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#### ABSTRACT

This research focuses on a program for improving spelling achievement through an integrated approach using high-frequency words. The targeted population consisted of a third grade class, a fourth grade special education resource class, a sixth grade language arts class, and an eighth grade language arts class. All classrooms were located in rural settings in the Midwest. The problems of inadequate spelling ability were evidenced by teacher observation of students' daily written work and students' inability to retain spelling knowledge for transfer into their writing. Data gathered support the writers' perception of the problem. Traditional basal spelling programs are not geared to promote the transfer of spelling strategies to other subject areas. Research suggests students would be empowered by a program exposing them to explicit strategies based on words that are frequently used in student writing. These findings influenced the researchers in their decision to implement a program based on the embedded model of teaching spelling focusing on high-frequency words. Post-intervention data reflected a significant decline in students' spelling errors. By the end of the intervention the students were well aware that they were expected to spell high-frequency words correctly at all times in all writing. It was apparent that the students were doing a better job of proofreading their work. The data also suggested that students were retaining the correct spelling of words they had studied. Appendixes contain dictation sentences; word lists; and parent, student, teacher, and business pre- and post-intervention survey instruments and tabulations of data. Contains 33 references and 7 figures. (RS)



# INCREASING SPELLING ACHIEVEMENT USING AN INTEGRATED APPROACH EMPHASIZING HIGH FREQUENCY WORDS

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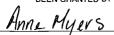
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**Abstract** 

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Studies going back before the 1950's indicate that our nation's spelling ability has deteriorated. It is the belief of these researchers that spelling plays a crucial role in the development of writing skills and that poor spellers have difficulty expressing their ideas effectively in writing. This research focuses on a program for improving spelling achievement through an integrated approach using high-frequency words. The targeted population consists of a third grade class, a fourth grade special education resource class, a sixth grade language arts class, and an eighth grade language arts class. All classrooms are located in rural settings in the Midwest. The problems of inadequate spelling ability are evidenced by teacher observation of students' daily written work and students' inability to retain spelling knowledge for transfer into their writing.

Society is surrounded by evidence of the lack of our nation's ability to consistently spell even the most common words correctly. Evidence of this can be seen in business advertisements, signs and billboards, and in restaurant menus. Spelling achievement on standardized tests have been declining for decades. Educators are frustrated with their students' lack of ability to transfer words learned during spelling instruction to their daily written work. Research has shown that the typical weekly spelling unit culminating with a Friday test, originating in 1783 with Noah Webster's Blue-Backed Speller, has been failing students for decades.

Data gathered supports the writers' perception of the problem. Traditional basal spelling programs are not geared to promote the transfer of spelling strategies to other subject areas. In most settings, spelling instruction and evaluation is isolated, rather than integrated into the language arts and literature programs and other curricular areas. Research suggests students would be empowered by a program exposing them to explicit strategies based on words that are frequently used in student writing. These findings influenced the researchers in their decision to implement a program based on the embedded model of teaching spelling focusing on high-frequency words.

Post intervention data reflected a significant decline in students' spelling errors. By the end of the intervention the students were well aware that they were expected to spell high-frequency words correctly at all times in all writing. It was apparent that the students were doing a better job of proofreading their work. The data also suggested that students were retaining the correct spelling of words they had studied.



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### CHAPTER 1

#### PROBLEM STATEMENT AND CONTEXT

### General Statement of the Problem

The students of the targeted groups of a third grade class, a fourth grade special education class, a sixth grade language arts class, and an eighth grade language arts classes exhibit inadequate spelling proficiency in their daily written work in all areas of study. Evidence of the problem's existence includes teacher observation of the students' daily written work and assessment of writing samples.

### **Immediate Problem Context**

### **Building Description**

Targeted Site A is an elementary school housed in a two story brick building built in 1937. It was originally used as the community high school. In 1954 a new high school was built, and since that time the building has housed grades kindergarten through eight. It is the only elementary school in the community.

The building contains three sections of kindergarten comprised of children from the home community together with children from other communities within the district, including one section of grades one through six, and all of the junior high classes for the district. In addition, all of the students with learning disabilities from the district are bussed to this location. Grades one



and two occupy the first level of the building along with the teacher's workroom, teacher's lunchroom, and the school's administrative offices. There are also two classrooms and a gymnasium used by the junior high students on the first level. Grades three, four, and five, and four more junior high classrooms are on the second level of the building. The sixth grade room and a junior high home economics room are located at the back of the building on yet another level.

The three kindergarten rooms are found in an adjoining building that also houses the learning materials center for the elementary through high school aged students. The elementary and junior high students share a Macintosh computer lab in a section of this facility. This building also connects the elementary and junior high building to the district's high school and contains the junior high and high school library. The cafeteria is located in a separate nearby building.

The targeted Site A classroom is a third grade self-contained classroom located on the upper level of the building. One classroom teacher and one program attendant provide instruction. Services are provided to students with learning disabilities in areas designated on their IEP through a pullout program and travel to another connected building to receive instruction. Several students also receive services from the Title I teacher.

### Student Demographics

The total enrollment for Site A is 151 elementary aged students. The average class size is 17.7 students. Ninety-nine and three tenths percent of the students are White non-Hispanic, with 0.7% of the students being Black. Twenty-nine and one tenth percent of these children are from families classified as low-income. While the mobility rate for this location is 20.0%, chronic truancy is not evident. The school's policy of stressing school attendance is reflected in its 96.4%



attendance rating. On the elementary level the pupil-teacher ratio is 13.1:1 (School Report Card, 1998).

# **Staff Demographics**

All of the staff members at Site A are White non-Hispanic. There are nine classroom teachers, one learning disabilities teacher, two teacher aids, and four program attendants providing instruction in kindergarten through sixth grade. All are female. A male physical education teacher, two female Title I teachers, and a female speech teacher are shared with other elementary buildings within the district. A male teacher, who teaches all vocal music for the district, provides vocal music instruction. A male band teacher provides all instrumental instruction in the district. The average teaching experience for classroom teachers is 15.8 years. While many of the teachers in the targeted school have accumulated graduate hours, none have earned a master's degree or above. The average teacher's salary is approximately half that of an administrator. These average salaries are \$34,479 and \$64,333 respectively (School Report Card, 1998).

The building secretary is also a certified teacher and is occasionally called upon to supervise a classroom in the event of an emergency. The building has one administrator who also supervises the junior high area. The secretary and administrator are both female.

# **Programs Offered**

Site A is comprised of a dedicated staff who strives to use a variety of techniques to teach all children. Since most of the students with learning and physical disabilities from the school district are bussed to this location, classroom schedules revolve around the learning disabilities (LD) teacher's schedule. The children with learning disabilities are pulled out into the LD resource room for the areas listed on their IEP and mainstreamed for all other subject areas. Each



self-contained classroom teacher is responsible for teaching reading, English, spelling, math, science, social studies, health, and penmanship.

Twice a week the children in grades one through six walk to the high school music room, located in a connected building, to receive thirty minutes of vocal music instruction. Three times a week students in grades one through six also participate in physical education class in an adjoining building containing the school cafetorium, a combination cafeteria, auditorium, and gymnasium. Kindergarten students receive music instruction in their classroom twice a week for twenty minutes. Kindergarten students' schedules vary somewhat, and they use the junior high school gymnasium for instruction. An art teacher is brought into the elementary schools to provide art education three or four times each year. All other instruction in this area is the responsibility of the classroom teacher.

The Title I teachers also serve all students falling at least one year behind in reading skills. Her room is located next to the learning materials center. All elementary students also have the opportunity to use the learning materials center (LMC) two to three times a week for periods ranging from thirty to forty-five minutes in length. They use this time to check out books and to learn library and computer skills. These classes are taught by a teacher aid. Occupational and physical therapists also provide services to students who are identified as needing them.

Each year the elementary schools in the district join together to teach a thematic unit to the children. All students and staff meet for assemblies on the subject and also hold a culminating event to share what has been learned. This allows the Site A children to meet students attending other schools that are also part of the district.



### **District**

The targeted district for Site A is located in the Midwest. The Site A school district began operating on July 1, 1948, as a result of 1947 state legislation that encouraged the formation of a unit district. At that time, four cities decided to unite to form a district. In 1984 a neighboring community voted to detach from a larger district and combine their efforts with the other four communities. The targeted district now serves a total of five communities and 900 students enrolled from pre-kindergarten through twelfth grade. The district covers 183.6 square miles. There are two full-time principals, four teaching principals, seventy-two teachers, and forty support personnel employed in the schools. In the administration office there is a superintendent, a district bookkeeper, and a secretary who also acts as district treasurer. Currently there is an elementary school in each of the five towns. Site A is in the centrally located community of the five towns in the district. In addition to housing its own elementary school, all kindergarten, junior and senior high students are bussed to this school. Because each of the community-based elementary schools was built in the 1920's and 1930's, maintaining separate facilities is becoming a challenge (Goals 2000 grant).

The primary industry within the district is agriculture. However, a significant number of the district's residents work in the surrounding towns in industry, business, health and other career fields. Many of the residents of the district fall into a lower income bracket, with 30% of the students qualifying for the free or reduced lunch program.

## The Surrounding Community

Site A is located in a rural community with a population of 1,100 people (Community Census Information, 1990). Having no major industry, the majority of the inhabitants travel to larger cities nearby for employment. Some are also employed locally by a combination



convenience store and gas station, a family restaurant, a bank, and a farm implement dealership.

The town also supports a real estate office, a fertilizer plant, a public library, a tumbling gym, and a small veterinary clinic. Family operated farms that raise both livestock and grain surround it.

There is one apartment building containing four apartments, and three buildings housing twelve condominiums available for rent within the community. There are also a few houses for rent, but most of the citizens own their own homes.

The average family income is \$30,000 per year, placing them in the lower-middle income bracket. This is reflected in the housing market with the average home selling for \$45,000 (Community Census Information, 1990). Houses sell easily in this community because of the reasonable pricing and the reputation of the school system.

Education is important to the people in the community surrounding Site A. Many have attended or graduated from one of the colleges or universities within a sixty-mile radius. There are also two junior colleges within twenty miles of the town.

The community government is a mayor with a town trustee system. This community has always had progressive leadership. Residents were provided with up to date gas, water, and sewer service before most of the neighboring communities. This community is one of the few small towns that still owns and operates their own telephone system. Cellular phone, Internet service, and cable television companies are also located in the town.

The inhabitants of this community are primarily white Protestants. While there are two churches in town, Methodist and Presbyterian, one minister is shared and services are alternated between the two facilities. Some people also travel to nearby towns to attend churches of other



faiths. Many of the youth are actively involved in church sponsored groups that meet after school and on weekends.

The community supports school based events and also offers recreation for children after school and during the summer. In the summer, an active baseball program for children aged five through fourteen is provided. Together with county organizations and the YMCA basketball and soccer teams, swimming lessons and roller skating parties are also sponsored throughout the year. Many of the young citizens also participate in one of the local 4-H groups. Tumbling is also a popular sport among the youth. Furthermore, the community has a well-maintained park with outdoor tennis and basketball courts.

Adults in the community banded together to provide weekly tutoring for elementary aged students who need extra, one-on-one help. The sessions are held in one of the churches where the children receive a snack and help with homework free of charge.

Most of the older youth are actively involved in school events. They also travel to a larger, near-by town for weekend entertainment.

### Immediate Problem Context

### Site B

# **Building Description**

The targeted site B is a brick building that houses both the junior high and the high school. The original building was built in 1953 but has undergone many additions since then in order to accommodate its growing population of students. The original building housed only the high school and consisted of nine classrooms, two administrative offices, a library, a gymnasium, a metal shop, and an automotive shop. The first of four additions came in 1966, when four more classrooms and a guidance office were added, and the seventh and eighth grades moved into the



building. In 1968, a new cafeteria and three classrooms were built to accommodate the addition of the sixth grade. In 1976, another addition to the building was made, which added ten classrooms, a wood shop, a conference room, and a new girls' locker room. Finally, in 1996, a new computer laboratory, band and chorus facility, and an all-purpose gymnasium were added to the building to make it the structure that it is today (Interview with superintendent and map of building, 1999).

Although school B is a junior/senior high in which the students share the same library, cafeteria, band, and chorus facilities, the junior high is located in a separate wing in the east third of the building. The junior high wing consists of eight core classrooms, one junior high computer lab, a science laboratory, and a special education classroom. There are three sections each of sixth, seventh, and eighth grade students. All grade levels are departmentalized and core classes meet every day, with the exploratory and PE classes meeting on an alternating "A/B day" basis.

The targeted classroom in Site B is a sixth grade language arts classroom located in the junior high section of the building. The targeted students of this classroom are divided into three sections, each of which meets in this classroom twice a day for language arts and literature instruction. The morning class is fifty-seven minutes long and the afternoon class is twenty-seven minutes long. The classroom has one teacher and receives collaboration from the special education teachers and Title I teacher during two class periods in the morning and one class period in the afternoon.

# Student Demographics

The sixth through eighth-grade junior high school houses 233 students. This population is 99.2% White, 0.4% Black, and 0.4% Asian/Pacific Islander. Low-income students comprise 1.7% of the population. None of the students are limited English-proficient. The attendance rate



at this school is 96.4% with a 0.4% chronic truancy rate. Student mobility in this school is 5.5%. The average class size in this junior high is 25.2 students (School Report Card, 1998).

### **Staff Demographics**

The staff of the targeted school includes nine regular division classroom teachers. Four of these teachers have a master's degree and the remaining five have a bachelor's degree. There are currently two teachers who are working on their master's degrees and plan to complete them in the next two years. The average number of years' teaching experience is fifteen and one-half years and the pupil-teacher ratio is 26:1. The teacher turnover rate for the school is relatively low. The building principal has hired only two teachers during the four years he has been an administrator there.

There are two special education teachers who collaborate with all regular division classroom teachers to support students with special needs within the regular classroom. Site B also has one full time Title I teacher who services grades six through eight in the morning and the high school students in the afternoon. There are two PE instructors who are shared with the high school. An art instructor, also servicing the high school, teaches art as an exploratory class to the seventh grade students. The school librarian is also shared with the high school. Other staff members that support the junior high school students include a full time guidance counselor, an athletic director, a computer technology teacher, and a home economics teacher, all of whom are shared with the high school building. The junior high principal and secretary service the junior high students exclusively.

# Programs Offered

The students at Site B are required to take language arts, science, social sciences, and math courses every year. The science, social science, and math courses, however, are sequential



in nature. The sixth grade students study biological sciences, ancient history, and basic mathematics. The seventh grade students study general sciences with an emphasis on Earth science, geography, and pre-algebra mathematics. The eighth grade students study physical sciences, American history, and algebra. In addition to these core classes, the students of this targeted site take exploratory classes, which include computer technology classes, the accelerated reading program, art, home economics, and industrial technology. Band and chorus are also offered to the junior high students. Extra-curricular activities offered to the students include inter-scholastic cross-country, basketball, cheerleading, volleyball, wrestling, track, scholastic bowl, speech, intra-mural softball and baseball, and student council.

### **District**

The targeted junior high school is part of a medium-sized unit district comprised of an elementary school and a building that houses both the junior high and high school. The district and its schools are found in a rural village located fifteen miles from a mid-sized metropolitan area on a major river in the central section of the state. The district serves this village and its surrounding area for a total area of 67.25 square miles. The total population the district serves is approximately 6,000. The district buses 66% of its 951 students.

Of the 951 students enrolled in the district in the 1997-98 school year, 99.2% are White, 0.3% are Black, 0.3% are Hispanic, and 0.2% are Asian/Pacific Islander. The district student population is 100% English proficient and 2.2% is considered low income. Of the sixty-three teachers the district employs, 100% are White, 71.6% are female, and 28.4% are male. The average teaching experience is 14.4 years. The attendance rate for the district is 96.1%, mobility rate is 6.0%, and the chronic truancy rate is 0.3%. The average class size for the district is 25.2.



The average teacher salary in the targeted district is \$34,808. The superintendent's current salary is \$85,000, and the average administrator's salary is \$60,726 (School Report Card, 1998).

### The Surrounding Community

The targeted community is a rural village of 2,200 located in the Midwest, fifteen miles west of a medium-sized metropolitan area. The town is a blend of a farm and suburban bedroom community. The rural population of the community exceeds that of the village by about 350. There are 1,680 households within the targeted school district, 808 of which are located within the village's city limits. Recent demographical reports indicate that 56.9% of these households consist of one or two people. Approximately 47% of the households have children under the age of eighteen. Roughly 34% house occupants age 65 or older. It is notable that 81% of the students in the targeted district live in traditional two-parent homes and 96% of these homes have at least one employed parent (Community Census Information, 1990).

About 52% of the people in the community work in white-collar professional and technical areas, 16% are laborers, 14% are craftsmen, 10% work in service-related areas, and 8% are farmers. The median household income of the district is \$36,574, while the median housing value in the district is \$66,325 (School District Data Book, 1992). Thirty-two percent of the community households have an income less than \$25,000, 60% have an income between \$25,000 and \$75,000, and 8% have an income that exceeds \$75,000. Eleven percent of the community's population have a college degree, 4.4% have taken graduate level courses, 28.3% have taken some college level courses, 37% have a high school diploma only, and 19% do not have a high school diploma (Community Census Information, 1990). Ethnically, the community is 99%



White, 0.01% Hispanic, 0.001% Asian Pacific Islander, and 0% Black (School District Data Book, 1992).

Religiously, this community has historically been largely Apostolic Christian. This religious composition is beginning to change. In addition to the two Apostolic Christian churches in the village, there is also a Baptist and a Methodist church. A relatively small Catholic population travels to the two nearby cities to attend services at Catholic churches. This community is highly active in the churches. Many of the after school activities in which the student body participates are church related.

The parental support of the school in this community is very high. This is evidenced in the fact that several community clubs serve the school and its programs through fund raising activities and facility rentals. These clubs include a parent's club, a mother's club, an athletic booster club, and a band booster's club.

### Immediate Problem Context

### Site C

### **Building Description**

The targeted school houses grades four through eight with the fourth and fifth grades in a separate wing of the building built in 1969. There are three sections of fourth grade and two sections of fifth grade. Sixth through eighth grades are on an eight block schedule where classes meet on alternating days. Junior high classes meet in the original three-story section of the school built in 1918.

Classroom A in Site C is a cross-categorical classroom servicing fourth-grade students with special needs. The classroom serves as a resource room for instruction in reading, mathematics, and language arts. The classroom has one teacher and one full time aide.



Classroom B in Site C is a language arts classroom located in the junior high section of the facility. The targeted students are eighth graders who are on an eight-block schedule but meet in this classroom every day for seventy-two minutes, one day for grammar/spelling instruction and the following day for literature instruction. The classroom has one teacher and receives no assistance from classroom aides.

# Student Demographics

The fourth through eighth grade school houses 234 students. This population is 100% White, 26.5% are considered low income, and attendance rate is 96.2%. No students in this school are considered chronically truant. The mobility rate is 12.4% (School Report Card, 1998). Staff Demographics

The staff of the targeted school includes twelve regular division classroom teachers. The average teaching experience in this building is fifteen years. The pupil-teacher ratio is 16:1. Three of these teachers have a master's degree; the other nine have bachelor's degrees. There are three special education teachers who are assisted by four non-certified aides. There are three PE instructors who are shared with the high school and elementary school. An art instructor provides instruction for all grades two days a week. The targeted school has one full time Title I teacher who services fourth through eighth grade. The school librarian, who has a master's degree, is shared with another fourth through eighth grade building in the district. This facility also shares a psychologist, a social worker, and a speech pathologist with other schools in the district. The principal is shared with a primary school located at a campus four blocks away.

## Programs Offered

In addition to regular fourth grade curriculum, the fourth grade classes in the targeted school receive a weekly enrichment program on thinking and study skills through the county co-



op one day a week. The D.A.R.E. program is offered to the fifth grade. The fifth grade also receives monthly visits from a local banker who explains banking, savings, and investments. Each student opens and contributes to a savings account during the school year.

The sixth through eighth grade is departmentalized and on a block schedule. Each day, students have a seventy-two minute activity block in which he or she chooses two of ten electives ranging from chorus to weight lifting. Extra-curricular activities for the students include the normal range of sports, history fair, scholastic bowl, and Science Olympiad. Biddy ball and latchkey are two programs offered by the community and housed at this facility.

### **District**

The school is in a medium sized unit district found in a rural area. The district is about twenty-five miles long and ten to fifteen miles wide including five small towns located five to eight miles apart. There are six attendance centers in the district: two K-3 buildings, two 4-8 buildings, one K-8 building, and one 9-12 building. Of the 1,429 students currently enrolled in the district, 99% are White, 0.08% Black, and 0.02% Asian Pacific Islander. The district student population is 100% English proficient, and 20.1% of the student population is considered low income. The district teachers are 100% White, 72.3% female, and 27.7% male. The attendance rate for the district is 95.8%, mobility rate is 13.5%, and the chronic truancy rate is 1.1%. The average class size is nineteen. District operating expense per pupil is \$4,562. The average teacher salary is \$34,415. In this district the superintendent's salary is currently \$96,900, and the average principal's salary is \$58,800 (School Report Card, 1998).

### The Surrounding Community

The Site C community is a rural village of 2,600 located ten miles west of a mid-sized metropolitan area situated on a river in the Midwest. The community is basically a White,



Protestant community of blue-collar workers. Family farms occupy the land surrounding the towns. District boundaries cross into three different counties. The town consists mainly of small businesses and shops: banks, grocery stores, small restaurants, and gas stations. The community supports seven churches. Many people commute thirty miles to a nearby, medium sized metropolitan area for employment. The population of the community is slowly decreasing. Therefore, fewer students are entering the district. There is also evidence that the district is aging. The town's betterment association is trying to promote economic and residential growth. The association has sought the removal of dilapidated, empty housing and recognized residents for exceptional yards and grounds.

### National Context of the Problem

Helping students become life-long, accurate spellers is not a new challenge for teachers in schools. The media is currently full of information on how the nation's ability to spell has deteriorated. A 1989 Gallup survey found that American adults missed eighty percent of the words in an international spelling bee. "In the running against Australia, Britain, and Canada, [the United States] finished last" (Woo, 1997, p.3). As a prime example of this, in 1992, Vice President Dan Quayle committed a major faux-pas at an elementary school spelling bee in New Jersey by insisting "that the humble vegetable [the potato] was spelled 'P-O-T-A-T-0-E'" (Woo, 1997, p.3). However, evidence exists that this was a problem over a century ago when social critic Thorstein Veblen stated in his 1899 "The Theory of the Leisure Class" that "poor spelling, then as now, was as conspicuous as a rip in the britches, a mark of the unrefined" (Woo, 1997, p. 2-3).

"Spelling, defined as the formation of words through the meaningful arrangement of letters (Mercer & Mercer, 1993), is one of the core academic skills taught to young learners"



(Bullara, D., Gardner, R. III, Weber, K., & Wirtz, C. L., 1996, p. 48). Spelling plays an important role in the development of writing skills, and poor spellers have more difficulty expressing themselves effectively in writing than good spellers (Bullara et al., 1996, p. 48). There are many theories that offer explanations as to why some people have difficulty mastering correct spelling in their everyday writing. Many argue that the English language and spelling system is the most difficult to learn due to inconsistent and sometimes chaotic spelling patterns. However, "if the spelling system were chaotic and highly irregular, learning to spell would place an intolerable burden on memory and, in consequence, there would be very few good spellers" (Beers, J., Cramer, R., Hammond, D.W., 1995, p. T19).

Correct spelling is not only an academic asset; it is a life skill. "Whenever words are written and exchanged, no matter how brief the message, the reader may be influenced by the writer's spelling---or misspellings" (Scott, Foresman, 1995, p. T19). Many teachers try to teach the importance of good spelling and a respect for it. However, many societal influences work against this goal. In the media, "advertisements are filled with such 'incorrect' spellings as 'tek' for 'tech,' 'brite' for 'bright,' and 'plak' for 'plaque' (Nilsen, 1994, p. 63). When students are assailed with misspellings in the media, they are less likely to be able to recognize misspellings in their own writing.

Even though teachers are using a variety of means to reinforce spelling in their classrooms, most teach spelling through use of standardized spelling lists given weekly. However, spelling achievement is still declining. Spelling scores on the Iowa Basic Skills tests have been dropping steadily since 1990 (Woo, 1997, p. 3). This has been a source of frustration for teachers of all grade levels across the United States. Currently, there is a lack of carryover from spelling instruction to everyday writing. The words most frequently misspelled are spelled



incorrectly by students at many grade levels, not just the grade level at which the words were "learned" (Scott, Foresman, 1995, p. T22-23).

It is obvious that this traditional method of teaching spelling is not providing positive results. "In the real world, spelling is assessed through everyday writing---on job applications and in business and personal letters" (Sitton, 1998, p. 57). Essentially, students need to learn to be accurate spellers in everyday writing, not just on a Friday spelling test.

H.D. Hoover, a University of Iowa professor who has long tracked educational dips and climbs, is more blunt: 'People can be proud of being bad in math and explain it away.

But if you misspell words, people think you're stupid (Woo, 1997, p. 3).



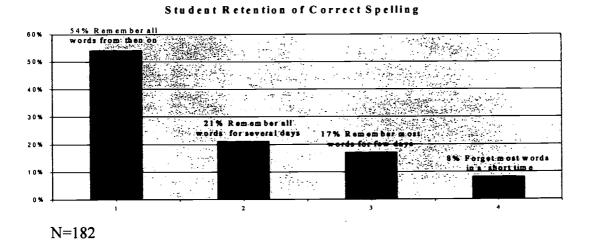
### **CHAPTER 2**

### PROBLEM DOCUMENTATION

### **Problem Evidence**

Prior to the implementation of the intervention, the researchers surveyed 182 students from grades three to eight. These students included both targeted and non-targeted students from three sites. This survey (Appendix A) covered student perceptions and feelings about the importance of spelling in their academic life and beyond. When the students were asked how they would rate their present spelling ability, 59% of the students surveyed said they were excellent or very good spellers. However, when these same students were asked how often they study spelling at home, only 27% stated that they studied spelling three or more times per week.

Figure 1





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In addition to this, 54% of these same students assert that they usually remember the spelling of words they have studied for a spelling test from then on, as seen in Figure 1. Twenty-one percent remember the spelling for several days, 17% remember most of the spellings for a few days, and 8% say they usually forget most of the spellings within a short period of time. Since it is the intent of the researchers to analyze spelling within written work, students were asked to identify the technique they use most often to find the spelling of unfamiliar words. Of the four common strategies offered, 34% of the students preferred to ask someone, 33% chose to look the word up in a dictionary, 27% selected guessing, and 6% chose using a different word. According to the survey, 85% of the students' homes have dictionaries available.

The students surveyed were also asked if they proofread their written work on a regular basis, even when it was not required. Of these students, 60% reported that they do proofread when it is not specifically required. This statistic increased to 94% when proofreading was requested by the teacher. Ninety-seven percent of the students questioned felt that it is important to spell correctly when they write. Forty-nine percent admitted that they were sometimes embarrassed when they misspell a word.

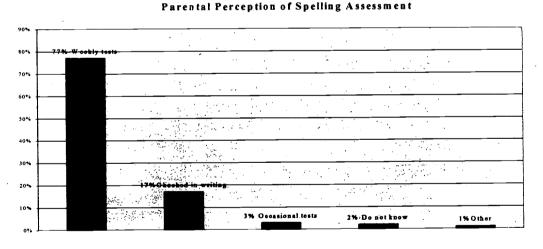
The researchers also surveyed the parents of their students in each respective site. One hundred eighty six parent surveys were returned and the results were tabulated. The questions on this survey (Appendix B) were aimed at gleaning the parents' perspective on their child's spelling performance. The parents' responses proved to be very insightful. It was especially enlightening to the researchers when comparing the parent answers to their children's. Sixty eight percent of the parents surveyed said that their child studies spelling at home. When asked how often their child studies spelling at home, 63% of the parents said that their child studies



spelling several times a week or daily. It is interesting to note that only 27% of the students stated that they study spelling three or more times a week.

The parents were also surveyed concerning the types and features of the current or most recent spelling program that has been used with their children in school. The majority (36%) of parents said that the program consists of word lists from a spelling text or workbook. Twenty-two percent stated that phonetic or patterned word lists are used, 20% believed that words to be studied are chosen from subject matter, and 18% said that their children study common or the most frequently used words in writing. Two percent of the responding parents described other methods that differed from the survey items, and only 2% claimed not to know how or if a spelling program was used in their school.

Figure 2



N=270

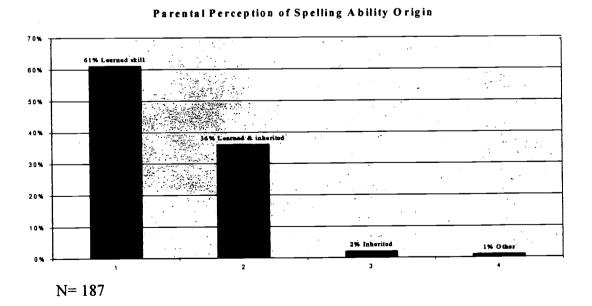
Figure 2 shows that when asked how their child's spelling is tested in the classroom, 77% said that weekly spelling tests are used. Only 17% claimed that spelling is checked in their child's writing. Three percent said that occasional spelling tests are administered, 2% said they do not know how it is assessed, and one parent described an alternative method of evaluation.



Thirty-two parent responses were excluded from the tabulation of responses to this question because they circled more than one answer. However, their responses are noted here. Twenty-nine (91%) of these parents said that their children's spelling is evaluated using weekly spelling tests and that spelling is checked in student writing. One parent survey stated that occasional spelling tests and spelling evaluation in writing is used, one asserted that spelling is evaluated in writing and used to be evaluated using weekly tests, and one said that spelling is evaluated using both weekly and occasional spelling tests.

Thirty-nine percent of the parents reported that their child's spelling ability has definitely improved due to the spelling programs used, while 43% said that only some improvement has been seen. Ten percent saw little or no improvement, and 8% do not know whether their child's spelling has improved due to the spelling programs used. Sixty-four percent of parents surveyed stated that their child's spelling program is similar to how they were taught when they were in school.

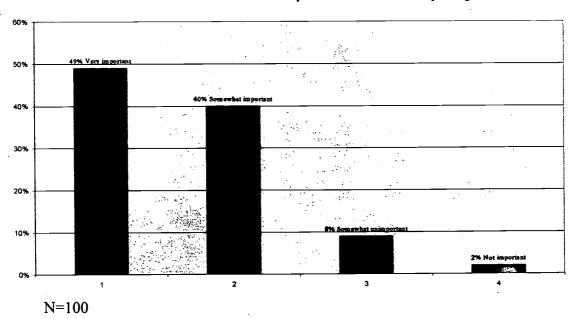
Figure 3





The parents surveyed were also asked about their beliefs concerning spelling ability and its necessity in life. As displayed in Figure 3, when asked how children acquire the ability to spell, 61% felt that it is a learned skill that must be worked toward. Only 2% felt that it is an inherited trait, while 36% reported a belief that spelling ability is both learned and inherited. Two parents (1%) circled "other", one stating that spelling is acquired through reading and the other stating that it comes with thinking or thought processing. Finally, when asked how important they feel it is to be a good speller in the workplace, 89% of parents felt that it is very important, while the remaining 11% said that it is somewhat important. Although the options of "somewhat unimportant" and "not important at all" were available, no parents marked these answers.

Figure 4



**Educators' Attitudes Toward Importance of Accurate Spelling** 

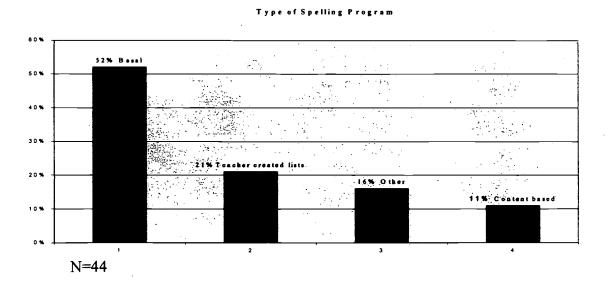
The researchers also distributed a survey (Appendix C) to 100 teachers from the three targeted sites concerning their attitudes towards spelling in the curriculum. Educators were asked how important it was for teachers to stress accurate spelling in daily writing. As shown in Figure



4, 49% of the surveyed teachers felt it was very important to stress accurate spelling, 40% felt it was somewhat important, 9% felt it was somewhat unimportant, and 2% saw no importance in accurate spelling at all. Seventy-nine percent of the surveyed teachers felt that educators should reinforce correct spelling in all content areas. Ninety-eight percent of the surveyed teachers reported that they require students to use some form of writing in the classroom such as note-taking, essay or short answer questions, paragraph writing, and copying from the board. Of those teachers who assign written class work, 85% said that students are required to answer written questions in complete sentences on most assignments.

Evaluation of student's spelling was another area the researchers surveyed. The researchers discovered that 58% of teachers evaluate student's spelling on most or all of their assignments, and 17% of the surveyed teachers rarely or never evaluate spelling. Of those teachers who factor spelling into a student's grade, 58% check the spellings of all words, 28% check only content words, and 14% check for common or high frequency words.

Figure 5





The researchers then focused on those educators who specifically teach spelling. When asked what type of spelling program the surveyed teachers use, Figure 5 shows that 52% reported using a basal spelling program, 21% use teacher created lists, 16% use an alternate program such as an individualized list or an embedded model, and 11% use a content based spelling program. Although 69% of those who teach spelling are satisfied with their current spelling program, only 26% continued to be satisfied with the number of students who transfer their spelling knowledge to their writing in other subject areas. This suggests to the researchers that educators are blaming their students for poor spelling transfer rather than the method of instruction.

The researchers final line of inquiry deals with teachers' ingrained beliefs about the role of spelling in society. Sixty-nine percent of the surveyed teachers did not view spelling skill as a sign of intelligence. When questioned about their beliefs on spelling ability, 2% felt spelling skill is inherited, 3% felt spelling skill came from family expectations or from developmental processes, 38% felt spelling was a skill to be worked toward, and 57% perceived it as a combination of an inherited ability or a learned skill.

The final survey (Appendix D) included in the pre-intervention data collection was sent out to area businesses. Examples of businesses that were solicited include local banks, convenient stores, eating establishments, and insurance agencies. Five business surveys were mailed from Site A, Site B sent out seven, and Site C distributed three surveys to area businesses. Unfortunately, only Site B received any response from these surveys. Six of the seven surveys were returned. Sixty-seven percent of these business owners or managers stated that their application does require some handwritten response from the applicant. When asked how important it is for their employees to be accurate spellers, 67% stated that it is extremely



important. The remaining 33% said it was important. These six business officials were divided on the question of whether they considered good spelling a sign of intelligence, with 50% saying yes and 50% saying no. One business owner sent an additional letter of response with his survey to explain some of his answers. He wrote, "Although I do not consider "good spelling" a sign of intelligence, it is required. I think it is important to realize that poor spelling implies a lack of intelligence". He also stated that spelling is an important life skill, though not "absolutely necessary". These business officials were not divided, however, when asked if accurate or inaccurate spelling on a job application or resume impacts their decision to hire a prospective employee. One hundred percent said yes.

In addition to the administration of the four surveys, baseline data was taken from the four different classrooms in three different sites. Site A is a self-contained third grade classroom that serves sixteen students. Site B is a sixth grade language arts classroom containing thirty students. Site C classroom A is a fourth grade, cross-categorical resource room of seven students. Site C classroom B is an eighth grade language arts classroom containing nineteen students.

Baseline data was gathered from each classroom prior to the intervention process. Each site collected data from actual student writings. The students were given two dictation tests, two writing samples were taken from the language arts area, and two additional writing samples were taken from other subject areas. Because of the wide range of student ability between sites, Site A and classroom A in Site C focused on the first fifty high frequency words on the high frequency word list when creating the dictation test (Appendix E) and checking spelling in student writing. Site B and classroom B in Site C focused on words one through one hundred fifty in the dictation test (Appendix F) and data collection for their classes. The results of this baseline data are shown in Figure 6.



Figure 6

Collection tool  2 Dictation tests	Number of Errors Made			
	101	98	63	43
2 Language arts writing samples	6	31	13	32
2 Writing samples from other curricular areas	15	35	8	18
	Site A 16 students	Site B 30 students	Site C: Class A 7 students	Site C: Class B 19 students

When the sixteen students from Site A were given dictation tests targeting high frequency words one through fifty, 101 errors were discovered. The students made six errors on writing samples taken from the language arts area, and fifteen errors were found in writing samples collected from other subject areas.

Focusing on high frequency words one through one hundred fifty, the thirty students from Site B accumulated ninety-eight errors on the dictation tests. From the language arts writing samples, these students missed thirty-one high frequency words, and thirty-five errors were discovered in two writing samples from other curricular areas.

When the researcher from classroom A in Site C gave the dictation tests which included words one through fifty on the high frequency word list, sixty-three spelling errors were made by the seven students. The two language arts writing samples contained thirteen spelling mistakes, and the two samples collected from other curricular areas revealed eight spelling errors.

Dictation tests concentrating on high frequency words one through one hundred fifty were administered in classroom B in Site C to nineteen students. Forty-three high frequency



word errors were found. Two writing samples from the language arts area yielded thirty-two mistakes and two writing samples from social studies and science produced eighteen errors.

### **Probable Causes**

Regardless of the research site, the probable cause of the apparent underachievement in spelling seems to be focused in four main areas. One problem is that many students are not making the transition from invented spelling to conventional spelling. It is also apparent that in each of the targeted school districts, classroom teachers use different methods of teaching spelling throughout the grade levels. No one spelling curriculum is used consistently. Because there is a lack of a consistent spelling program, the amount of time spent on the teaching of spelling can vary considerably. This means that it is very likely that not enough time is being spent teaching and reviewing the spelling of words that students need to know in order to be considered literate. From the information gathered on the surveys, the researchers discovered that teachers who do not teach language arts or literature are less likely to stress spelling and evaluate it in student writing. Students, parents, and teachers seem to feel that the availability of spell check will solve their spelling problems, but examination of the available research and literature has proven that this is not true.

Examining the history of English language development gives the researchers some insight into the complexities of putting the spoken word into the written form. The root of the problem began with the Norman Conquest in 1066 AD and the recognition of English as a separate language. At that time the Germanic tribes of Anglos, Saxons, and Jutes invaded England and its surrounding countries. Their Germanic dialects and the dialects of other invading countries influenced the spoken language in that time period. For the next four hundred years the



development of the English language moved rapidly through a series of complicated phonemic changes (Henderson, 1981).

During the tenth century, writing was the domain of the clergy. Their writing followed a regular phoneme-grapheme pattern. But with the advent of the printing press, publication and sale of books, and increased writing skill of the common man, the gap between spoken sounds and written language increased. The written word took on the characteristics of the language of the consumer and the governing class of the time. For the next two hundred years, variability in spelling was accepted among common people until the first dictionary of Modern English was complied by Bailey in 1721. This dictionary established a single standard for correct spelling. Because of the complexity of the single standard, various proposals were made to simplify and relate English spelling directly to sound (Henderson, 1981).

The desire for a simpler spelling system surfaced again and again throughout the next two hundred and fifty years. Those who have tried to simplify the system include Samuel Johnson, Noah Webster, and Benjamin Franklin. Their argument was that English spelling was too difficult to be learned by children and immigrants. However, the public remained indifferent to any proposals for spelling reform, and because of that, our spelling system is good for readers but bad for spellers. The English language is a living language that has made phonemic changes over time. Unfortunately, spelling reform has not occurred since the printing press was invented (Henderson, 1981) around the year 1450 (Grolier Multimedia Encyclopedia, 1998).

In today's society, confusion about spelling standards is perpetuated by big business and media advertising techniques. Imagine the confusion of a child entering the first stages of spelling development receiving a toy that is clearly marked "Playskool" or "Lite-brite."

Increasingly common in print, children are bombarded with intentional misspellings such as



"nite" for night, "kwik" for quick, and "plak" for plaque. Even though advertisers may not spell according to the accepted standard, they recognize the importance of spelling according to the pronunciation expectations. Cigarette and alcohol manufacturers are not allowed to advertise on TV or radio, so they choose product names that reflect common pronunciation such as Kool cigarettes and Lite beer. Even popular children's books address this phenomenon (Bear and Templeton, 1998).

In Ramona and Her Mother (Cleary, 1979), Ramona tackles the perplexing system of English spelling. She is puzzled by a television commercial for a popular antacid remedy in which the response to the question "How do you spell relief?" is "R-o-l-a-i-d-s." She speaks for generations of students when she goes on to lament that "Spelling was full of traps-- blends and silent letters and letters that sounded one way in one word and a different way in another, and having a man stand there on television fooling children was no help." (p. 105)

Learning to spell words correctly is a developmental process. Just as children must learn to count before they can learn addition facts, the words in a child's vocabulary must move through a specific sequence before the child will be able to spell them correctly. First, a word must be assimilated into a child's verbal vocabulary before it can be transferred into his or her reading vocabulary (Sitton, 1997). It is not until the word is firmly and comfortably established in a person's reading vocabulary that it can be accurately spelled on a consistent basis (Blanton, Blanton, Perney, & Morris, 1995). John O'Flahavan and Renee Blassberg (1992) also argue that spelling knowledge and ability develop when reading and writing lessons are overlapped.

Traditionally, spelling has been taught as an isolated subject often using published text and student workbooks. Despite the fact that teachers know that the effectiveness of the traditional



published text is not supported by research, few embed spelling into the curriculum (Gettinger, 1993). Judie Bartch (1992) found that publishers of spelling programs focus on the memorization of specific lists of words with no emphasis or connections made between reading and writing processes. The only "writing" exercises given as practice come in the form of repeated writings of the words and story starters. These practices obviously do not support the developmental stages of spelling skill acquisition.

Because spelling skill acquisition is a developmental process, young children have been and should be allowed to use invented spellings in their writing in order to communicate ideas. According to Bill Honig (as cited in Woo, 1997), California's superintendent of public instruction during the state's shift from phonics instruction to the whole language approach in the 1980's, the idea is to make young students comfortable enough to express their thoughts without worrying about the conventional spellings of the words that they want to use. Through these invented spellings, children begin to construct their own theories about spelling patterns and should go on to refine these theories (Griffith & Leavell, 1996). These inventive spellings should become a useful tool to help teachers identify each individual student's weaknesses in their knowledge of spelling patterns (Gentry, 1993). However, studies have shown that students are not being adequately taught how to move away from their inventive spelling techniques toward the use of conventional orthographic spellings once the words have been established in their speaking and reading vocabularies (Woo, 1997).

Upon reflection, even Bill Honig, the proponent of invented spelling and the whole language approach, admitted that doing away with formal spelling instruction was "a huge mistake" (as cited in Woo, 1997, p. 4). The reasons for his disappointment lay in the fact that teachers interpreted the inventive spelling movement as meaning that correct spelling was now



irrelevant. They felt that it was more important to focus on the ideas in the writing than the conventional spellings. Basically, it became a free pass to think that spelling was no longer an issue. This lead to such a lax attitude among teachers and students that it became acceptable to turn in final drafts of process papers with spelling errors in them. Author Sandra Wilde (as cited in Woo, 1997), "argues that invented spelling is not a euphemism for misspelling or a license...to spell werds any ole way u wunt (sic)....Invention is not a failure to achieve convention but a step on the road to reaching it" (p. 4).

One reason for students' apparent lack of spelling skills is not only that teachers are not teaching them how to take the steps to achieve accurate spelling, but also that teachers themselves are not being adequately trained in how to help students in this endeavor. In a study by Louisa Cook Moats (1995), results of a survey found that otherwise competent teachers are not adequately prepared by their personal understanding of the structure of our spoken and written language to teach it to emergent readers or students with disabilities in reading or spelling. The reason for this inadequacy lies in the mindset of the teachers who teach reading and writing. Experienced readers generally visualize words in their written form, rather than in their spoken form. In other words, they see the words in their heads instead of paying attention to how it sounds. Teachers who are not trained in phonological analysis will count letters when asked to count phonemes, or speech sounds, in a word. For example, the word yellow will be seen as containing six speech sounds (Moats, 1995) instead of four.

Children, on the other hand, do the opposite. They conceptualize words in terms of the sounds in the word (Moats, 1995). In order to become good spellers, students need to be capable of analyzing words. They must be able to divide words into parts to hear the sounds in the order in which they occur. Further, students have to remember the location of the sound and transfer



that into the correct letter representation of that sound (Harrington, 1996). The bottom line is that teachers need to be explicitly trained, not only in the developmental stages of spelling acquisition, but also in phonological analysis in order to increase their own phonemic awareness. With this knowledge, they would be able to assist students in moving from sounding words out to being able to visualize the conventional spellings of words (Moats, 1995).

According to Schlagal and Schlagal (as cited in Blanton et al., 1995), spelling, as a formal topic of instruction, has been de-emphasized. There are two trains of thought in this area. Some teachers believe that spelling is a minor part of the writing process and, as children become more adept at writing, that this skill will be learned incidentally (Blanton et al., 1995). On the other hand, some educators seem to think that spelling acquisition should be an isolated subject using the traditional published spelling basal revolving around rote memorization of lists of words and repetitive practice of these words (Griffith & Leavell, 1995-96). The problem with the incidental learning of spelling through reading and writing is that little or no time is spent on the direct teaching of spelling patterns or conventions. Conversely, isolated teaching of spelling does not promote higher order thinking skills (Johnson, 1997), nor does it promote the long-term retention of correct spelling. Teaching spelling in isolation uses the Friday test method of assessment where students are tested on a specific list of words once and then moved on to a new list the next week (Sitton, 1997; Recht, Caldwell, & Newby, 1990; Woo, 1997; Beers, J., Cramer, R., Hammond, D.W., 1995; Bodycott, 1993). Maribeth Gettinger (1993) and H.D. Hoover (as cited in Woo, 1997) agree that regular classroom instruction does not provide sufficient time for mastering the correct spelling of words or for corrective feedback essential to student learning. One explanation offered by Cronnell and Humes (as cited in Gettinger, 1993) explains that this may be due, in part, to the fact that educationally sound practices are difficult



to replicate in the average classroom because they rely heavily on individualized or small group instruction.

Finally, neither of these methods of spelling instruction explicitly require students to transfer what they have learned into their writing. The focus on memorization isolates spelling as a separate subject and fails to communicate the ultimate goal, which should be to use correct spelling in all writing. The recent availability of spell check is often cited as an excuse for not teaching or requiring correct spelling, but unfortunately, spell check devices cannot recognize all errors, especially errors involving homophones or when a particular spelling is accurate for a different word. It is interesting to consider the fact that the teaching of mathematics was not abandoned with the invention of the pocket calculator. "However, neither a calculator nor a spell-checker can think...and there is no substitute for thinking" (Sitton, 1997). Students must be taught the fundamentals of spelling so that they will be capable of proofreading their work for words spell check does not catch and of writing competently when a word processor is not available. If a teacher does not require students to use correct spellings of the words they know how to spell in their writing, then the teaching of spelling at all is wasted.



#### CHAPTER 3

### THE SOLUTION STRATEGY

#### Literature Review

The American public has always considered spelling proficiency or the lack thereof as one mark of social status. It seems that other successes in school curriculum are quickly forgotten if spelling scores slip. The study of orthographic trends in the twentieth century has led educators to search for ways to successfully teach children the conventions of English spelling. As far back as 1918, Henry Bradley proposed that written language was not represented by sound but by meaning (Henderson, 1981) and argued against spelling reform which would more closely align spelling to phonetic quality of words. It is Bradley's assertion and the assertion of other researchers that the complexities of English spelling conventions can be mastered by children if educators help those children move away from the assumption that words are spelled as they sound.

Henderson (1981) notes that some of the biggest gains in the understanding of spelling assimilation took place in the 1960's with the separate studies of Venezky (1967) and Chomsky (1968). Both Venezkey and Chomsky found in their research that English spelling has a more orderly system than previously thought and that this knowledge could help in the attainment of spelling proficiency. In his study, Chomsky asserted that as a child develops and expands his



vocabulary, he will naturally expand his grasp of spelling conventions (Henderson, 1981). It appears to be up to educators to facilitate this process, and historically three models of spelling instruction have been utilized.

The traditional method of teaching spelling was first introduced in 1783 by Noah

Webster in his "Blue-Backed Speller" (Henderson, 1981). In this type of curriculum, spelling is
taught as a separate subject using word lists from commercially produced spelling texts
emphasizing phonetics and spelling rule memorization. These lessons always culminate in a
weekly test in which students write each word in a list format (Heald-Taylor, 1998). Usually, the
practice activities used in preparation for these tests are workbook-based in which phonemic
rules are explicitly taught and practiced through matching definitions, analogies, filling in the
blanks, repeated writing of each word, and occasional sentence and paragraph writing activities
(Johnson, 1998; Bullara, D., Gardner, R. III, Weber, K., & Wirtz, C.L., 1996). In general, there
are approximately ten to twenty words studied each week. Each grade level has its own book.
Lesson one is given during week one of the school year and the format is continued throughout
the year to its end with lesson thirty-six. Typically, a review unit is taught every six weeks in
which four to five words from each of the preceding five lessons are selected for cumulative
review activities and testing (Beers, J., Cramer, R., Hammond, D.W., 1995).

In the individualized model of teaching spelling, instruction focuses on creating lists for students to study that are distinctly based on each student's needs and ability level. There are several different ways of doing this. In one method, students choose their own words based on words they have interest in studying and those they have misspelled in the past in any curricular area. Word lists could also be chosen from a list prescribed by the teacher which could either be words that follow similar spelling patterns or words used frequently in writing (Topping, 1995).



Another method of individualizing student spelling lists uses the spelling basal and workbooks as a basis. Students take a pretest of each week's list of words and self-correct it. The words missed become the student's list for the week. In addition, either the student, the teacher, or both the teacher and the student select additional words for study from other content areas, the student's writing, or other areas of interest (Johnson, 1997; Cooper & Opitz, 1993). Some methods incorporate a conference between the student and the teacher (Bodycott, 1993). The number of words each student studies varies and can be adjusted based on the list's level of difficulty and the ability level of the student. Students study their words using various activities throughout the week and take a posttest at the end of the week given either by a partner or an older student. Words missed on the posttest are then placed on the student's list for the following week (Cooper & Opitz, 1993). This allows students to develop their spelling ability at their own pace.

In the embedded model of teaching spelling, instruction is student-centered and motivated, rather than teacher-centered in its motivation. Spelling skills are developed by overlapping reading and writing instruction. Spelling lessons occur during the editing step of the writing process (Blassberg & O'Flahavan, 1992). This method combines individualized and group instructional activities. Some common instructional activities are the creation of spelling logs, personal and class dictionaries, word walls, and the discovery of word families. The words selected for study in the embedded model are often based on words frequently used in students' writing. Students are guided toward the discovery of spelling patterns and conventions. Examples of possible guided word activities are sorting and classifying of words, proofreading, and playing word games. According to Blassberg and O'Flahavan (1992), theories supporting this model state the following:



Embedded spelling instruction is guided by the complementary notions that children's developing word knowledge is primarily self-directed (Temple, Nathan, Burris, & Temple, 1988) and that instructional contexts that foster a sense of student self-determination (Deci, Vallerand, Palletier, & Ryan, 1991) better enable the teacher to guide spelling development (p. 412).

The embedded model of spelling instruction focuses on helping students' word knowledge to grow as they apply the conventions of the English language to their own writing. An important goal of the embedded model of spelling instruction is for the student to develop control over the correct spelling and usage of words in their own writing.

Critics of the traditional model of spelling argue that the Friday spelling test measures only how well students have memorized the spelling of the words on that week's list, not their ability to apply these correct spellings beyond the examination (Johnson, 1998; Sitton, 1998). Many students are able to get perfect scores on these tests, only to spell the same words incorrectly in their own writing within the next week (Bartch, 1992). Why does this happen? The explanation of this phenomenon lies in the design of the curriculum. Typically, the list tests given on Friday are graded heavily, while the spelling of these words in everyday writing is not weighted very heavily, if at all, in their overall spelling grade (Sitton, 1998). Therefore, students naturally work very hard to study for the Friday tests and then abandon these words to study the words for the next week. This process often involves a family supported "cram" session on Thursday nights in preparation for these evaluations. The reward for a successful studying session is a good grade. Unfortunately, there is no reward built into the traditional program for the application of the correct spelling of these words after the test. Furthermore, the lists of words given in these spelling texts often consist of words that are not frequently used in student



writing. They appear in a list together primarily because they share a common spelling pattern, teach a specific spelling rule, or have a specific thematic relationship.

Another problem with this model is that spelling rules and patterns are taught explicitly to students for memorization, rather than allowing students to discover the patterns themselves. This direct instruction of spelling conventions discourages student inquiry into spelling rules and patterns that could lead to higher interest, greater motivation, and more effective word study for long term memory and application (Bear & Templeton, 1998). In this type of instruction, students are seen as an "empty vessel" and the teacher's role is to be the "giver of information" (Heald-Taylor, 1998).

Research challenges this "empty vessel" theory suggesting that students need to take an active role in forming basic concepts of the spelling rules and patterns. The traditional spelling programs focus on tedious practice involving low-level thinking skill activities. Leo Cohen (as cited in Graves, 1994) found that students' spelling ability actually regresses when instruction focuses on studies of phonetic spellings, word parts, and dictionary skills. Most workbook-based programs in the traditional model focus on these types of lessons for their formal instruction. Because commercial programs do not provide an adequate variety of instructional strategies for teachers (Moats, 1995), these programs often fail to meet the needs of all students in the typical classroom today (Schlagal &Schlagal, 1992, as cited in Heald-Taylor, 1998).

Critics of the individualized model of teaching spelling focus on several positive aspects. When students are allowed to choose their words, they take control of their own spelling and language learning processes. This, in turn, makes the process more meaningful to them. As students observe their progress, they become more aware of the details in their writing. They also stated that their spelling ability improved as they gained more techniques for generating spellings



of unknown words (Zutell, 1996). Through conferences, the teacher has the opportunity to examine the student's individual development and help facilitate each student's personal development. The one-on-one conferencing is a non-threatening way to meet individual needs while also reinforcing the concept that there are other sources of knowledge beyond the teacher. Because the individual program gives the student the chance to practice authentic writing and understand broad spelling concepts, the teacher is then able to assist the students in the progression of their spelling skills (Bodycott, 1993).

The negative aspects of this model are glaringly obvious. Few teachers have the organizational skills and time to implement such a program. Individual conferencing with students to review their selected words is time consuming. Students may choose words that are interesting to them but not necessary for future reference. Students may also overlook important spelling patterns necessary to transfer to more difficult words, and if this is not perceived during conferencing, gaps in the spelling knowledge may occur (Heald-Taylor, 1998). Critics assert that a published spelling program can do a much better job coordinating a developmental learning sequence (Templeton, 1991). Administering the varied forms of individual tests is also a problem.

Critics of the embedded model of teaching spelling argue that conducting spelling instruction through activities such as word sorts and word games isolate spelling from contextual reading instruction. There is also concern that certain word study activities do not take into account student developmental stages. Furthermore, because many embedded programs of teaching spelling abandon a formal textbook format, critics voice concern about the apparent lack of specific support for teachers with regards to appropriate instructional strategies for improving spelling through writing. (Heald-Taylor, 1998)



Advocates of the embedded model of teaching spelling would respond by saying that the delivery and selection of words are more systematic than the more typical traditional programs (Blassberg & O'Flahavan, 1992). They would also say that this model of teaching spelling takes into account the fact that not all words that will be used by all students can be taught explicitly within the context of a classroom. If twenty words were taught each week from first to eighth grade, the result is a writing vocabulary of 5,760 words, assuming a one hundred percent retention rate. The average literate adult can correctly spell around 80,000 words. This suggests that the rest of the words are learned through the processes of reading, seeing words, or comparing relationships of words in analogies (Burns, 1999). The embedded model takes these considerations into account by focusing on student discovery of words, rather than teacher and textbook selected lists. Research has found that the top one hundred high use writing words in the English language make up fifty percent of all words used in adult writing. The first 1,200 words on this list account for ninety percent (Sitton, 1997). The focus of the embedded model of teaching spelling lies in the assumption that it makes more sense to teach words that students actually will use in their writing.

These researchers have selected a program that is similar to the embedded model of teaching spelling. The following project objectives, processes, and action plan describe this program and outlines the intervention used in this study.



# Project Objectives and Processes

As a result of strategies used to both increase spelling retention and transfer of this knowledge into written work across the curriculum, the targeted language arts students will increase spelling knowledge. The intervention will begin in September 1999, and end in January 2000. Spelling achievement will be measured using writing samples, dictation sentences, and weekly cloze reviews.

In order to accomplish our goals for this intervention, the following processes are necessary.

- Spelling instruction will focus on core words based on the list of 1,200 most frequently used words in written language.
- 2. Cooperative learning and multiple intelligence activities will be selected.
- 3. Within the teacher lesson plans, time will be scheduled for spelling instruction, creation of word banks, and studies of spelling patterns and conventions.

The following are the components to the solution.

- Researchers will introduce grade appropriate priority words and explain their importance.
- 2. Weekly, four to seven new core words will be introduced to the students.
- 3. Past core words and priority words will be systematically reviewed and tested.
- 4. Daily activities using core words will be planned in order to allow for transfer of skills learned. These activities will incorporate a variety of cooperative learning activities and multiple intelligences techniques.



- 5. At the end of each week, some type of assessment will be given on past and present core words.
- 6. Journal and writing samples from both the language arts curriculum and other curricular areas will be evaluated for transfer of spelling retention.

## Action Plan

The following action plan is intended to improve spelling achievement through an integrated approach emphasizing a list of high frequency words. The top one hundred high frequency words account for over half of the words used in adult writing (Sitton, 1998). By using this action plan, the researchers hope students will consistently spell these high frequency words correctly in all writing, both in the language arts classroom and across the curriculum.

During the first weeks of school, the researchers will administer baseline surveys to parents, teachers, students, and business owners. These surveys will be used to document need and attitude of the respondents, and at the end of the intervention, a survey will be readministered to parents and students to measure growth of spelling proficiency and change of opinion. Other baseline data will be obtained through the administration of two dictation pretests on age-appropriate targeted words from the high frequency word list (Appendix A) and the collection of specific writing samples across the curriculum.

Starting the week following Labor Day, 1999, the intervention plan will be implemented. The action plan involves using age-appropriate priority words for which students will be responsible for spelling correctly in all written work by the end of the intervention. Other words included in the action plan will be core words that will be introduced weekly. These core words will act as the basis for students' discovery of spelling patterns. Students may select other



relevant curriculum words to study that are topic specific to writing assignments. Instruction for these words will involve various cooperative learning activities, multiple intelligence applications, and written activities such as journal, paragraph, and essay writing.

During the intervention, the researchers will assess spelling progress using a variety of evaluation tools. Even though each researcher instructs a different grade level and will choose appropriate activities for that grade level, the following features will be consistent throughout the intervention. Weekly, the students will be given a list of four to seven core words. Daily spelling activities will include cooperative learning activities such as study groups working together to discover spelling patterns, suffixes, affixes, homophones, synonyms, and antonyms. The eight multiple intelligences will be incorporated in these activities. The final assessment will either be a dictation test or a cloze review focusing on past and present core words. Students will not know ahead of time which core words will be reviewed.

Another form of assessment will be the random collection of writing samples from the language arts curriculum as well as other curricular areas. Students will be aware that these samplings will be taken, but they will not be aware of when these samples will be assessed.

Portions of these random writings will be blocked off and checked for correct spelling of priority and core words. Students will be required to find and correct their mistakes and turn their corrections in for evaluation.

The concluding week of the intervention will be used to gather data that will hopefully support the researchers' assumptions. Surveys will again be administered to parents and students. The dictation sentences from the pre-intervention activities will be re-administered and teacher directed writing samples and samples of writing from other curricular areas will be collected.



### **Timeline**

#### Pre-intervention

- Baseline data gathered

#### Week 1

- Explanation of program and assessment to students
- Introduction of age-appropriate priority words
- Discussion of priority words
- Varied activities involving priority words
- Distribution of personal priority word bank that will be added to throughout intervention (Appendix G)

### Weeks 2-7

- Weekly presentation of four to seven grade appropriate core words

## (Appendix B)

- Review of past core words
- Variety of daily spelling activities
- Weekly assessment of present and past core word retention
- Creation of word bank using words with similar spelling patterns
- Discussion of patterns and other spelling conventions
- Random gathering of at least two written samples from other curriculum areas
- Random gathering of at least two written samples from language arts assignments
- Addition of core words to personal priority word bank
- Expansion of the number of no excuses words when appropriate

### Week 8

- Midpoint evaluation of intervention
- Collection of teacher directed writing sample
- Re-administration of pre-intervention dictation tests



Weeks 9-15

Weekly presentation of four to seven grade appropriate core words

(Appendix B)

- Review of past core words

- Variety of daily spelling activities

- Weekly assessment of present and past core word retention

- Creation of word bank using words with similar spelling patterns

- Discussion of patterns and other spelling conventions

- Random gathering of at least two written samples from other curriculum areas

Random gathering of at least two written samples from language arts assignments

- Addition of core words to personal priority word bank

- Expansion of the number of no excuses words when appropriate

Week 16

- Collection of teacher directed writing sample

- Re-administration of pre-intervention dictation tests

- Redistribution of surveys to parents and students

### Methods of Assessment

In order to measure the effects of this intervention plan, the researchers will assess spelling progress using a variety of evaluation tools. Surveys will be distributed to parents, teachers, students, and selected businesses within the respective school districts to assess attitudes and beliefs about spelling. The parent and student surveys will be redistributed at the conclusion of this intervention to measure changes of attitude and beliefs. Dictation and cloze



tests will be used to evaluate the learning of the core words that will be introduced and studied each week. Writing samples will be gathered across the curriculum on a biweekly basis and checked for the correct spelling of the grade appropriate priority words. In addition, a preintervention, mid-intervention, and post-intervention writing prompt and dictation tests will be given. Individual student progress will be tracked throughout the intervention using a record keeper for words one through one hundred fifty on the high frequency word list from *Spelling Sourcebook 1* (Sitton, 1997). Student interviews and reactions to the program will be taken into account throughout the duration of the program.



#### **CHAPTER 4**

#### PROJECT RESULTS

## Historical Description of the Intervention

The objective of this intervention was to increase spelling retention and transfer of this knowledge into written work across the curriculum. The researchers gathered baseline data which consisted of two language arts samples, two samples from other subject areas, and two dictations. Teachers, parents, and students were surveyed to establish a general baseline attitude toward spelling. Parents were informed of the program and its basic components either through a letter (Appendix I) or at an open house.

Each of the researchers made a decision as to which core words her class should begin with, and the priority words students should be responsible for, based on the baseline data results and the grade-level suggestions given in the program's Spelling Sourcebook I (Sitton, 1997). Each student was then given a personal copy of alphabetically listed priority words. On a weekly to bi-weekly basis students were given a list of four to seven core words to study, and extension activities were done with these words throughout the unit. At the end of each unit, the words were reviewed through a cloze and/or a dictation exercise. Student spelling grades also reflected priority word spelling performance on assignments gathered from other subject areas.

At the mid-intervention point, the researchers had originally intended to follow the preintervention plan of gathering samples to evaluate spelling. Instead, one writing sample was



gathered and the two dictation tests, which had been given at the beginning of the intervention, were repeated in order to assess progress. The researchers then repeated the process used to gather the initial baseline data at the end of the intervention. Parents and students were surveyed again at the end of the intervention in order to gather their impressions of the effectiveness of this program.

#### Site A

While following the basic action plan for the intervention, Site A deviated somewhat. A week after the onset of the intervention one student moved to another community. This caused the numbers reported in the post-intervention data to vary.

The researcher in Site A used a variety of methods to capture the interest of the students while teaching them how to spell correctly. The children enjoyed writing core and review words in shaving cream spread on their desktops. Colored letter tiles were also used to spell the weekly words or to play an adapted version of Scrabble. A favorite game was one called Typewriter. In this game all of the children stood behind their desks and a word was given. Each child named only one letter of the word in the order in which it appeared in the word. The child with the turn after the final letter for a word was given said "ding" and sat down, unless he was able to correct the spelling of someone who was involved in spelling the word before him. The game proceeded until there was only one person standing. Another game the students enjoyed playing was one the researcher entitled Team Row Races. Each group sent a person to the board. After a word was given the first person to write the word correctly and sit down earned a point for their team.

Occasionally the students played board games while learning how to correctly spell core and review words. Words selected would be typed and copied on colored paper and then laminated. Each team would have the same group of words, but these words would be printed on



a different color of paper. This made sorting the cards into equal groups easier. When playing this type of game, each child would be required to pick up a card, hand it to his opponent to read to him, and then correctly spell the word before moving his pawn on the game board.

Throughout the intervention, the children played checkers and other teacher-made, interdisciplinary board games in this manner.

The researcher from Site A also used extension activities to help the children make word connections. Some of this time was spent as a group writing words on the board and discussing ways to remember how to spell them or listing related words. Occasionally, reinforcement was achieved by using a worksheet format. The students might be asked to identify correctly spelled words or to name an antonym, synonym, homophone, or homograph of the given word. They were also asked to use selected core and review words in sentences or stories.

One component of the intervention was the implementation of a list of no excuse words. No excuse words were words that the students were expected to spell correctly in all of their work. The program suggested requiring third grade students to correctly spell the first thirty-five words on the list of most frequently used words in all of their work. More words could then be added as the students improved. Many of the students in Site A had already mastered the majority of the first thirty-five words, so the researcher opted to make all students accountable for the first fifty words on the list. The researcher made the decision not to add additional words to the list because a significant number of students were still being challenged.

Several children in Site A initially had difficulty with the program. After analyzing the problems the students were having, the researcher made adaptations to the format of the assessment for core and review words. The researcher used configurations on the cloze test format. Configurations are boxes that are made for each letter of a word. This helps the student



see the shape of the printed word. The letterboxes cued the student to the shape of the letter. Short letters would fit into short boxes, letters with tails would go into boxes that extended below the line, etc. For the student having extreme difficulty, some of the letters of the word were filled in. If the child had trouble using the correct vowels in words, that was the only component they were tested on. All of the children were eventually able to move away from this type of intervention. The researcher also shortened the number of dictation sentences for struggling students. Over time these students were able to overcome their difficulties and, before midintervention, were taking dictation tests of the same length as other students in the class. Site B

The original thirty targeted students of Site B followed the basic prescribed methods of the intervention described earlier. The researcher started the core word lessons with word six hundred, and five or six core words were given and studied on a weekly basis. Many discovery, word-sort activities were used and enjoyed by the students. In such activities, students were asked to "make a list of as many words that…" follow some pattern that is demonstrated by one of their core words for the week. After a list is compiled, students were placed in groups to sort their words into categories appropriate for the spelling pattern being examined. These activities resulted in the students' self-discovery of the spelling patterns and rules found in the English language.

At the end of the core word study, cloze reviews were given most often with a writing prompt related to the cloze review topic given in addition. On occasion, a dictation review was used either on its own or in addition to the cloze. No adaptations were used for students, as none of the students needed their work to be adapted. In grading the reviews, words that were specifically studied during the unit, priority words, and words that were studied previously were



worth three points each. Words that had not been studied during the intervention were worth one point each.

At the beginning of the intervention, the researcher used the pre-intervention dictation tests and writing samples and the program's recommendations to decide that high frequency words one through forty would be deemed no-excuse, priority words for the sixth grade students. Twenty-two more words were added to this list at the end of November. Each student was also given his own copy of the priority word list that listed the top one hundred fifty high frequency words in alphabetical order and gave sentences to help them distinguish the different homonyms in the list. The students highlighted the words that were considered no-excuse words at the time and highlighted more words when priority words were added in late November.

Because sixth grade spellers often misspell words out of carelessness, not an inability to spell the words, some unique additions were made to help encourage students to proofread their work for all words, especially priority words. Whenever an assignment was checked for "priority words", the researcher would put a number at the bottom of the paper indicating the number of priority words that were missed. Each misspelled priority word lowered the student's running priority word-spelling grade by two points. The student was then expected to find the word or words that he misspelled, circle them in a different color of pen or pencil, and correct the spelling. They would then turn the paper back in to earn one point back per word missed. In this particular class, the priority word grade was worth fifty points per quarter.

To further encourage students to proofread their work and to make the process a little more fun, a strike system against the teacher was instituted. If the students could find more priority word spelling mistakes than were marked on their paper, they could show them to the teacher and earn a strike against the teacher for their class. When the class accumulated five



strikes, they earned a game day for the entire class. On game days, the class spent the fifty-seven minute morning class playing games such as board games that were related to spelling. If the game was not originally intended to be a spelling game, the students could add a spelling component into the game and explain it to the teacher in order to be able to play it. Each of the researcher's three classes, including the targeted class, earned three such game days throughout the course of the intervention. Strikes could also be earned if the students found a word misspelled by the researching teacher. These mistakes could be made either intentionally or unintentionally; however, very few of the strikes the classes earned were deliberately left for the students to find in their papers or in her own writing.

Some of the games that were played included a student made version of Password, spelling heads up, seven up, and spelling baseball. For Password, the students put a word on each side of a small card that could be acted out in charades fashion. Because they were working on words that end in "y" at the time, one of the words on each card had to end with "y". Then the students compiled their game cards, dealt them out among groups of four, and played Password. Partners had to use other clue words to try to get their guessing partner to say the word they had on their card. As in the commercial board game and game show, they could "pass" on two words per turn. The team earned one point per word that they guessed correctly in a one-minute time period. After the time was up, the opposing team chose a word ending in "y" and the guessing opponent had to spell the plural of that word for an extra point. It was then the other team's turn.

Spelling heads up, seven up used these same password cards to add spelling into the original game. In heads up, seven up, seven students are "up" while the others put their heads down and their thumbs up on their desks. The seven students then quietly walk around and touch



one student's thumb. When all seven are finished, one of them calls "heads up, seven up!" and the seven whose thumbs were touched stand up. Each of these seven had to correctly spell a word or its plural chosen from the password cards in order to earn a chance to guess who touched their thumb. If they guessed the person correctly, they would trade places with that person and become one of the seven who are "up".

Spelling baseball is simply the addition of baseball to a basic spelling bee. The students are divided into two teams. One team is up to bat and the other team pitches the words to them. For this game, words of varying difficulty were written on small cards. Each word is designated as a single, double, triple, or home run word. If the batter spells the word pitched to them correctly, they get to move the specified number of bases. If they do not spell the word correctly, an out is given to the team. Score is kept, and after three outs, the pitchers are up to bat and the batters "take the field".

## Site C: Classroom A

Site C classroom A followed the same basic format as the other sites except for a few variations. One variation occurred in the beginning of the intervention. Originally, when the researcher decided on the starting core words, she looked at the baseline data along with the suggested starting point for fourth grade. Since the students were learning disabled and had difficulty with spelling, she went below the suggested starting point. After six weeks, the researcher decided that the students were ready to move ahead in the core word lessons to be further challenged, so the students were moved them forward twelve lessons. The researcher also began by giving the students an alphabetized list of fifteen priority words that the students were responsible for spelling correctly all the time. In November, the researcher added ten more priority words to this list.



Another variation involved the review activities at the end of the lessons. The researcher in this site always did both a cloze review and a dictation test. The dictation test process began with the researcher reading a sentence twice, the students repeating the sentence, and then writing it down. Since many students in her classroom had difficulty with short-term memory, the researcher felt this activity would help with listening and memory skills.

The researcher also included a variety of review games that were particularly designed and used in order to benefit students with learning disabilities. Some of the most beneficial games were tactile ones. In one game, the students used modeling clay to form the letters of their spelling words. When they were done and checked by the teacher, the students would close their eyes and trace over the clay letters with their fingers. In another game, the students wrote the letters of words in shaving cream on their desks. When the students were taking their reviews at the end of these lessons, the researcher would remind students to visualize the words in shaving cream or clay and feel the letters as they had previously traced them. These tactile activities helped many of the students, especially the ones who were more visual-spatial and bodily kinesthetic learners, succeed in spelling when they hadn't in the past.

Another game that aided this style of learner was Spelling Bingo. In this game students were given a grid with S-P-E-L-L printed along the top. The researcher placed both core words for that week and some review words on the board. Students used a pencil to fill in the words anywhere they wanted to in the boxes on their grid. The teacher would then designate a letter of S-P-E-L-L, call a word and use it in a sentence. If the student had that particular word under the right letter, they would take a colored writing utensil and trace over the letters of the word. This gave students an opportunity to practice forming the words.



### Site C: Classroom B

The targeted group for Site C classroom B was a class of nineteen eighth graders. The middle school that houses this classroom operates on a block schedule of seventy-two minutes and meets on alternating school days. During the sixteen-week intervention period, the targeted population remained consistent. Initially these students were introduced to a list of 150 high frequency words and were told they were responsible for seventy of these words. This list of "no excuse" words was increased by approximately ten to fifteen words every four to five weeks and resulted in a list of 110 priority words by the end of the intervention. After introducing these priority words, the researcher began the program by starting with core words below the suggested starting point for eighth grade students. The researcher quickly moved up to the suggested starting point when it was realized that previous core words would be reviewed consistently in the cloze and dictation reviews. On a regular basis, five core words would be previewed in the prescribed manner.

As this researcher focused on word memory and visualization, the core words would be placed on the chalk board in colored chalk, and the students were asked throughout the week to visualize how each core word looked as it was first presented. Other assignments meant to enhance visual memory were sporadically given throughout the intervention. Students were asked to visualize an area such as their bedrooms or lockers and write descriptions from memory. The descriptions were exchanged between classmates, and the students then drew each other's descriptions. Another activity was to describe what a person who was not in the room had been wearing and then ask that person to return. Comparisons were then made.

After preview of the core words was completed, two words were examined each class period, and a word study was applied to each word. The researcher often used these words as



springboards to other language arts study. For example, core words "address" and "sincerely" led to the examination and writing of a business letter. When the word "quarter" was presented, various words beginning with the word quarter were examined. The word quarterback provoked a dictionary hunt, an Internet search, and a written letter to a sports columnist who then responded to those students in his newspaper column.

The misspelling of priority words in daily writing carried a consequence, and as the intervention progressed, this consequence became more severe. At approximately week fourteen of the intervention, students were not allowed to miss more than two priority words in any written assignment. If three priority words were missed in one assignment, a failure or a redo of that assignment resulted. Students also knew that the spelling in their writing was evaluated in other classrooms. A cloze or a review activity was completed approximately every fourth class period. Because of the block scheduling and other time constraints, this classroom only completed the study of forty core words during the sixteen-week intervention.

# Presentation and Analysis of Results

At the conclusion of the implementation of the intervention, the researchers surveyed 173 students from the three sites using the same survey given prior to the intervention. These students included both targeted and non-targeted students from two of the four classrooms in the three sites. Nine students of the original 182 students surveyed previously were not included because eight of the students in Sites A, B, and C were absent during the time that the survey was administered and one student from Site A moved shortly after the intervention began. This survey again questioned students on their perceptions and feelings about the importance of spelling in their academic life and beyond.



When the students were once more asked how they would rate their present spelling ability, 55% of the students surveyed said they were excellent or very good spellers. However, when these same students were asked how often spelling was studied at home, only 12% stated that they studied spelling three or more times per week. While there was only a 4% decline in the number of students who consider themselves excellent spellers, the amount of study time devoted to studying spelling declined significantly from the 27% of students who reported that they studied spelling three or more times a week in August. This sharp decline may be due, in part, to the facts that the children were studying words that they actually use in their daily writing and that they did not consider the words that were studied to be difficult enough to require further study outside of the classroom.

In addition to this, in January, 56% of these same students asserted that they usually remember the spelling of words they have studied for a spelling test from then on. In August, this number was 54%. The post-intervention survey showed that 24% of the students remember the spelling for several days, 12% remember most of the spellings for a few days, and 8% say they usually forget most of the spellings within a short period of time. On the same question, the pre-intervention numbers were 21%, 17%, and 8% respectively.

When students were again asked to identify the technique they use most often to find the spelling of unfamiliar words, 37% of the students preferred to ask someone, 28% chose to look the word up in a dictionary, 27% selected guessing, and 8% chose using a different word. The statistics in August showed that 34% ask, 33% look it up, 27% guess, and 6% choose another word. The use of the personal priority word list coupled with the word study activities may account for some of the decline shown in the number of students who use the dictionary to find



correct spellings. According to the survey, 91% of the students' homes have dictionaries available, which was slightly higher than the 85% reported in August.

The students surveyed were also asked once again if they proofread their written work on a regular basis, even when it was not required. The resulting figures went up 4%, from the original 60%, to 64% of students who reported that they do proofread when it is not specifically required. This statistic remained steady at the original 94% who proofread when proofreading was requested by the teacher. Furthermore, fifty-six percent admitted that they were always or sometimes embarrassed when they misspell a word, whereas 53% claimed to be embarrassed by this in August. These changes are most likely due to the fact that students were aware that their spelling of priority words could be evaluated in any of their work, in any class, at any time. Ninety-five percent of the students questioned felt that it is important to spell correctly when they write, which was lower than the 97% who felt it was important in August. The researchers attribute this drop to the possibility that the students felt more comfortable to mark their true feelings on the survey given in January.

At the end of the student survey, the researchers gave the students the opportunity to voice opinions about the program. Of the children who took the time to make comments, most responded positively by writing that they liked the program and that it helped to make them better spellers. One student enthusiastically stated, "I really liked the spelling that we did. I think that you should do it again. This was FUN!!". Other students offered critiques of the program that called for less dictation and more words studied per week. In a prime example of why this type of a program focusing on high-use words is necessary, one student remarked, "The words are to (sic) easy. You need harder words."



The researchers also re-administered a version of the original parent survey given prior to the beginning of the intervention (Appendix H). Because some of the original questions were not pertinent to the post-intervention research, they were left out. The revised parent survey repeated questions about the children's spelling ability and study habits. Parents were also asked again about their perception of how their child's spelling has improved due to the spelling program's implementation. A short answer question was added to gather information on the differences that the parents have noticed between past and present spelling programs and proofreading skills.

One hundred sixty-one parent surveys were returned, and the results were tabulated. This is comparative to the 186 surveys collected before the intervention began. Thirty-eight percent of the parents surveyed said that their child studies spelling at home, which is remarkably lower than the 68% who claimed that their child studied spelling at home prior to the intervention. Of this 38%, 48% of the parents say that their child studies spelling several times a week or daily. Only 12% of the students stated that they study spelling three or more times a week. Prior to the intervention, 63% of the parents and 27% of the students reported that they studied spelling three or more times a week. The researchers attribute the inflated pre-intervention survey results to the tendency of parents to respond to please the teacher. Consequently, some of the post-intervention survey results may reveal an unrealistic discrepancy.

The researchers feel that this decline in the amount of studying being done at home is due to the nature of the spelling activities. Memorization of the spelling of the words is no longer a focus. Instead, high-frequency words that the students and the parents deem easy, if not too easy, are being used as a springboard for studying and discovering word formation, spelling patterns, and spelling rules. Most of these activities are done cooperatively in the classroom, with



assignments being given that require students to use the words in their writing instead of completing the more traditional workbook, fill-in-the-blank type exercises.

Twenty-one percent of the parents said that their child's spelling ability has definitely improved due to the spelling programs used, which is quite a bit lower than the 39% reported that their children's spelling had improved from spelling programs used in past years. Forty-four percent said that only some improvement has been seen, which shows virtually no change from the original 43%. Fourteen percent saw little or no improvement and 21% did not know whether their child's spelling has improved due to the spelling programs used versus the respective 10% and 8% from the pre-intervention data.

The fact that there was a decline in the percentage of parents who reported seeing daily or weekly examples of their children's writing, from 95% prior to the intervention to 82% after the intervention, may explain the lower perception of how this spelling program has improved their children's spelling ability. It could also be attributed again to the apparent lack of difficulty in the program. Because a majority of the parents claimed that their children's spelling was assessed using the weekly spelling list tests in the past and that this was predominately the way they were assessed in spelling when they were in school, the parents may also be correlating the ability to spell "difficult" words in isolation to being a good speller. One parent commented that "by the time they are in sixth grade, they should already know the difference between their/there, pitcher/picture, to/two/to, etc." This parent also went on to list some "challenge words" such as "elasmosaurus" and "detonator" that their second grade child was studying. In contrast, other parents did appreciate the value of the more embedded method of teaching spelling. One such parent commented,



Spelling must encompass all subject areas as taught. Simply memorizing a group of words a week is simple. Application is the key. I wholly support this method of spelling as the <u>only</u> way to teach spelling. (It was popular thirty-five years ago by the nuns!)

When asked about the differences seen between their child's past and present spelling programs and proofreading skills, parents offered many different responses. Most parents stated that the major difference was that spelling of priority words was now being checked in writing in other classes as well as in language arts. They also noted the lower number of words studied at one time and the word study activities versus a larger weekly list and spelling workbook. In all sites, parents commented on the increased attention to proofreading and dictionary usage by their children. One parent summed up the most positive effect noticed with one word- "motivation".

In August, baseline data was taken from four different classrooms in three different sites. Again, Site A was a self-contained third grade classroom serving sixteen students. Site B was a sixth grade language arts classroom containing thirty students. Site C classroom A was a fourth grade, cross-categorical resource room of seven students. Site C classroom B was an eighth grade language arts classroom accommodating nineteen students. All targeted classrooms were serving the same students at the conclusion of the intervention in January except for Site A where one student moved away in October, leaving fifteen targeted students in the classroom.

Baseline data was gathered from each classroom prior to the intervention process, and the researchers collected data after the intervention following the same procedure. The students were given two dictation tests, two writing samples were taken from the language arts area, and two additional writing samples were taken from other subject areas. Because of the wide range of student ability between sites, Site A and Site C classroom A focused on the first fifty high



frequency words on the high frequency word list, while Site B and Site C classroom B focused on words one through one hundred fifty (Sitton, 1997).

Figure 7

Collection tool  2 Dictation tests	Number of Errors Made			
	101 (37)	98 (51)	63 (22)	43 (21)
2 Language arts writing samples	6 (3)	31 (32)	13 (2)	32 (7)
2 Writing samples from other curricular areas	15 (11)	35 (16)	8 (8)	18 (10)
	Site A 16 (15) students	Site B 30 (30) students	Site C: Class A 7(7) students	Site C: Class B 19 (19) students

(Numbers in parentheses indicate post intervention data.)

As shown in Figure 7, when the sixteen students from Site A were given dictation tests targeting high frequency words one through fifty, 101 errors were discovered. The students made six errors on writing samples taken from the language arts area, and fifteen errors were found in writing samples collected from other subject areas. Upon post-intervention data collection, fifteen of the original sixteen students made thirty-seven errors on the two dictation tests, three mistakes in samples taken from language arts writing, and eleven errors on writing samples collected from other curricular areas.

Focusing on high frequency words one through one hundred fifty, the thirty students from Site B accumulated ninety-eight errors on the pre-intervention dictation tests. From the language arts writing samples, these students missed thirty-one high frequency words, and thirty-five errors were discovered in two writing samples from other curricular areas. In January, the post-intervention testing of the original thirty students revealed fifty-one errors on the two dictation



tests, thirty-two inaccurate spellings in language arts writing samples, and sixteen misspellings in writing samples taken from other curricular areas.

When the researcher from Site C classroom A gave the dictation tests which included words one through fifty on the high frequency word list, sixty-three spelling errors were made by the seven students. The two language arts writing samples contained thirteen spelling mistakes, and the two samples collected from other curricular areas revealed eight spelling errors. Post-intervention data collected twenty-two misspelled target words on the two dictation tests, two errors in language arts writing samples, and eight inaccuracies in other curricular area writing samples from the same seven students.

Dictation tests concentrating on high frequency words one through one hundred fifty were administered in Site C classroom B to nineteen students. Forty-three high frequency word errors were found. Two writing samples from the language arts area yielded thirty-two mistakes, and two writing samples from social studies and science produced eighteen errors. When the nineteen students were again tested in January, the two dictation tests produced twenty-one errors, the two language arts writing samples showed seven misspellings, and the two writing samples from outside the language arts classroom revealed ten mistakes.

The researchers are very impressed by these results. Over the course of only sixteen weeks, the priority word mistakes have gone down by over fifty percent in most areas at all the sites. The fact that the number of priority word mistakes stayed the same in the other curricular writing samples from Site C, class A, and went up by one in the language arts writing samples from Site B, could be attributed to the unpredictable nature of students and the nature of the type of writing they were doing. However, when compared to the ten other sets of samples, these two anomalies seem trivial. There is obviously some marked improvement among the students at all



sites. The researchers feel that the major factor in this improvement is the embedded model of teaching spelling used during this intervention.

#### Recommendations and Conclusions

During the implementation of this action research plan, all four researchers came to several similar conclusions. Even though the intervention produced many positive results, the researchers also recognized that time management and weak organizational skills became a problem. The collection and documentation of student writing samples proved to be more cumbersome than conventional spelling programs. Gaining cooperation from other educators, especially in the collection of data from their area, presented more of a problem than originally anticipated. Unfortunately, some curricular areas at the various sites did not always require written responses from the students. Student perceptions of the program, at times, were frustrating. Students felt that the words were too easy and beneath their abilities. Frequently, a reminder that the core words were used just as an introduction to word study was necessary. Students were also reminded that they were still missing the most basic words in their daily written work.

On the other hand, the researchers were pleased with several other areas. All four researchers concluded that, as a result of the intervention, students' proofreading skills had become noticeably better. If the goal for students is error free writing, these students have made steps toward that goal. Because of the increased use of proofreading skills, improvement had been seen and noted in other curricular areas. Misspellings of homophones and homonyms have decreased throughout the intervention. Documentation has shown that the designated high-frequency words focused upon were internalized and used by the students in their everyday writing. The students gained a sense of accountability for the quality of their writing.



The researchers also felt that the significant decline in spelling mistakes made in most areas of the post-intervention data collection seemed to be a direct reflection of the powerful nature of the embedded model of teaching spelling. Because the targeted words in the program are words that the students use in their everyday writing, the likelihood that the words studied will be used and practiced in their writing became much greater than in more traditional programs. By the end of the intervention, the students were well aware that they were expected to spell these high-frequency words correctly at all times in all writing. The fact that they were held accountable for these words was a great motivation for them to practice using them correctly, rather than falling back into old habits of misspelling them. By the time the postintervention data was collected, many of the students had retained the correct spelling of words they had studied. The researchers feel that the number of errors seen from pre-intervention testing to post-intervention testing significantly decreased during the sixteen weeks because these words were reviewed throughout the course of the program in a variety of different ways. The researchers expect that the students will retain the correct spelling of these words and will continue to make similar progress in their writing.

Future researchers may find the following recommendations helpful. One change the researchers would suggest is to take the title "spelling" and to change it to "word study and usage". The word "spelling" has a connotative message of Friday tests, lengthy word lists, and consumable workbooks. We recommend changing the title to word study and usage in order to reflect the fact that the core words studied act as a springboard into a deeper study of each word and its relationship to other curricular areas. For example, when one class was studying the core word "dollar," the lesson turned into an economics study of preteens and their allowances.

Another example of the study of deeper word relationships occurred when one class studied the



core word "ball." The class not only learned how to spell "ball," but also in the course of an activity discovered several other words that ended with "all".

Another suggested modification would address the recording and collecting of student data. It is the feeling of the researchers that, in addition to a whole class data analysis, an individual analysis for each student would be beneficial. Each student should have a folder where writing samples and a data chart could be kept. This would aid in evaluating a student's progress throughout the year, clue the instructor to the need for individualized assistance, and indicate weaknesses of the class as a whole.

The next recommendation would involve making the parents aware of the workings of the program and their child's progress within the program. Since this program is so different from past spelling programs used, the researchers believe that parents need a full understanding of the program. In order to increase parental understanding, future researchers should have an initial information meeting, possibly at an open house, to explain the philosophies behind the program, the structure of the implementation, and evaluation procedures. Either a phone call or a detailed letter should provide the important information about the program any parent who did not attend this meeting. The individual student folders could also be sent home to increase parents' awareness of their child's progress. This could be done on a periodic basis throughout the year.

Furthermore, the researchers suggest a heightened awareness of visualization skills is necessary for student spelling success. Spelling is a visual skill. The written format of a word and phonemic format of the same word can be very different. Since a student cannot rely on many words being spelled the same way they sound, he must often develop a visual memory of the word. Teaching a child to visualize can be done by a variety of activities. One way is to teach the



students that their minds are like special video machines that can be rewound to have the images replay in their minds. One activity that would contribute to this development would be to have the students observe a picture for a short period of time, remove the picture, and then have them recall as many details as they can by bringing back the picture to their minds. Other aids to visual memory include the researcher using different colored chalk when introducing core words during the preview process and requiring students to print during dictation and cloze activities. The use of the printed letter mimics the look of a printed page in a book. These activities should be done at the beginning of the program and continue to be recycled throughout the year.

The researchers' final recommendation involves the collection of statistical data. The researchers felt that the validity of the dictation tests could be increased by varying the content of the sentences while continuing to target the same particular high frequency words instead of repeating the same set of sentences three times. This would eliminate the possibility that the students' performance improved due to a memorization factor.

As a result of the researcher's experience coupled with the favorable results observed during and after the implementation of the embedded model of teaching spelling, it is the researchers' intent to continue the intervention in the same instructional manner. Furthermore, it is the researchers' vision to expand the use of the program through staff development to other educators within their respective sites. It is our goal to bring all educators together to make every child a speller.



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## Appendices



## Appendix A

## Spelling Survey: Student

Circle the answer that most applies to you.

- 1. How would you rate your spelling ability?
  - a. excellent
  - b. usually very good
  - c. good-but could be better
  - d. poor
- 2. Do you think it is important to spell correctly when you write?
  - a. yes
  - b. no
- 3. How often do you study spelling words at home?
  - a. every day
  - b. 3-4 times a week
  - c. 1-2 times a week
  - d. less than one time a week
- 4. Have you ever looked up a word you did not know how to spell?
  - a. yes
  - b. no
- 5. When you do not know how to spell a word, 'you . . .
  - a. look it up.
  - b. guess (spell it how you think it should be spelled).
  - c. ask someone.
  - d. choose a different word.
- 6. Do you proofread your written work when it is required?
  - a. yes
  - b. no
- 7. Do you proofread your written work when it is not specifically required?
  - a. yes
  - b. no



- 8. Do you have a dictionary at home?
  - a. yes
  - b. no
  - c. do not know
- 9. Do you think spelling tests help you become a better speller?
  - a. yes
  - b. no
- 10. After you have studied words for a spelling test,
  - a. you usually remember the correct spelling from then on.
  - b. you usually remember the correct spelling for several days.
  - c. you usually remember most of the correct spelling for a few days.
  - d. you usually forget most of the correct spelling within a short time.
- 11. Are you embarrassed when you misspell a word?
  - a. yes
  - b. no
  - c. sometimes

Thank you for your time and effort. If you have any additional comments, please write them below or on the back of this paper.

Comments:



Tre

Spelling Survey: Student

Circle the answer that most applies to you.

1. How would you rate your spelling ability?

8 a. excellent   7 b. usually very good   c. good-but could be better   d. poor	a 50% 1 b 3 d 0 1
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2. Do you think it is important to spell correctly when you write?

MHHI	15 a. yes		93.8 6.3
-11	b. no	9	6 -

3. How often do you study spelling words at home?

	•	2 12.5 11
1.3	a. every day	a 121.3
11		b 5.1
THE	5 b. 3-4 times a week	c. 50 (1)
THE	8 c. 1-2 times a week	1 6.3 /
1	d. less than one time a week	α •

4. Have you ever looked up a word you did not know how to spell?

HT H1 111	13 a. yes	a.	81.8
	3 b. no	り	18.0

5. When you do not know how to spell a word, you . . .

5 b. gu	ok it up.  uess (spell it how you think it should be spelled).  k someone.	a b c d	29.4
d. cf	noose a different word.	$\alpha$	5 1

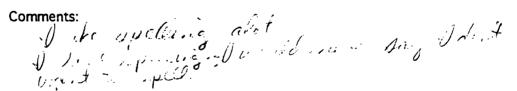
6. Do you proofread your written work when it is required?

6. Do you proditead yo	Jul William Work William
16 a. yes b. no	$\sim 10^{\circ 1}$
	<b>b</b> 5



7. Do you proofread your written work when it is not specifically required?  A 81.5  B 12.5  D 12.5
8. Do you have a dictionary at home?
8. Do you have a dictionary at home?    White the property of
9. Do you think spelling tests help you become a better speller?
b. no 1200 arriver 201,
10. After you have studied words for a spelling test,
10. After you have studied words for a spelling test,
11. Are you embarrassed when you misspell a word?
The you embatrassed when you misspell a word? $\frac{1}{a}$ yes $\frac{1}{b}$ b. no $\frac{1}{b}$ c. sometimes $\frac{1}{b}$ c. sometimes

Thank you for your time and effort. If you have any additional comments, please write them below or on the back of this paper.



Re

Spelling Survey: Student



Circle the answer that most applies to you.

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It b. usually work good A	h 28.0
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If b. usually very good & b. 25

1 c. good-but could be better 14.3 C.

2. Do you think it is important to spell correctly when you write?

3. How often do you study spelling words at home?

4. Have you ever looked up a word you did not know how to spell?

5. When you do not know how to spell a word, you . ...

6. Do you proofread your written work when it is required?

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7. Doʻyou	proofread ye	our written	work when it is not specifically
required?			the answer descended an

8. Do you have a dictionary at home?

9. Do you think spelling tests help you become a better speller?

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a.50.0
III a. yes
                               6.500
/// b. no
```

10. After you have studied words for a spelling test,

III a. you usually remember the correct spelling from then on. b. you usually remember the correct spelling for several days. | | | c. you usually remember most of the correct spelling for a few days

d. you usually forget most of the correct spelling within a short time.

11. Are you embarrassed when you misspell a word?

Thank you for your time and effort. If you have any additional comments, please write them below or on the back of this paper.

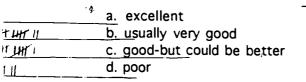
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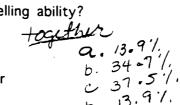
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## Spelling Survey: Student

Circle the answer that most applies to you.

1. How would you rate your spelling ability?





2. Do you think it is important to spell correctly when you write?

<b>4111</b> 1.	a. 97.1%. b. 2.8%.
HTHTHI WITH a. yes	a. 11.21
b. no	b 2.8%

3. How often do you study spelling words at home?

→ a. every day	a. 6.91, 1, 15.3%
b. 3-4 times a week	b. 13.3.
c. 1-2 times a week	c 20.8%
d. less than one time a week	d. 56.9%

4. Have you ever looked up a word you did not know how to spell?

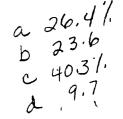
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штит ит ит ита. yes
b. no
b. no
b. 15.3'.
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5. When you do not know how to spell a word, you .

P7 1111	a. look it up.
HT 111	b. guess ( spell it how you think it should be spelled).
1741111	c. ask someone.
<u> </u>	d. choose a different word.

6. Do you proofread your written work when it is required?

ти иг ши ша. yes b. no	a, 93.1%,
	$y \cdot \mathbf{w}$





7. Do you proofread your written work when it is not specifically required?

a. 48.65 b. 51.4

8. Do you have a dictionary at home?

a 88.9

b 1,4 C 9,7

9. Do you think spelling tests help you become a better speller?

a 83.3 h 16.7

10. After you have studied words for a spelling test,

a. you usually remember the correct spelling from then on.

b. you usually remember the correct spelling for several days.

c. you usually remember most of the correct spelling for a few days.

d. you usually forget most of the correct spelling within a short

time.

11. Are you embarrassed when you misspell a word?

a 2.7 1/1. b. 54.2.1. c. 43.1

Thank you for your time and effort. If you have any additional comments, please write them below or on the back of this paper.

Comments:

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## Spelling Survey: Student

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Circle the answer that most applies to you.

How would you rate your spelling ability?

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| The spelling ability ability

3. How often do you study spelling words at home?

a. every day

b. 3-4 times a week

HIT LIH III c. 1-2 times a week

ART LIH III d. less than one time a week

Have you ever looked up a word you did not know how to spell?

HIT HIT HIT HAT UT HA. yes

D. no

5. When you do not know how to spell a word, you . . .

a. look it up.
b. guess (spell it how you think it should be spelled).
出行用[出行] C. ask someone.
d. choose a different word.



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b. you usually remember the correct spelling from then on.

b. you usually remember the correct spelling for several days.

C. you usually remember most of the correct spelling for a few days.

d. you usually forget most of the correct spelling within a short time.

11. Are you embarrassed when you misspell a word?

:,	a. yes
· *	Lite Lett 111 b. no
1	以此 (川 c. sometimes

Thank you for your time and effort. If you have any additional comments, please write them below or on the back of this paper.

Comments:



" 'lally Sneet 87 total Spelling Survey: Student Circle the answer that most applies to you. 1. How would you rate your spelling ability? a. excellent THATT THAT WHITHING . usually very good wi THE THE THE THE THE C. good-but could be better d. poor 2. Do you think it is important to spell correctly when you write? b. no 3. How often do you study spelling words at home? a. every day THE THE THE b. 3-4 times a week жинини с. 1-2 times a week ни THETHER HELD I less than one time a week 4. Have you ever looked up a word you did not know how to spell? 5. When you do not know how to spell a word, you . . . THE THE THE BY B. LOOK IT UP. THE ! THE THE THE B. guess ( spell it how you think it should be spelled). THIN THE C. ask someone. d. choose a different word. 6. Do you proofread your written work when it is required? 

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7. Do you proofread your written work w required?	when it is not specifically	. Aug Prof
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8. Do you have a dictionary at home?		
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c. you usually remember most of the d. you usually forget most of the co	Correct spelling for a four	1 days
d. you usually forget most of the	correct spelling for a few rrect spelling within a sho	v days.
d. you usually forget most of the co	correct spelling for a few rrect spelling within a sho	r days. 9
d. you usually forget most of the common time.  11. Are you embarrassed when you missper a. yes	correct spelling for a few rrect spelling within a should be a word?	v days. 9
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a. yes  Thank you for your time and effort. If you please write them below or on the back of	correct spelling for a few rrect spelling within a should be a word?	rdays. 9





## Spelling Survey: Student

Circle the answer that most applies to you.

- 1. How would you rate your spelling ability?
  - a. excellent
- b. usually very good
  - c. good-but could be better
  - d. poor
- 2. Do you think it is important to spell correctly when you write?

a. yes b. no

3. How often do you study spelling words at home?

b. 3-4 times a week
c. 1-2 times a week
d less than one time a week

4. Have you ever looked up a word you did not know how to spell?

M a. yes

b. no

5. When you do not know how to spell a word, you . . .

a. look it up.
b. guess (spell it how you think it should be spelled).
c. ask someone.
d. choose a different word.

6. Do you proofread your written work when it is required?

a. yes b. no

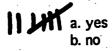
7. Do you proofread your written work when it is not specifically required?

a. yes b. no

8. Do you have a dictionary at home?

a. yes b. no c. do not know

9. Do you think spelling tests help you become a better speller?



10. After you have studied words for a spelling test,

a. you usually remember the correct spelling from then on & b. you usually remember the correct spelling for several days:

c. you usually remember most of the correct spelling for a few days.
d. you usually forget most of the correct spelling within a short time.

52 S.

11. Are you embarrassed when you misspell a word?



Thank you for your time and effort. If you have any additional comments, please write them below or on the back of this paper.

Comments:





## Spelling Survey: Student



Circle the answer that most applies to you.

- 1. How would you rate your spelling ability?
  - a. excellent [] []
  - b. usually very good HII
  - c. good-but could be better!
  - d. poor |
- 2. Do you think it is important to spell correctly when you write?
  - a. yes HT HI 11
  - b. no
- 3. How often do you study spelling words at home?
  - a. every day
  - b. 3-4 times a week
  - c. 1-2 times a week IHI
  - d. less than one time a week
- 4. Have you ever looked up a word you did not know how to spell?
  - a. yes HT JHT 111
  - b. no
- 5. When you do not know how to spell a word, you . . .
  - a. look it up. HT H 1
  - b. guess ( spell it how you think it should be spelled). I
  - c. ask someone. ]
  - d. choose a different word.
- 6. Do you proofread your written work when it is required?
  - a. yes LHT LHT 11
  - b. no ]

7. Do you proofread your written work when it is not specifically required?

8. Do you have a dictionary at home?

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a. yes LHT LHT
b. no
c. do not know ///
```

9. Do you think spelling tests help you become a better speller?

10. After you have studied words for a spelling test,

```
| | | | a. you usually remember the correct spelling from then on.
| | | b. you usually remember the correct spelling for several days.
| | | | c. you usually remember most of the correct spelling for a few days.
| d. you usually forget most of the correct spelling within a short time.
```

11. Are you embarrassed when you misspell a word?

Thank you for your time and effort. If you have any additional comments, please write them below or on the back of this paper.

Comments:



Post-Intervention (85)

## Spelling Survey: Student

Circle the answer that most applies to you.

1. How would you rate your spelling ability?
A. excellent  THE NUTTH IN b. usually very good HU     33 38.91 39 1.  HAND THE NUTTH IN C. good-but could be better
2. Do you think it is important to spell correctly when you write?
р. no p. no 2 6.1.
3. How often do you study spelling words at home?
a. every day  b. 3-4 times a week  5 5.91. 61.  h. IN. N. IN. IN. IN. IN. IN. IN. IN. IN.
4. Have you ever looked up a word you did not know how to spell?
## b. no 6 7.1'1. → 7'1.
5. When you do not know how to spell a word, you
HIM THE a. look it up. $ \frac{11_0 \rightarrow  8.8 _{1.7}  9.8 _{$
6. Do you proofread your written work when it is required?
HHHHHH a. yes TH THUTH
No Professional Contraction of the Contraction of t



7. Do you proofread your written work when it is not specifically required?
1114114 HL HL D. no/HL   53 62.41, -> 62.1.  1114114 HL HL D. no/HL   32 37.61, -> 38.1.
8. Do you have a dictionary at home?
#####################################
9. Do you think spelling tests help you become a better speller?
MINIMINUM 2. yes THE THE THE THE THE THE THE THE THE BOY.  17 20%.
10. After you have studied words for a spelling test,
a. you usually remember the correct spelling from then on. HI HI HI LAND Several days.  c. you usually remember most of the correct spelling for a few days.  d. you usually forget most of the correct spelling within a short time.
11. Are you embarrassed when you misspell a word?
H a. yes $5.9\% \rightarrow 6\% \rightarrow 6\%$ THEN THEN C. sometimes HI THEN THEN $46.56.5\% \rightarrow 56\%$

Thank you for your time and effort. If you have any additional comments, please write them below or on the back of this paper.

Comments:



Circle the answer that most applies to you. 1. How would you rate your spelling ability? b. usually very good with 11 - (29) c. good-but could be better ## 111 (20) (6) d. poor III 2. Do you think it is important to spell correctly when you write? -65 a. yes HT HT HT II b. no 11 3. How often do you study spelling words at home? a. every day 1 b. 3-4 times a week c. 1-2 times a week II 8 4. Have you ever looked up a word you did not know how to spell? a. yes HT LHT HT 1 b. no 5. When you do not know how to spell a word, you . . .

/ b. guess ( spell it how you think it should be spelled)

6. Do you proofread your written work when it is required?

III a. look it up

/// c. ask someone.

a. yes HT HT HT I

b. no 🔡

111 d. choose a different word.

Spelling Survey: Student



7. Do	you	proofread	your	written	work	when	it	is	not	specifically
require				1				١.	d	

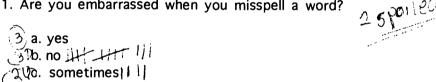
8. Do you have a dictionary at home?

a. yes 
$$\frac{1}{4}$$
  $\frac{1}{4}$   $\frac{1}{4}$ 

9. Do you think spelling tests help you become a better speller?

10. After you have studied words for a spelling test,

- 4 spoiled a. you usually remember the correct spelling from then on. ### +## - 39 b. you usually remember the correct spelling for several days. Ill c. you usually remember most of the correct spelling for a few days. II = (
- d. you usually forget most of the correct spelling within a short IItime.
- 11. Are you embarrassed when you misspell a word?



Thank you for your time and effort. If you have any additional comments, please write them below or on the back of this paper.

Comments:

# Appendix B Pre-Intervention

## Spelling Survey: Parents

Circle the letter of the answer that best applies.

1.	How would you rate your child's spelling ability?
	a. excellent
	<ul><li>b. good for age/grade level</li><li>c. slightly below grade level</li></ul>
	d. very poor; cause for concern
2.	How often do you read samples of your child's writing? (ex. notes, lists, paragraphs, essays, letters)
	a. daily
	b. several times a week
	c. once a week
	d. a few times per month or less
3.	Does your child study spelling at home?
	a. yes
	b. no
4.	If yes, how often?
	a. daily
	b. several times a week
	c. once a week
	d. a few times per month or less
5.	Is the spelling program your child has studied in the past similar to how spelling was taught when you were in school?
	a. yes
	b. no
6.	What features have you noticed used in your child's most recent spelling program? (Please
	circle all that apply.)
	a. word lists from a spelling textbook/workbook
	b. word lists chosen from subjects being studied
	c. phonetic lists or lists of words that follow similar patterns (ex. fright, bright, kite, etc.
	d. common words/ words used most frequently
	e. other (Please describe.)



f. don't know

7.	a. b. c. d.	was your child's spelling tested? weekly spelling tests occasional spelling tests spelling is checked in child's writing other (Please describe.) don't know
8.	Do vo	u think your child's spelling has improved due to the spelling programs used?
•	•	definitely
		some improvement seen
		little or no improvement seen
		don't know
0	Do way	have a distingery in your hama?
9.	•	have a dictionary in your home?
		yes no
	0.	110
10.	Have	you ever seen your child use the dictionary?
	a.	yes
	b.	no
11.	How i	mportant do you think it is to be able to be a good speller in the adult work world?
		very important
		somewhat important
		somewhat unimportant
		not important at all
12	Do vo	u consider yourself a good speller?
14.	•	yes
		no
13.	Finish	this sentence with the choice that best fits your beliefs. Spelling ability is
	a.	inherited
	b.	learned or worked toward
	c.	both
	d.	other (Please describe.)
Tha		of for your time and effort. If you have any additional comments, please write them



Comments:



	Spelling Survey: Parents	
GG Circle the letter of the answer that	best applies.	
01. How would you rate your chil	d's spelling ability?	
a. excellent 9		•
HI HIT HIT B. good for age/grade lev	el um um 35	Ihrawn out
c. slightly below grade le	evel 14	9,0,000
d. very poor; cause for co	oncern	
67) 012. How often do you read sampl	es of your child's writing? (ex. no	otes, lists, paragraphs, essays,
letters)	,	1.17
HITHT a. daily 15	70 thrown 14	
HTHT HH HT H III b. several times a week  c. once a week  7	20	
7 D: 1 _ C _ 4 1	or less 7	•
d. a few times per month	•	•
Does your child study spellin	g at home? Juguer?	! 11
HIT HIT HIT HIT a. yes 25		
нп-инингингинг I b. по 33		
HIT I		
(29) 4. If yes, how often?		
ur a. daily 5	4.5	
b. several times a week		
HT LHT c. once a week		
d. a few times per month	Toriess 5	
1s the spelling program your	hild has studied in the past simil	ar to how spelling was taught
when you were in school?	onite that steered in the past summ	_ oo to work opening was wagen
HHT HHT HHT a. yes 38		
ин ин инт ит и в. по 22		
6. What features have you notice circle all that apply.)	ed used in your child's most rece	ent spelling program? (Please
भूगोर प्रभू भार अस्ति व. word lists from a spel	ling textbook/workbook 39	
HTHE WILL HE WOOD lists chosen from	n subjects being studied 32	
c. phonetic lists or lists	of words that follow similar patte	rns (ex. fright, bright, kite, etc.) 12
	ls used most frequently 23	
e. other (Please describe	e.) <u> </u>	
HT II f. don't know	7	
108-116 7. How is/was your child's spe	ling tested?	
HTUT HIT HT HT HT Wa. weekly spelling tests		
HT II b. occasional spelling to		
c. spelling is checked in		
d. other (Please describ	e.) <u> </u>	
e. don't know	3	1. 1.2
7 . 6	3 AMTIN 38	
- Na	* auswers	MH-11 H+C
		$I = C \cdot D$
, —	•	•





(50)	
C 8. Do you think your child's spelling has improved due to the spelling programs use  HTHH HH 11 a. definitely 17  HTHH WH HT HH b. some improvement seen & 26	ed? Thrown out
c. little or no improvement seen 7	•
Hr III d. don't know 8	•
59 tt9. Do you have a dictionary in your home?  HIT HIT LIMIT OF THE WAY AND THE SERVICE SERVI	Thrown out
b. no	
69 0×10. Have you ever seen your child use the dictionary?	11
HITHTHITHT a. yes IN INT LITTLINE IN 188	Thrown out
0. 110	/
159 M. How important do you think it is to be able to be a good speller in the adult work with the think it is to be able to be a good speller in the adult work.  Which were important the think it is to be able to be a good speller in the adult work.	world? Thrown C
HT 11 b. somewhat important 7	1
c. somewhat unimportant O	
d. not important at all	
59 o Kt2. Do you consider yourself a good speller?	
HIT HIT WILL YES HET LITTELL HET HE THE SO	Thrown out
LHT IIII b. no 9	/
6 CK13. Finish this sentence with the choice that best fits your beliefs. Spelling ability is	
a. inherited 2	Skrown out
HTHT HT HT HE learned or worked toward HT HT 11 38	///
(H1 111 1111) C. both 17	
d. other (Please describe.)	

Thank you for your time and effort. If you have any additional comments, please write them below.

Comments:

Pre

Spelling Survey: Parents	
Circle the letter of the answer that best applies.	mang dipolitika (1972). Si dipolitika (1972)
1. How would you rate your child's spelling ability?	And the second s
1. How would you rate your child's sperining ability:  (The would your rate your child's sperining ability:  (The would your rate your child's sperining ability:	Anto Courte (1932) (2)
(9)b. good for age/grade level	West 1800 D
(3) c. slightly below grade level	de la companya de la
d. very poor; cause for concern	in the second s
2. How often do you read samples of your child's writing? (ex. notes, l	lists, paragraphs, essays,
letters)	Now 10
HIHIII Ba. daily (parent marked	HID
111) 4 b. several times a week	
c. once a week d. a few times per month or less	• • • • • • • • • • • • • • • • • • • •
	•
3. Does your child study spelling at home?	<u></u>
HTHTLM & yes	
b. no	2 · ₩ · · ••• · • • •
17 4. If yes, how often? (parent marked AYB)	
11 3 a daily	<b></b>
144 HT 1 (12) several times a week	• • • • • • • • • • • • • • • • • • •
c. once a week	
d. a few times per month or less	
5. Is the spelling program your child has studied in the past similar to	how spelling was taught
when you were in school? consend marked both	comment!
11 8 a. yes no answer	· · -
Somewhat!	·
6. What features have you noticed used in your child's most recent s	pelling program? (Please
circle all that apply.)	o answer 1
/ a. word lists from a spelling textbook/workbook	
b word lists chosen from subjects being studied    Word lists of words that follow similar patterns	(ex. fright, bright, kite, etc.)
7 d. common words/ words used most frequently	(0.11 = -6.11)
e. other (Please describe.)	
f. don't know	•
7. How is/was your child's spelling tested?	
How is was your child's spenning tested:    How is was your child's spenning tested:	
b. occasional spelling tests	
3 c. spelling is checked in child's writing	
d. other (Please describe.)	
e. don't know	



14	and the second s	A.
8. Do you think your child's spelling has improved du	ie to the spelling programs used?	
H 1 7 a. definitely	the contract of the contract of the contract of	
b. some improvement seen	and the second s	• •
c. little or no improvement seen	Serte Constant and Analysis and Association	. 11
d. don't know	he color approved to the design of the second of the secon	F.
	14 NO. 30 No. 340 AC POSE UZI 111	نبد
9. Do you have a dictionary in your home?		
The state of the s	and the second of the second o	
111 111 a yes 16		
b. no		
10. Have you ever seen your child use the dictionary?		
11 10 a. yes		
6 b. no		•
		•
11. How important do you think it is to be able to be a	good speller in the adult work world?	
wery important com	ment 2	
b. somewhat important		
c. somewhat unimportant	• - •	
d. not important at all	•	
12. Do you consider yourself a good speller?	•	
11 11 13 a. yes		
b. no		1
<u> </u>	CALL COMMUNICATION CONTRACTOR CON	
13. Finish this sentence with the choice that best fits	your beliefs Spelling ability is	_
15. I mish this sentence with the choice that best his	your beneat. open_g,	
e a inherited	•	
// b. learned or worked toward		
5 c. both	,	
d. other (Please describe.)		
	the target and a second them	
Thank you for your time and effort. If you have any	additional comments, please write them	

below.

Comments:

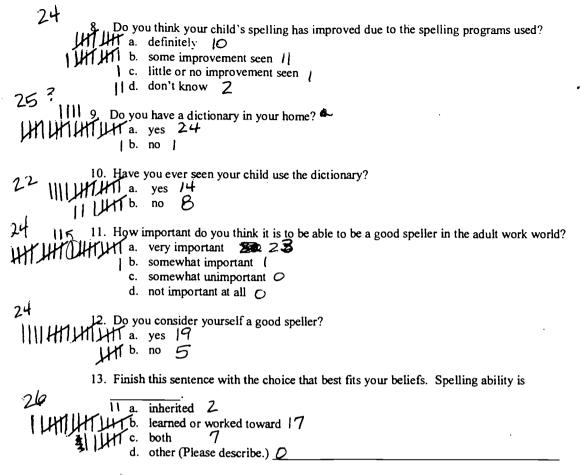


Pre

#### Spelling Survey: Parents

```
Circle the letter of the answer that best applies.
            1. How would you rate your child's spelling ability?
                a. excellent
           HIHT b. good for age/grade level 19
              111 c. slightly below grade level 3
                d. very poor; cause for concern
  24
            2. How often do you read samples of your child's writing? (ex. notes, lists, paragraphs, essays,
               letters)
    I I I a. daily
           11 b. several times a week
                1 c. once a week
                  d. a few times per month or less O
        1173. Does your child study spelling at home?
 HIHTHIHT a. yes 22
               11 b. no 2
            4. If yes, how often?
       I H I a. daily 1
          | | | | b. several times a week 8
               | c. once a week
                                     2
                 d. a few times per month or less
  23
            5. Is the spelling program your child has studied in the past similar to how spelling was taught
               when you were in school?
    HHHHHT a. yes 16
          11 IH b. no
            6. What features have you noticed used in your child's most recent spelling program? (Please
               circle all that apply.)
  III HT HT a. word lists from a spelling textbook/workbook 18
          b. word lists chosen from subjects being studied 7
phonetic lists or lists of words that follow similar patterns (ex. fright, bright, kite, etc.) 16
        d. common words/ words used most frequently B
                 e. other (Please describe.)
                f. don't know i
            7. How is/was your child's spelling tested?
a. weekly spelling tests 24
                  b. occasional spelling tests O
                11 c. spelling is checked in child's writing 2
                 d. other (Please describe.)
                   e. don't know
```





Thank you for your time and effort. If you have any additional comments, please write them below.

Comments:

Fre		(8 <b>b</b> ) 99
oo.	Spelling Survey: Parents	Thrown out
Circle the	letter of the answer that best applies.	Thrown out
	would you rate your child's spelling ability?	///
	good for age/grade-level 141 141 141 46	•
	slightly below grade level /2 very poor; cause for concern	
	often do you read samples of your child's writing? (ex. notes, lists, page of the control of the	aragraphs, essays
letters	3)	Lagrapia, ossays,
Utilut litt the litt a.	several times a week	_ '
11 d.	a few times per month or less	<del>-</del> -
	your child study spelling at home?	_
	yes lift lift lift lift lift lift lift 66	<b>3</b>
FILTHI MILLIM THE P.	no 25	
1 OF STATE	, how often? daily 2	1
White It is b.	several times a week W 35	
MI THE INTERIOR	a few times per month or less	
(89) a 5. Is the	spelling program your child has studied in the past similar to how sp	celling was taught
	you were in school?  yes HT HT HT HT HT HT 56	
	no [H] [H] 33	_
(2)4) 6. What	features have you noticed used in your child's most recent spelling p	program? (Please)
MIM MI MI LINE CHEEK	all that apply.) word lists from a spelling textbook/workbook word lists chosen from subjects being studied word lists chosen from subjects being studied	(THE THE THE THE THE
		ht, bright, kite, etc.) 5!
MINIMINITY OF	phonetic lists or lists of words that follow similar hatterns less frig. common words/ words used most frequently 3.6.  other (Please describe.)	
	don't know	
10 (13 ) 7. How	is/was your child's spelling tested?	INCININ 85
क्रियोप्रीप्रीप्रीप्रामा व	is/was your child's spelling tested?  weekly spelling tests  occasional spelling tests	WII WILLIAM
	occasional spelling tests spelling is checked in child's writing \ other (Please describe.)	
	<del></del>	
	MIN Ment 2 22	
·	> AxC	



	ل ا
(91)	Throw out
8. Do you think your child's spelling has improved due to the spelling programs used	1?  \
111 Lt. c. little or no improvement seen 34	
5 41 C	. <b></b>
91) 9. Do you have a dictionary in your home?  HTHILHILHILHILHILHILHILHILHILHILHILHILHILH	11
b. no	$\mathcal{M}$
10. Have you ever seen your child use the dictionary?  HILL HILL HILL BI	. 1 1
11. How important do you think it is to be able to be a good speller in the adult work	world?
HTHE WERY IMPORTANT WITH WHITH WITH WITH WITH WITH WITH WI	1178
c. somewhat unimportant O d. not important at all O	,
12. Do you consider yourself a good speller?	THE
HITHIUM LUTA. yes WIN WIN WHY LUT WIN LUT LUT LOB	<b>)</b> .
13. Finish this sentence with the choice that best fits your beliefs. Spelling ability is	. //
a. inherited O	
HUILIHI c. both (Please describe.)	<del>_</del>
The state of the s	te them

Thank you for your time and effort. If you have any additional comments, please write then below.

Comments:



## · Appendix C

## Spelling Survey: Teacher

Circle the letter of the answer that best applies.

1.	What content area(s) and grade level(s) do you teach?

- 2. What percentage of your students, do you feel, transfer accurate spelling knowledge to daily writing?
  - a. 25% or less
  - b. 26-50%
  - c. 51-75%
  - d. 76-100%
- 3. Do you require your students to write in class? (ex. Note-taking, essay or short answer questions, paragraph writing, copying from board)
  - a. yes
  - b. no
- 4. Do you require students to answer written questions using complete sentences?
  - a. yes
  - b. no
- 5. If yes, how often?
  - a. On almost all assignments
  - b. On most assignments
  - c. On few assignments
  - d. Rarely or never
- 6. Do you evaluate your students' spelling on assignments?
  - a. On almost all assignments
  - b. On most assignments
  - c. On few assignments
  - d. Rarely or never
- 7. Do spelling errors affect your students' grade?
  - a. yes
  - b. no
- 8. If yes, what words do you check for spelling?
  - a. all words
  - b. content words only
  - c. common/ high frequency words



9.	Do yo	our students know which assignments will be graded for spelling?
	a.	yes
	b.	no
10.	a. b. c.	mportant is it to you as a teacher to stress accurate spelling in daily writing? very important somewhat important somewhat unimportant not important at all
11.	a. b.	teach spelling, are you satisfied with your current spelling program?  yes  no  not applicable
12.	a. b. c. d.	type of spelling program do you use? basal spelling program content based spelling words teacher created lists none other (Please describe.)
	writing a.	ou satisfied with the number of students who transfer their spelling knowledge to their g in other subject areas?  yes  no
14.	Finish	this sentence with the choice that best fits your beliefs. Spelling ability is
	b.	inherited learned or worked toward both other (Please describe.)
15.	a.	ou see spelling as a sign of intelligence? yes no
16.		ou think students should be held accountable for accurate spelling in all subject areas?  yes  no



- 17. In a departmentalized situation, who do you believe should be ultimately responsible for teaching/reinforcing accurate spelling in schools?
  - a. language arts teacher
  - b. math teacher
  - c. science teacher
  - d. social studies teacher
  - e. all of the above

Thank you for your time and effort. If you have any additional comments, please write them below.

Comments:



#### Spelling Survey: Teacher

Circle the letter of the answer that best applies.

1. What c	ontent area(s) and grade level(s) do	you teach?	•
writing         a.         b.	? 25% or less	feel, transfer accurate spelling know	wledge to daily
	ns, paragraph writing, copying from	lass? (ex. Note-taking, essay or shorm board)	rt answer
4. Do you 111111111 a. 1 b.	yes CY-	questions using complete sentences	s?
//// a.   1	how often? On almost all assignments On most assignments On few assignments Rarely or never		. •
a.       b.	On almost all assignments On most assignments On few assignments Rarely or never	on assignments?	
7. Do sj   UH] LHT a.      b.	pelling errors affect your students' ges	grade?	
a.       b.	what words do you check for spel all words content words only common/ high frequency words	ling?	I)XI
	our students know which assignme yes no	nts will be graded for spelling?	Marie al



III III b. so	portant is it to you as a teacher to stress accurate spelling in daily writing? omewhat important omewhat unimportant of the important at all	ŗ
11. If you tea    a. ye      b. no      c. no		
ib. co.	pe of spelling program do you use? asal spelling program ontent based spelling words acher created lists one her (Please describe.)	5
		<b>\</b>
a. inh    b. lear       C. bot	urned or worked toward	
15. Do you se  IM a. yes  III b. no	ee spelling as a sign of intelligence?	
16. Do you thi HTHT a. yes 1111 b. no	ink students should be held accountable for accurate spelling in all subject areas?	*
b. mat c. scie	tmentalized situation, who do you believe should be ultimately responsible for einforcing accurate spelling in schools? guage arts teacher th teacher ence teacher ial studies teacher of the above	

BEST COPY AVAILABLE

Spelling Survey: Teacher Circle the letter of the answer that best applies. i.. What content area(s) and grade level(s) do you teach? 2. What percentage of your students, do you feel, transfer accurate spelling knowledge to daily writing? a. 25% or less 1111 NA b. 26-50% HTT c. 51-75% d. 76-100% 3. Do you require your students to write in class? (ex. Note-taking, essay or short answer questions, paragraph writing, copying from board) b. no 4. Do you require students to answer written questions using complete sentences? N.A. 1111 MILM a yes LH LH LH LH (40) (5) b. no 5. If yes, how often? a. On almost all assignments b. On most assignments []] NA HY Z.c. On few assignments d. Rarely or never Testsl 6.9 Do you evaluate your students' spelling on assignments? 12 a. On almost all assignments NAII Joine 1 15 b. On most assignments 7 c. On few assignments // d. Rarely or never Do spelling errors affect your students' grade? NAI Sometimes 11 b. no [11] 8. If yes, what words do you check for spelling? NAIII  $\frac{II}{}$  a. all words 11/1 640 <u>5</u> b. content words only d c. common/high frequency words Do your students know which assignments will be graded for spelling? Utta ves HTHT LT 35 WA HT ح b. no



	107
How important is it to you as a teacher to stress accurate spelling in daily writing?  How important III 23 10+d 11.044	
HI 6 c. somewhat unimportant	
11 If you teach spelling are you satisfied with your current spelling program?	
41 111 24 a. yes 41 111 9 b. no	
12. What type of spelling program do you use?  ###################################	spelli
b. content based spelling words  11 4 c. teacher created lists  5 d. none  2 e. other (Please describe.)  4 b c l	
Are you satisfied with the number of students who transfer their spelling knowledge to their writing in other subject areas?  A a yes  B no 33  14. Finish this sentence with the choice that best fits your beliefs. Spelling ability is	
a. inherited    Inherited   WA	
15. Do you see spelling as a sign of intelligence?	
16. Do you think students should be held accountable for accurate spelling in all subject areas?    H	
17. In a departmentalized situation, who do you believe should be ultimately responsible for teaching/reinforcing accurate spelling in schools?  5 a. language arts teacher  b. math teacher  c. science teacher  d. social studies teacher	
HI HI HI e. all of the above	

#### Spelling Survey: Teacher

Circle the letter of the answer that best applies.

1. What content area(s) and grade level(s) do you teach?
2. What percentage of your students, do you feel, transfer accurate spelling knowledge to daily writing?  At buy inviting  B b. 26-50%  THANKING Doc. 51-75%  White the control of the property of the propert
Do you require your students to write in class? (ex. Note-taking, essay or short answer questions, paragraph writing, copying from board)
Do you require students to answer written questions using complete sentences?
15. If yes, how often?   3 a On almost all assignments   11.   11.   12.   13.   14.   1
The polyou evaluate your students' spelling on assignments?  The polyou evaluate your students' spelling on assignments.  The polyou evaluate your spelling on assignments your spelling on assignments.
Do spelling errors affect your students' grade?  HHHHHHHH a. yes (9)  HHHHHHHH b. no (5)  18. If yes, what words do you check for spelling?  William III a. all words
18. If yes, what words do you check for spelling?    A all words   A   A   A   A   A
9. Do your students know which assignments will be graded for spelling?





10. How important is it to you as a teacher to stress accurate spelling in daily writing?	
THE HILL 111 19 a. very important	
THHUTHI (16)b. somewhat important	
3c. somewhat unimportant	
d. not important at all	
11/76	
If you teach spelling, are you satisfied with your current spelling program?	
MINIM HI HI HI MI Case. not applicable	
What type of spelling program do you use?	
(3) a. basal spelling program	
b. content based spelling words	
11 (3) c. teacher created lists	
allymitati (ac)d. none	
HHAMITH (15) d. none  (Su brochus) (individualized lists)	
113. Are you satisfied with the number of students who transfer their spelling knowledge to their	
writing in other subject areas?	
HHHHIII (3) a. yes HIII (7)	
HH-HH-HI (B). 110	
14. Finish this sentence with the choice that best fits your beliefs. Spelling ability is	
a. inherited  HI N/ HILLIN (1B) b. Jearned or worked toward  HITH HILLIN (19)c. both  O d. other (Please describe.) 1 expectations from family	
HI HILLIN (18) b. Jearned or worked toward	
HITH HA III (9)c, both	
D d. other (Please describe.) 1 expertations from family	
15. Do you see spelling as a sign of intelligence?	
HIMI (I) a yes	
MITHUTHING no (27)	
16. Do you think students should be held accountable for accurate spelling in all subject areas?	
THATHANIA 2 yes 27	
MKMLI b. no III	
17. In a departmentalized situation, who do you believe should be ultimately responsible for	
teaching/reinforcing accurate spelling in schools?	
H H (1) a language arts teacher	
17. In a departmentalized situation, who do you believe should be ultimately responsible for teaching/reinforcing accurate spelling in schools?	enew
c. science-teacher	
d. social studies teacher	
HAHLAN TANK e. all of the above	
President de la company de la	

#### Appendix D

#### Spelling Survey: Business

Circle the answer that most applies to your business.

- 1. How important is it for your employees to be accurate spellers?
  - a. extremely important
  - b. important
  - c. not very important
  - d. does not apply
- 2. Does your application for employment require any handwritten response?
  - a. yes
  - b. no
- 3. Does accurate/inaccurate spelling on the job application or resume impact your decision to hire an applicant?

a.yes

b.no

- 4. How important do you think it is to teach spelling in schools?
  - a. extremely important
  - b. important
  - c. not very important
  - d. does not apply
- 5. Do you consider good spelling a sign of intelligence?
  - a. yes
  - b. no
- 6. Do you consider accurate spelling a necessary life skill?
  - a. yes
  - b. no

Thank you for your time and effort. If you have any additional comments, please write them below.

Comments:



6

#### Spelling Survey: Business

Circle the answer that most applies to your business.

applied to your decimose.
1. How important is it for your employees to be accurate spellers?
111 (4) a extremely important 671,  b. important 331,  c. not very important
d. does not apply
2. Does your application for employment require any handwritten response?
111 4 a. yes 67%, 11 3 b. no 33%,
3. Does accurate/inaccurate spelling on the job application or resume impact your decision to hire an applicant?
THU 6 a. yes 1001.
4. How important do you think it is to teach spelling in schools?
a. extremely important b. important c. not very important d. does not apply
5. Do you consider good spelling a sign of intelligence?
111 (3) a yes 50 1. 111 (3) b. no 50 1.
6. Do you consider accurate spelling a necessary life skill?
TH 6 2 Mas 831.
/ ( b. no /7 //,
Thank you for your time and effort. If you have any additional comments, please write them below.  Comments:

#### Appendix E

# Dictation Sentences: Targeted High-Frequency Words # 1-50

#### Dictation Test #1

- 1. They said your cat is not on the table.
- 2. There are two boys in his family as well as three girls.
- 3. What will you do if I eat this apple?
- 4. Were all their stories about frogs with spots or stripes?
- 5. He was from that class but moved.

#### Dictation Test #2

- 1. Which one will be at your party?
- 2. Have we looked for a can of soup?
- 3. Each girl had a pen and a pencil by her desk.
- 4. When did you go to it?
- 5. How does an airplane stay up in the air?



#### Appendix F

#### Dictation Sentences: Targeted High-Frequency Words #1-150

#### Dictation #1

- 1. Where (98) was (13) the (1) new (107) boy from (23)?
- 2. You (8) could (70) write (108) to (5) your (40) grandmother.
- 3. <u>Some (56) people (79) are (15) very (93) funny.</u>
- 4. There (37) were (34) more (63) girls than (73) boys at the (1) party.
- 5. Turn right (116) and (3) go (105) around (120) the (1) block.

#### Dictation #2

- 1. Joe said (43) they (19) would (59) bring their (42) ball.
- 2. First (74) the (1) kitten chased its (76) tail and then (53) it (10) went (143) to (5) sleep.
- 3. What (32) does (128) Mom say (149) about (48) the (1) party?
- 4. <u>Another</u> (121) day (114) was (13) wasted <u>because</u> (127) <u>too</u> (112) many (55) students <u>were</u> (34) gone.
- 5. Do (45) you (8) know (100) which (41) room is (7) our (109) room?

The underlined words are words of particular interest to the researchers as benchmarks to help decide the ability level of the students.



Appendix G Adapted from "Spell Check", Rebecca Sitton's Sourcebook Series, 1999.

# 's Priority Word List

A	Does	9 Know	9 Our	Three
About	Down	Like	Out	9 Through
After	Each	Little	Over	Time
Again	Even	Long	Part	∇o
AĬĬ	Find	Look	People	P Too
Also	First	Made	Place	? Two
An	9 For	Make	Put	Up
And	From	Man	? Right	Use
Another	Get	Many	Said	Very
Any	Go	May	Same	Was
9 Are	Good	Me	Say	Water
Around	Great	Men	9 See	9 Way
As	Had	More	She	We
At	Has	Most	Small	Well
Away	Have	Much	So	Went
Back	He	Must	9 Some	9 Were
Be	Help	My	Such	What
Because	Her	9 New	Take	When
Been		9 No	Tell	Where
But	Him	9 Not		
<b>ў Ву</b>	His	Now	That	9 Who
Called	How	Number	The	Why
Came	I	Of	↑ Their	Will
Can	If ·	Off	Them	With
Come	In	Old	9 Then	Words
Could	Into	On	9 There	Work
Day	Is	∂ One	These	Would
Did	It	Only	They	9 Write
Different	9 Its	Or	Think	You
9 Do	Just	Other	This	<pre>9 Your</pre>

Word often confused with another word. See examples on back for correct choice.



#### Months

January February March April

May

June

July
August
September
October
November

December

Days Monday Tuesday Wednesday Thursday Friday Saturday Sunday

# Reference of Confusing Words

The boys are in the gym. Are Hour An hour equals sixty minutes. Our We want our team to win. Ate She ate two apples for lunch. Eight Eight girls came to the party. You can buy soda at school. Buy Put it by the book by B. Cleary. Ву "Good-bye!" called Mom. Bye Close Close the book. You are close to the edge. Clothes He wears nice <u>clothes</u>. Dear Dear diary, Deer He hunts for deer in the fall. Morning dew covered the grass. Dew Do you like pizza? Do My report is <u>due</u> tomorrow. Due For This card is for you. Four Two times two equals four. Hear Can you hear that noise? Here My friends are here for cake.

There is a hole in my shoe. Hole Whole I ate the whole sandwich. The butterfly spread <u>its</u> wings. Its It's It's a long book. **Knew** I once <u>knew</u> a strange teacher. New My new socks are green. I know how to roller-skate. Know No No, she didn't have her coat. The sailor tied a knot in the rope. Knot Not Mom will <u>not</u> let me go. Mrs. Smith lets us play checkers. Let's Let's have ice cream after dinner. Made Dad made tacos for lunch. Maid I would like a maid to clean for me. She only wants one sheet of paper. One Our team won the game. Won Read I read a book. She will read the

Cardinals are red birds.



Red

Right My answer was right. I am right-

handed.

Write She will write an essay on cats.

Sea A whale swims in the sea.

See Can you see the blackboard?

Some I would like some milk.

Sum Six is the sum of two plus four.

Than She has more dogs than me.

Then Knock on the door, then come in.

Their They took their dog to the vet.

There There is my favorite restaurant.

They're having fun in class.

Theirs The ball is theirs.

There's a bug in my shoe.

Threw I threw the ball to Joey.

Through The cat walked through the

water.

To She drove to the store.

Too The water is too hot.

Two You have two eyes.

Way Show me the way to school. It's

way too expensive to fly.

Weigh I weigh ninety-five pounds.

Were My glasses were in my pocket.

We're We're going to my house.

Wear I like to wear jeans to school.

Where is my homework?

Which She knows which dog is mine.

Witch The witch flew on a broomstick.

Who's Who's your favorite teacher?

Whose Whose shoes are purple?

**Wood** The house was built with <u>wood</u>. **Would** She <u>would</u> love to play.

Your Is that your notebook?

You're You're asking the wrong person.



# Appendix H Post-Intervention

#### **Spelling Survey: Parents**

Circle the letter of the answer that best applies.

- 1. How would you rate your child's spelling ability?
  - a. excellent
  - b. good for age/grade level
  - c. slightly below grade level
  - d. very poor; cause for concern
- 2. How often do you read samples of your child's writing? (ex. notes, lists, paragraphs, essays, letters)
  - a. daily
  - b. several times a week
  - c. once a week
  - d. a few times per month or less
- 3. Does your child study spelling at home?
  - a. yes
  - b. no
- 4. If yes, how often?
  - a. daily
  - b. several times a week
  - c. once a week
  - d. a few times per month or less
- 5. Do you think your child's spelling has improved due to the spelling programs used?
  - a. definitely
  - b. some improvement seen
  - c. little or no improvement seen
  - d. don't know
- 6. Have you ever seen your child use the dictionary?
  - a. yes
  - b. no
- 7. What differences have you noticed between your child's past and present spelling programs and proofreading skills?

Thank you for your time and effort. If you have any additional comments on your perception of the spelling program this year, please write them on the back. Your comments are a great help to the improvement of this program in the future, so we would be extremely appreciative of your input.



#### **Spelling Survey: Parents**

Circle the letter of the answer that best applies.

- 1. How would you rate your child's spelling ability?
  - 9-a. excellent
  - 27-b. good for age/grade level
  - 14 c. slightly below grade level
  - 2 d. very poor; cause for concern
- 2. How often do you read samples of your child's writing? (ex. notes, lists, paragraphs, essays, letters)
  - 5-a. daily
  - 16-b. several times a week
  - 14-c. once a week
  - 17- d. a few times per month or less
- 3. Does your child study spelling at home?
  - 12 a. yes
  - 40b. no

- 4. If yes, how often?
  - – a. daily
  - 5 b. several times a week
  - 2-c. once a week
  - 5- d. a few times per month or less
- 5. Do you think your child's spelling has improved due to the spelling programs used?
  - 10- a. definitely
  - 22 -b. some improvement seen
  - 9 c. little or no improvement seen
  - // d. don't know
- 6. Have you ever seen your child use the dictionary?
  - 47-a. yes
  - 5-- b. no
- 7. What differences have you noticed between your child's past and present spelling programs and proofreading skills?

Thank you for your time and effort. If you have any additional comments on your perception of the spelling program this year, please write them on the back. Your comments are a great help to the improvement of this program in the future, so we would be extremely appreciative of your input.



Post (15)

#### Spelling Survey: Parents

Circle the letter of the answer that best applies. 1. How would you rate your child's spelling ability? 2 a. excellent ! b. good for age/grade level ### 3 6 c. slightly below grade level [H] d. very poor; cause for concern How often do you read samples of your child's writing? (ex. notes, lists, paragraphs, essays, letters) daily 山竹物 III several times a week ъ.\_ c. once a week d. a few times per month or less 3. Does your child study spelling at home? a. yes HTLH III no If yes, how often? a. daily [ ] b. several times a week HH once a week [[] d a few times per month or less b. some improvement seen little or no improvement seen d. don't know 6. Have you ever seen your child use the dictionary?

13 a yes 114 111 7. What differences have you noticed between your child's past and present spelling programs and

Thank you for your time and effort. If you have any additional comments on your perception of the spelling program this year, please write them on the back. Your comments are a great help to the improvement of this program in the future, so we would be extremely appreciative of your input.

proofreading skills?

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### **Spelling Survey: Parents**

.Circle the letter of the answer that best applies.

4444	v would you rate your child's spelling abi a. excellent b. good for age/grade level c. slightly below grade level	lity?
11 (	c. slightly below grade level d. very poor; cause for concern	
		's writing? (ex. notes, lists, paragraphs, essays, letters
111	a. daily b. several times a week	
11	c. once a week	
''	d. a few times per month or less	
3. Doe	s your child study spelling at home?	1 thrown out (picked both)
	a. yes b. no	(picher
	b. no	•
4. If y	res, how often?	v.2-
	a. daily	Insfort3
1111	<ul> <li>a. daily</li> <li>b. several times a week</li> <li>c. once a week</li> <li>d. a few times per month or less</li> </ul>	Ivo,
'	d. a few times per month or less	
•		t to the amplified programs used?
5. Do	you think your child's spelling has impr	oved due to the spenning programs used:
114	a. definitely	
ואע	c. little or no improvement seen	
1	b. some improvement seen c. little or no improvement seen d. don't know	
6 Ha	we you ever seen your child use the diction	onary?
111	a. yes	-
m	b. no	
	•	

7. What differences have you noticed between your child's past and present spelling programs and proofreading skills?

Thank you for your time and effort. If you have any additional comments on your perception of the spelling program this year, please write them on the back. Your comments are a great help to the improvement of this program in the future, so we would be extremely appreciative of your input.



### **Spelling Survey: Parents**

Circle the letter of the answer that best applies.	1/02/2007
1. How would you rate your child's spelling ability?	10 600
B. good for age/grade level HI HI NI 1	Control to the control of the contro
c. slightly below grade level d. very poor; cause for concern	The Control of the Co
2. How often do you read samples of your child's writing? (ex. notes, lists, a daily	paragraphs, essays, letters)
b several times a week	
d. a few times per month or less	
3. Does your child study spelling at home?	·
14 1 4 4 yes 111	
1111 H & noft 1 (58)	
4. If yes, how often?	
a. daily b. several times a week	· ) - 1/2 (
c. once a week	- cl
d. a few times per month or less	- Moreover
5. Do you think your child's spelling has improved due to the spelling program a. definitely	rams used?
b. some improvement seen	:
c. little or no improvement seen d. don't know	No. 10 September 19
(20)	·
6. Have you ever seen your child use the dictionary?	32 )
b. no	
	/

7. What differences have you noticed between your child's past and present spelling programs and proofreading skills?

Thank you for your time and effort. If you have any additional comments on your perception of the spelling program this year, please write them on the back. Your comments are a great help to the improvement of this program in the future, so we would be extremely appreciative of your input.

#### Appendix I Letter to Inform Parents of Program

Dear Parents,

As part of the masters program I am completing, I am required to conduct an action research project with my students. Because of the focus on our nation's declining test scores in the area of spelling, I have chosen to develop a plan to enhance students spelling achievement.

This program will be used by all students in my class this year, and the results will be recorded in my research study. Confidentiality of student performance will be maintained. If you choose not to allow your child to participate in the research study your student's scores will not be used in the report. Your choice not to participate will not affect your child's grade. The grades earned will not solely depend on Friday test scores, but will also reflect the student's performance on correctly spelling high frequency words in other subject areas.

I am excited about this program because accurate spelling is a life skill and is important for people to feel successful. Please read and sign the attached permission slip. An extra copy has been included for your records should you like to keep one.

If you have any questions concerning this project please contact me at

Sincerely,





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Office of Educational Research and Improvement (OERI) National Library of Education (NLE) Educational Resources Information Center (ERIC)



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