet to tabulate the frequency of misspelled words in daily work.
9. Teach students dictionary and reference skills.
10. Teacher modeling of spelling strategies.

Action Plan for the Intervention

A. Apply Spelling Words in Authentic Writing Assignments

1. give students pretests in September 1995
 - a. students will be given a list of twenty-five high frequency words
 - b. students will be given six dictation sentences which consist primarily of the twenty-five high frequency words

2. create or acquire monthly tally sheets
 - a. sheets will be used to keep track of the number of spelling errors found in various writing samples
 1. student stories
 2. student response worksheets
 3. student journals
 - b. one of the assignments (as listed in a) will be selected each week for tallying
 - c. tally sheets will be monitored to see if the total number of misspelled words decreases
3. collect writing samples from students
 - a. students will be required to write a story about themselves at the beginning of the year
 1. get a baseline of student spelling ability
 2. get a baseline of student writing ability
 - b. teachers will collect monthly writing samples from students
4. give students posttest in January 1996 (as in #1)

B. Create Personal Spelling Dictionaries

1. dictionary will consist of pages labeled alphabetically
2. beginning in September 1995, students will write spelling words weekly in spelling dictionaries
3. teach students dictionary and reference skills
 - a. review alphabetical order
 - b. practice writing spelling words in alphabetical order using teacher modeling and independent practice
 - c. have students practice locating spelling words in a published dictionary in groups and/or independently
4. students will be required and encouraged to use words from spelling dictionaries in written assignments
 - a. beginning in October 1995, students will be required to use a minimum of five words from personal spelling dictionaries in one journal entry per week
 - b. students will be encouraged and/or required to look for words they need assistance with before seeking help

c. through the use of other reference materials or teacher assistance, new words will continually be added to personal spelling dictionaries for future reference

C. Create a Class Dictionary

1. a pocket chart will be used
 - a. each pocket will be labeled with a letter of the alphabet
 - b. words will be written on index cards to be placed in the pockets of the class dictionary
2. weekly spelling words will be written on index cards and placed in a class dictionary
3. high interest words from content areas will be written on index cards and added to the class dictionary

D. Editing for Spelling During the Final Stages of Writing

1. create or acquire a spelling trend assessment form
 - a. used to identify misspellings found in written work
 - b. used to identify spelling error patterns which need to be addressed by teacher
2. teach students to use spelling trend assessment form
 - a. students will identify misspelled words in draft and list on the spelling trend assessment form
 - b. students will use various reference sources to find correct spellings of words listed; these may include personal spelling dictionaries, published dictionaries, peers, electronic spell checks, classroom charts, and teacher
 - c. during student/teacher conferences the spelling trend assessment form will be reviewed
 - d. during conferences unnoticed misspellings will be pointed out by teacher
 - e. students will use various reference sources to complete corrections found during conferencing
 - f. provide each student with a sticker chart to keep track of the number of words corrected on the first attempt
 - g. the teacher will provide the correct spellings for words students were unable to correct on their own

h. students will write all the words corrected on the spelling trend assessment sheet in their personal spelling dictionaries

Methods of Assessment

In order to assess the effects of the interventions, after a four month period students will be regiven the same tests given in September. The percentages indicating the number of misspelled words will then be compared. The tests will reflect students' ability both to spell words in isolation and in written form. In addition to comparing the pretest and posttest scores, teachers will be reviewing charts kept on a monthly basis containing percentages of misspellings in a story, a form of written response, and a journal entry for each student. The percentages will be looked at to see if there is a decrease in the number of misspelled words in the student's writing. This will help determine if the interventions were successful.

Chapter 4

PROJECT RESULTS

Historical Description of Intervention

The main objective of this project was to increase student retention and transfer of weekly spelling words into daily writing. At the beginning of the year students were given a pretest of high frequency words and dictation sentences to establish a baseline. They were also asked to write a story about themselves. This story helped to identify each child's individual spelling and writing ability. The use of high frequency words, creating a personal spelling dictionary, writing for authentic purposes, and editing for spelling were the strategies selected to help achieve this objective.

Weekly spelling lists were modified to include a minimum of five high frequency words. Every sixth unit included a review of the high frequency words from the previous five units. Weekly spelling tests were given in two ways. Students were required to write the list words in isolation and then to write dictation sentences which included the words from current and previous units.

In September of 1995, the students created personal spelling dictionaries. In the creating of these dictionaries the teacher reviewed

alphabetical order and began a series of lessons on reference skills and how to locate words in dictionaries. Each week the students would write the weekly spelling words in the personal dictionaries. In addition to the spelling list words, students were encouraged to add words that they used in their own writing. The students used these dictionaries as a reference tool. A class spelling dictionary was also created for students to share new words from their spelling repertoires with other students. The class dictionary was also a reference for vocabulary presented in other content areas.

Students were required to use a minimum of five words from their personal dictionaries in one journal entry per week. This activity forced students to increase the frequency of spelling word use. Students were provided with many opportunities to write for authentic purposes. These opportunities include writing on a given journal topic, independently choosing a journal topic, and during individual story writing. Spelling was not emphasized until students were in the editing stage of writing.

When editing, students highlighted words believed to be misspelled. The highlighted words were then written on the spelling trend assessment sheet. Students then used various reference sources to find the correct spellings of the words listed. These included: personal spelling dictionaries, published dictionaries, peers, electronic spell checks, classroom charts, and the teacher. During individual conferences, the teacher and student would review the words on the spelling trend assessment sheet. For each word the students were able to correctly spell in the "Try Again" column, they received a stamp on the Spelling Stars chart (Appendix C). If students were unable to correctly spell the word, the teacher would then provide the standard spelling in the "Correct"

column. Students were then required to write all the correct spellings listed on the spelling trend assessment sheet in their personal spelling dictionaries.

The teachers also collected writing samples from the students each month to examine whether or not there was a decrease in the number of words incorrectly spelled and an increase in the total number of words used in the students' writing. The student writing samples included a journal entry, a story, and a response worksheet.

To chart student progress, students were given a posttest of the same high frequency words and dictation sentences used as a pretest in September. The students were also asked to again write a story about themselves. The data collected from these tests was used to measure student progress in the area of spelling. Particular attention was paid to the story to see if transfer of spelling was occurring.

Presentation and Analysis of Results

In order to measure the effects of the spelling interventions the results of the posttests were examined. The following tables show how students performed on the high frequency, dictation, and writing posttests. For Tables 1-B and 2-B the total number of words will be decreased because one student moved between the pretests and posttests. For Tables 3-B and 4-B this will be noted by N/A when studying Student 6's results. Each table is followed by an interpretation and analysis of this information.

**TABLE 1-A
POSTTEST OF HIGH FREQUENCY WORDS
SCHOOL A JANUARY 1996**

HIGH FREQUENCY WORD	NUMBER OF CORRECT SPELLINGS	NUMBER OF MISPELLINGS
of	22	1
who	16	7
you	23	0
are	22	1
they	22	1
from	22	1
have	23	0
what	23	0
were	14	9
there	18	5
your	21	2
which	16	7
their	12	11
said	18	5
many	22	1
would	22	1
more	23	0
could	22	1
first	17	6
been	21	2
people	18	5
use	20	3
know	22	1
where	16	7
very	20	3

**TABLE 1-B
POSTTEST OF HIGH FREQUENCY WORDS
SCHOOL B JANUARY 1996**

HIGH FREQUENCY WORD	NUMBER OF CORRECT SPELLINGS	NUMBER OF MISPELLINGS
of	19	6
who	14	11
you	25	0
are	21	4
they	21	4
from	22	3
have	21	4
what	16	9
were	18	7
there	14	11
your	21	4
which	10	15
their	7	18
said	17	8
many	17	8
would	19	6
more	18	7
could	20	5
first	12	13
been	21	4
people	15	10
use	13	12
know	18	7
where	11	14
very	15	10

This table indicates that School A students as a class correctly spelled 86 percent of the high frequency words when given in isolation. When compared to the pretest given in September, this showed an increase of 44 percent. School B students as a class correctly spelled 68 percent of the high frequency

words when given in isolation. When compared to the pretest given in September, this showed an increase of 40 percent. Although there was a variance between the baseline scores of School A and School B, it was interesting to see that both schools showed similar growth from the pretest to the posttest, both having scores that increased by approximately 40 percent.

TABLE 2-A
POSTTEST OF DICTATION SENTENCES
SCHOOL A JANUARY 1996

HIGH FREQUENCY WORD	NUMBER OF CORRECT SPELLINGS	NUMBER OF MISPELLINGS
of	21	2
who	7	16
you	22	1
are	18	5
they	12	11
from	20	3
have	16	7
what	12	11
were	9	14
there	11	12
your	15	8
which	3	20
their	1	22
said	8	15
many	9	14
would	6	17
more	16	7
could	7	16
first	12	11
been	5	18
people	5	18
use	7	16
know	12	11
where	7	16
very	14	9

TABLE 2-B
POSTTEST OF DICTATION SENTENCES
SCHOOL B JANUARY 1996

HIGH FREQUENCY WORD	NUMBER OF CORRECT SPELLINGS	NUMBER OF MISPELLINGS
of	22	3
who	12	13
you	24	1
are	22	3
they	17	8
from	18	7
have	18	7
what	17	8
were	19	6
there	10	15
your	20	5
which	11	14
their	5	20
said	18	7
many	19	6
would	16	9
more	18	7
could	17	8
first	13	12
been	18	7
people	14	11
use	14	11
know	16	9
where	14	11
very	13	12

Table 2 for both School A and School B shows that the student scores were consistent with the same words in isolation as when presented in dictation form. School A students as a class scored an average of 83 percent when writing high frequency words in dictation form compared to 86 percent when words were presented in isolation. The dictation test for School A had an increase of 35 percent from pretest to posttest. School B students as a class scored an average of 65 percent when writing high frequency words in dictation form compared to 68 percent when words were presented in isolation. The dictation test for School B had an increase of 39 percent from pretest to posttest.

Tables 3-A and 3-B present the individual student results of the high frequency and dictation pretests.

TABLE 3-A
STUDENT SCORES ON POST TESTS
SCHOOL A JANUARY 1996

STUDENT	HIGH FREQUENCY PERCENT CORRECT	DICTION SENTENCES PERCENT CORRECT
1	96%	96%
2	84%	76%
3	88%	92%
4	84%	72%
5	80%	88%
6	88%	92%
7	96%	92%
8	84%	72%
9	96%	92%
10	96%	92%
11	100%	100%
12	76%	68%
13	68%	64%
14	100%	96%
15	96%	96%
16	100%	92%
17	56%	60%
18	56%	52%
19	100%	96%

TABLE 3-B
STUDENT SCORES ON POSTTESTS
SCHOOL B JANUARY 1996

STUDENT	HIGH FREQUENCY PERCENT CORRECT	DICTION SENTENCES PERCENT CORRECT
1	76%	76%
2	96%	96%
3	84%	80%
4	48%	56%
5	92%	92%
6	N/A	N/A
7	28%	20%
8	96%	92%
9	76%	76%
10	80%	76%
11	40%	52%
12	84%	72%
13	16%	12%
14	100%	92%
15	84%	84%
16	12%	8%
17	96%	96%
18	48%	36%
19	88%	96%

TABLE 3-A CONTINUED

STUDENT	HIGH FREQUENCY PERCENT CORRECT	DICTATION SENTENCES PERCENT CORRECT
20	76%	72%
21	80%	76%
22	80%	76%
23	100%	96%
24		
25		
26		

TABLE 3-B CONTINUED

STUDENT	HIGH FREQUENCY PERCENT CORRECT	DICTATION SENTENCES PERCENT CORRECT
20	88%	84%
21	12%	20%
22	100%	96%
23	100%	92%
24	52%	20%
25	60%	56%
26	44%	44%

From the tables it was found that students at School A had scores that ranged from 56 to 100 percent correct. Students at School B had scores that ranged from 12 to 100 percent correct. Compared to the baseline scores School A had a mean score of 86 percent which shows an increase of 44 percent. The median score for School A went from 40 percent to 88 percent. School B students had a mean score of 68 percent which shows an increase of 40 percent. The median score for School B went from 20 percent to 80 percent. By studying the mean and median scores of both schools, it can be concluded that all students showed significant growth. Students from School A showed growth ranging anywhere from an eight percent to 76 percent increase. Students from School B showed growth ranging anywhere from a 12 percent to 80 percent increase with the exception of Student 13 who maintained his score.

TABLE 4-A
NUMBER OF SPELLING
ERRORS IN STUDENT
WRITING SAMPLES
SCHOOL A JANUARY
1996

STUDENT	NUMBER OF ERRORS	TOTAL NUMBER OF WORDS IN STORY
1	1	46
2	7	77
3	5	79
4	9	34
5	7	56
6	7	43
7	2	81
8	10	87
9	8	48
10	3	48
11	3	40
12	12	41
13	4	35
14	9	56
15	8	137
16	2	67
17	3	20
18	7	32
19	2	79
20	8	62
21	4	38
22	2	61
23	2	66
24		
25		
26		

TABLE 4-B
NUMBER OF SPELLING
ERRORS IN STUDENT
WRITING SAMPLES
SCHOOL B JANUARY
1996

STUDENT	NUMBER OF ERRORS	TOTAL NUMBER OF WORDS IN STORY
1	5	40
2	3	40
3	3	47
4	7	24
5	1	57
6	N/A	N/A
7	8	42
8	8	113
9	10	36
10	9	90
11	6	17
12	19	64
13	26	59
14	5	67
15	10	100
16	12	36
17	5	123
18	3	15
19	7	30
20	4	40
21	14	24
22	0	109
23	0	45
24	9	26
25	8	30
26	2	31

From Table 4-A it was found that students at School A had a range in the number of errors from one to 12. The total number of words used ranged from 20 to 137. Students at School B had a range in the number of errors from zero to 26. The total number of words generated by the individual students ranged from 15 to 123. Compared to the baseline scores School A had a mean score

increase from 51 words to 58 words used in the writing samples. The mean score of errors decreased from nine to five point four. School B had a mean score increase from 26 words to 52.2 words used in the writing samples. The mean score of errors increased from five to seven point four. Although School B's mean score for the number of errors increased by two point four percent, the students more than doubled the mean score for the total number of words used in the writing samples. School B's increase in the number of errors from pretest to posttest is insignificant compared to the increase in the number of words used in the writing samples.

When looking at the data from all three forms of assessment, the percentage of growth was greatest in scores for the high frequency and dictation sentences showing increases in the mean scores ranging from 40 to 44 percent and 35 to 39 percent respectively. The increase in the mean scores for correct spelling in writing samples ranged only from eight to 10.5 percent. The researchers found that this growth was significant, since the baseline mean scores were already higher to begin with. Factors that need to be taken into consideration when looking at the percentage of growth in writing samples include the number of words written. In School A, 17 out of 23 students increased the number of words used in their writing sample; and in School B, 23 out of 25 students increased the number of words used. Through studying anecdotal records the researchers found that some students continued to use words that they were familiar with and had an easier time spelling, often repeating the same words within their stories. Other students were more willing to take risks and experiment with new words.

On the following pages a visual representation of the comparisons of the pretest and posttest scores for each form of assessment has been included to further illustrate the significant growth each student made. The posttest scores for Student 6 from School B must be disregarded because Student 6 moved and no posttest scores were available. The computer therefore read this student's posttest scores as zero.

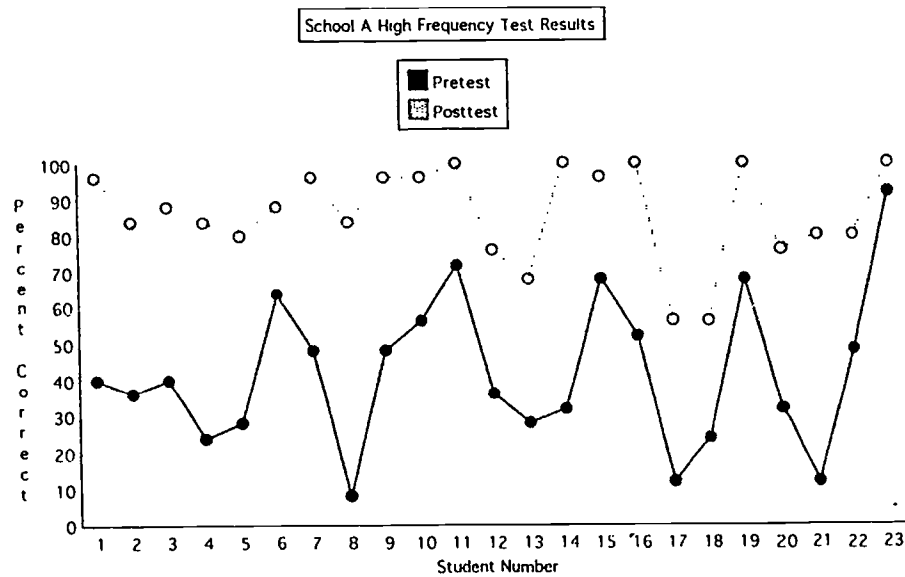


Figure 1. School A High Frequency Test Results.

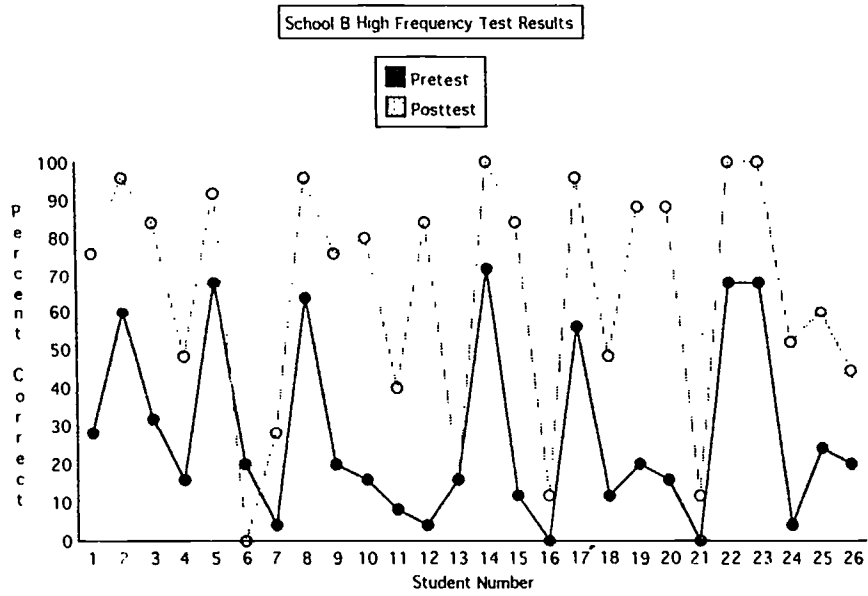


Figure 2. School B High Frequency Test Results.

The School A and School B High Frequency Test Results graphs compare each individual student's pretest and posttest scores. The solid line represents the pretest scores, and the dotted line represents the posttest scores. This representation proves that each student's score increased with the exception of School B's Student 6, who moved, and School B's Student 13, who maintained his score.

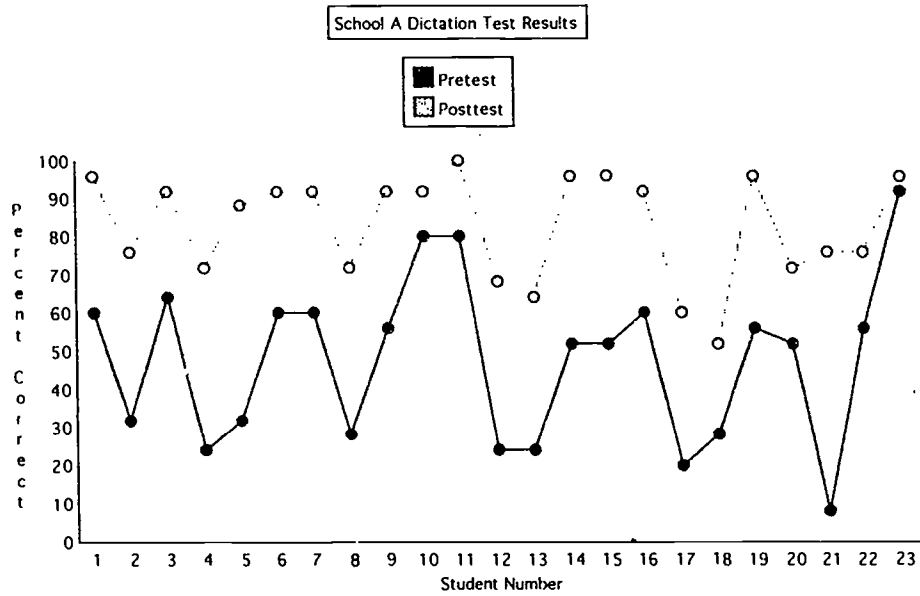


Figure 3. School A Dictation Test Results.

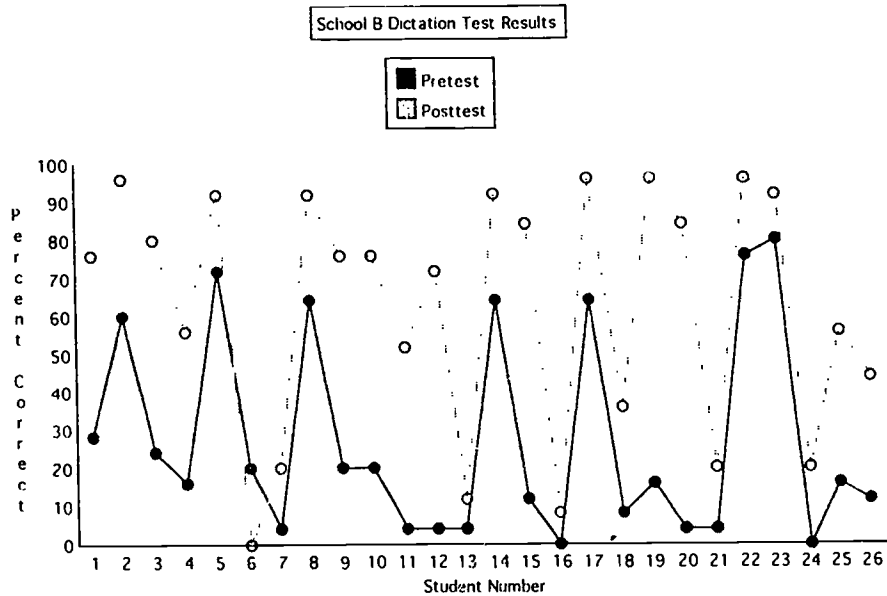


Figure 4. School B Dictation Test Results.

The School A and School B Dictation Test Results graphs compare each individual student's pretest and posttest scores. The solid line represents the pretest scores, and the dotted line represents the posttest scores. This representation proves that each student's score increased with the exception of School B's Student 6, who moved.

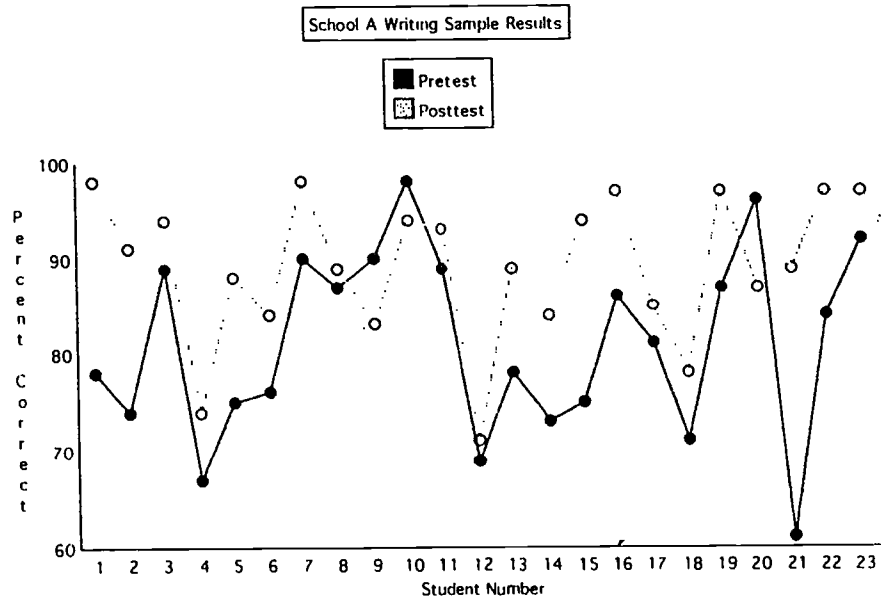


Figure 5. School A Writing Sample Results.

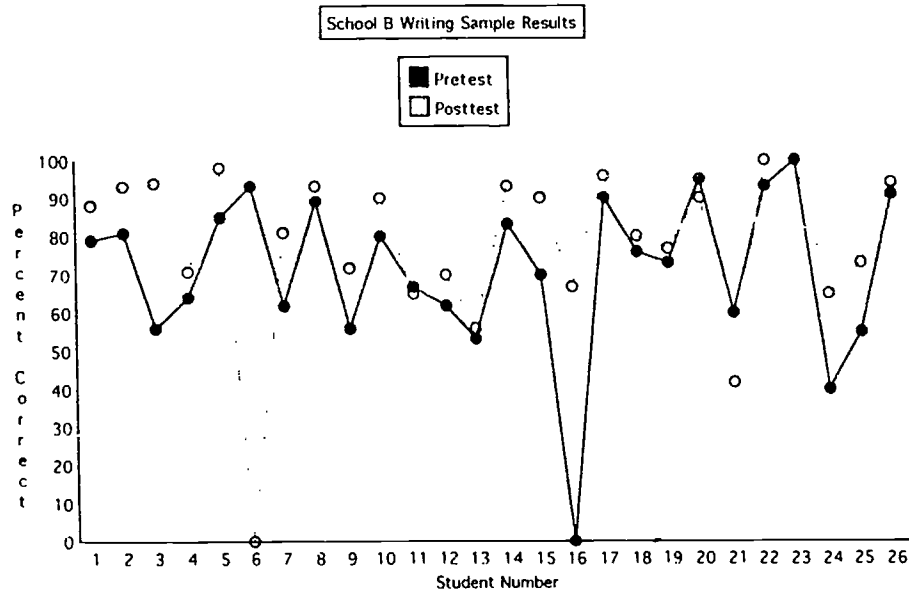


Figure 6. School B Writing Sample Results.

When looking at the line graph from School A for writing sample results, it is important to note that although Students 10 and 20 had a decrease in the percent of words spelled correctly, they increased the total number of words used in their writing sample. Both Student 9's percent of words spelled correctly and total number of words in the story decreased, however, the percent of words spelled correctly remained high. The number of words in Student 9's story only decreased by two. When looking at School B's line graph, Students 11, 20, and 21 had a decrease in the percent of words spelled correctly. However, each had a significant gain in the total number of words, using two to five times more words in their stories.

The following bar graphs for each school were included to illustrate the overall significance the interventions had on the classes as a whole. The

graphs group the students according to the percent of words spelled correctly in the writing samples. Pretests are represented with a solid black bar, and posttests are represented with a dotted bar.

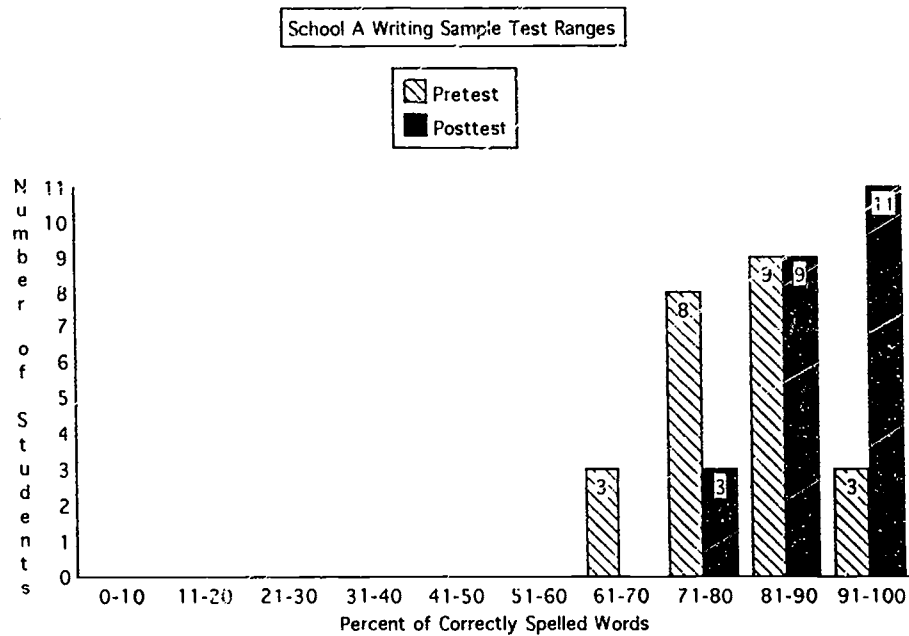


Figure 7. School A Writing Sample Test Ranges.

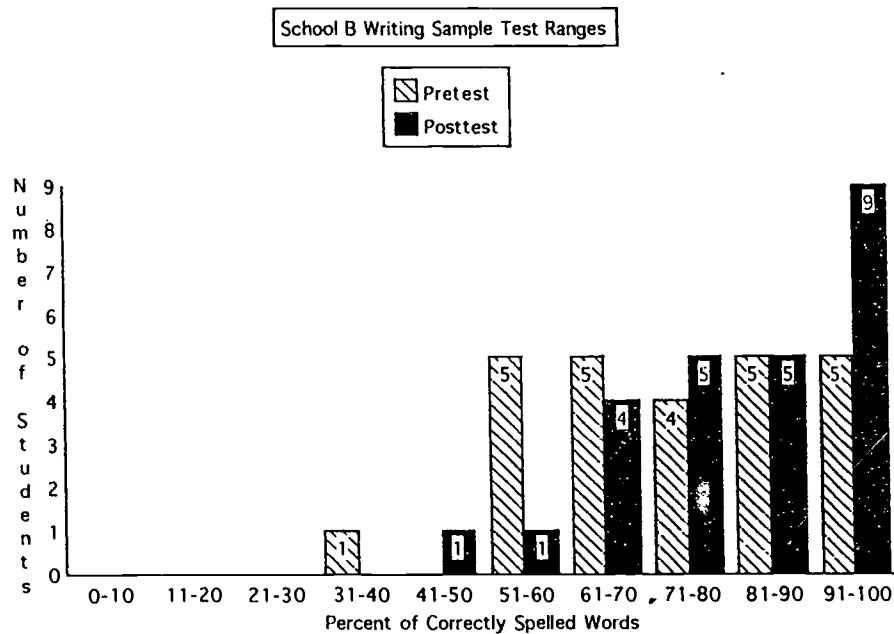


Figure 8. School B Writing Sample Test Ranges.

Both graphs showed the majority of students shifting into the higher percentile ranges. The majority of School A students moved from 71-80 and 81-90 percentile ranges to the 81-90 and 91-100 percentile ranges. The number of students in the top percentile range increased from three to 11. Students from School B were almost evenly distributed anywhere from 51 to 100 percent on the pretest. With the posttest the number of students in the 51-60 percentile range decreased from five to one, and the number of students in the 91-100 percentile range increased from five to nine.

Conclusions and Recommendations

Based on the presentation and analysis of the data on the retention and transfer of weekly spelling words into written work, the students showed a significant increase in both retention and transfer. This increase was proven when comparing the pretest and posttest results. By concentrating on high frequency words students were able to learn how to spell the words they use most often in their writing. The Spelling Trend Assessment sheet that was implemented helped students to focus on their own spelling in the editing stage of writing. It also helped students concentrate on words they wanted to learn how to spell. This intervention began to develop a type of individualized spelling program for each student. All of the high frequency words and words from the Spelling Trend Assessment sheet were written by the students in their personal spelling dictionaries. Students were allowed and encouraged to use their personal spelling dictionaries often. With the students continually focusing on their spelling and using the words from their personal dictionaries, the repetitive use of these words enabled them to better retain the correct spelling. By modeling and teaching students various reference skills, the students were able to correct many of their own spelling errors when editing.

The researchers found that the interventions used yielded very significant results. The interventions are ones that the researchers will continue to use with few modifications. One modification would be to implement only individual personal spelling dictionaries and eliminate the class dictionaries. The researchers found that the students were more inclined to use their personal dictionaries and that the class dictionary was often left unused. The personal dictionaries were more easily accessible to the students and contained not only

the high frequency words but words that were more individualized to each student. The personal dictionaries provide the students with a sense of ownership and can be used by the students year after year. Another modification would be to collect fewer writing samples. The researchers found that a larger time span between collecting samples was necessary to show significant growth.

The results were significant enough for the researchers to continue to use these interventions in their own classrooms with the exception of the noted modifications. The researchers observed a positive impact in the ability of the students to retain and transfer their weekly spelling words to their writing. The students were better able to recognize their own spelling errors. Through the use of these interventions students were becoming more aware of the fact that one must be able to spell correctly in order to communicate effectively.

The districts involved in the study have both adopted new spelling programs neither of which focus on high frequency words. The researchers are being asked to use these programs. This is proving to be very frustrating because as the research has shown, students are better able to use and transfer words that appear naturally in their writing. Although the researchers will continue to use the personal spelling dictionaries and other various strategies presented in the action research, it is the belief of the researchers that the strategies will not have as great an effect when they are combined with words that are not frequently used in student writing.

Even though districts are allowing teachers to complete action research, they are still slow in accepting the results and allowing the teachers to continue the use of programs that differ from the adopted curriculum. This leads the researchers to question whether or not the students' needs will ever take precedence over curriculum.

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Appendices

Appendix A

The students will be given the following tests to get a baseline of data that will establish the students' spelling ability at the beginning of the school year. Students will be required to write the words in isolation and to write them in dictation sentences. Students will also be given these tests at the end of four months to measure student progress.

High Frequency List:

- | | |
|------------|-----------|
| 1. of | 2. who |
| 3. you | 4. are |
| 5. they | 6. from |
| 7. have | 8. what |
| 9. were | 10. there |
| 11. your | 12. which |
| 13. their | 14. said |
| 15. many | 16. would |
| 17. more | 18. could |
| 19. first | 20. been |
| 21. people | 22. use |
| 23. know | 24. where |
| 25. very | |

Dictation Sentences:

1. Which of their pets have been outside?
2. Where were they from?
3. Do you know very many people?
4. Who could use your name first?
5. She said there would be more to do.
6. What are we going to have for lunch?

Appendix B

SPELLING TRIES			
Name:			
Date:			
TRY	TRY AGAIN		CORRECT

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Lacey, C. (1994). Moving on in spelling: Strategies and activities for the whole language classroom. New York: Scholastic.

SPELLING TRIES STAMP CHART

Name _____