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writing. More research is necessary to determine whether improved spelling is
a result of the intervention. (Contains 27 references, and 3 tables and 5
figures of data. Appendixes provide illustrations of developmental stages of
learning to spell, a developmental spelling checklist, and writing and
spelling samples.) (Author/RS)

IMPROVING STUDENT SPELLING
IN DAILY WRITTEN WORK

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ABSTRACT

This action research project describes a program to increase the application of spelling skills in students' writing. The target population consisted of first grade students in a middle-class community in the northern suburb of a large metropolitan area. The problems of inadequate application of spelling skills to student writing were documented with a spelling checklist, a developmental spelling list, and samples of student writing.

Analysis of probable cause data revealed that students did not transfer spelling skills to their daily writing across the curriculum due to a lack of a formal spelling curriculum. Ineffective teacher training also resulted in poor students' spelling performance.

A review of solution strategies suggested by knowledgeable others, combined with an analysis of the problem setting, resulted in the selection of three major categories of intervention: establishing a print-rich environment, direct teaching of spelling strategies, and implementing student centered activities.

Post intervention data indicated that the students internalized spelling strategies in daily writing. More research is necessary to determine whether improved spelling is a result of the intervention.

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CHAPTER 1

PROBLEM STATEMENT AND CONTEXT

General Statement of the Problem

The students in four targeted first grade classrooms demonstrate poor use of spelling

strategies in daily written work. Evidence for the existence of the problem includes a spelling

checklist, developmental spelling test and student writing.

Immediate Problem Context

The information for the targeted site is taken from the 1998 school report card. The site is

part of a large, fast growing elementary district consisting of one kindergarten center, one

primary building for first and second grades, one intermediate building for third and fourth

grades, one middle school for fifth and sixth grades, and one junior high school. The district

consists of a superintendent, an assistant superintendent, curriculum director, director of special

services, five building principals, and four assistant principals. The total enrollment for the

school district is 3,227 students, of which 730 are in the primary building. The average number

of students in the 17 first grade classrooms is 22.7. The ethnic background of the school district's

student population is 71.0% White, 2.9% Black, 16.9% Hispanic, 9.2% Asian/Pacific Islander,

and 0.2% Native American. Low-income students make up 15.6% of the population. Ninety-five

percent of the student population attends school daily.

The campus effect has in the past met the needs of the students. The school district is in the midst of building and grade level reconfiguration. The current campus structure will be divided into two neighborhood schools. The neighborhood schools will house first through fourth grades. The existing intermediate school will become an Option School following Glasser's Choice Theory. This school will house two sections of kindergarten through sixth grade. The current junior high will become a middle school housing fifth and sixth grades. The school district is building a new junior high housing seventh and eighth grades. The kindergarten center remains consistent. The need to change the school buildings and the configuration of the grades housed in each building became evident due to the rapid growth of the community.

Teachers in the district have an average of 15.2 years of experience. Of the degrees held by teachers, 48.9% are bachelors and 51.1% are masters degrees and above. The ethnic background of the teacher population is 97.0% White, 1.0% Black, 1.5% Hispanic, 0.5% Asian/Pacific Islander, and 0.0% Native American. The average teacher salary is $49,405. The average administrator salary is $85,924.

The school district spends $3,924 per pupil each year for instructional expenditures. The instructional program includes language arts, mathematics, science, social studies, physical education, health, and fine arts. The formal spelling curriculum begins in second grade. It consists of a phonetically based weekly pretest and posttest. The teachers have also created a list of the most frequently used and misspelled words. It is a progressive word list that follows the children through fifth grade. The words are evident on the student's desks, word walls, and posters. It is the philosophy of the district that spelling is a developmental concept. The formal spelling program for first grade has been eliminated due to this belief.

Many of the first grade teachers in the district promote invented spelling by the children in their journal writing. They encourage children to use word walls, vocabulary words and basic phonics rules to improve spelling. But there is no formal assessment or consistency among the staff. The teachers use parent teacher conferences and open house nights to explain the developmental process of learning to spell to parents in the community.

The Surrounding Community

The surrounding communities for these schools are just as diverse as the school settings. The site is located about 35 miles north of a major metropolitan area. This village began as a 125 home subdivision. It was incorporated in 1958 and during its first two decades grew from just a few hundred people to a population of 5,600. In 1980 the census reported a total of 9,827 people. As of 1999, the population of the village is 15,319 and growing to a projected population of 26,000. The median family income is $48,873. Housing ranges from apartments, to $60,000 condominiums, to a wide range of town homes, to 1.5 million-dollar homes. The average home is valued at $140,500.

There is strong parental involvement in the school district. Each school has parent volunteer programs such as Picture Parent, Room Mothers, Parents and Literature Volunteer Reading Program, South Paws (clerical aides), Mystery Readers, classroom curriculum helpers, and Book Fair. Formal parent teacher conferences are held twice per school year. Parents attend orientation programs, Open House, curriculum awareness meetings, portfolio parties, and are members of advisory committees. The professional learning community works together to continuously meet the needs of the students and keep abreast of educational change. Currently, the use of spelling strategies has become a concern.

National Context of the Problem

"Spelling instruction remains one of the most debated aspects of the language arts" (Heald-Taylor, 1998, p. 404). Teachers and parents are in a quandary as to what is the best way to teach spelling to their children. Parents who grew up taking weekly spelling tests feel comfortable with this rote style of learning.

As educators worked with students, it became evident that the children were not transferring this skill to other areas of daily writing. Therefore, a trend began to investigate the best way to teach spelling to students. There has been intense discussion and debate on three major trends of spelling: traditional, transitional and developmental.

"The support for traditional spelling strategies is based more on traditional attitudes and practices than on theory or research" (Heald-Taylor, 1998, p. 404). Spelling tests were given weekly with students memorizing words and receiving perfect scores. "Spelling proficiency was considered the bedrock of literacy, the barometer of intelligence, the measure of our schools' success" (Templeton, 1992, p. 454). Spelling was considered one area where children could experience success. However, correct spelling of these words was not transferred into the student's daily written work. "Hammell, Larsen, and McNutt reported that at the end of fourth grade, students who had received no formal instruction could spell as well or better than those who had experienced formal instruction" (Heald-Taylor, 1998, p. 405).

It became apparent that the traditional method was not providing the lifelong skills that students needed. Teachers began to stress the role of reading, writing, and spelling. The transitional method evolved. This method still had the weekly spelling list but this list came directly from the students reading. It also included word games and phonics. According to Heald-Taylor (1998):

Because reading and spelling are so closely linked, Templeton (1992) emphasizes that words studied in spelling should come from student reading material so that phonetics, spelling rules, and semantic and visual functions are learned in a context meaningful to the child. However, others suggest that word study is important both in and out of reading contexts. (p. 454)

As professionals gained better understanding of spelling and how students use this skill, another spelling method was investigated. The developmental spelling approach takes in the readiness level of each individual child. Therefore children progress along the lines of academic spelling growth as the mind matures. "Determining a stage of spelling for a student is not for creating a label but serves as a starting point for instruction" (Bear & Templeton, 1998, p. 230).

Student's strengths and weaknesses in spelling are assessed. The teacher also observes where the child's comfort stage of spelling is and the approach that individual children are using in their writing. Information like this can help the professional choose appropriate language activities for each child and concentrate on individual growth. "Children move beyond simple memorization and develop ways to become active in making sense of and drawing relationships about the English language" (Fresch & Wheaton, 1997, p. 20). Appendix A (Fresch & Wheaton, 1997, p. 20) shows the characteristics of the developmental stages of learning to spell.

"By now, most people agree that learning to spell is complex, intricate cognitive and linguistic process rather than one of rote memorization" (Heald-Taylor, 1998, p. 405). Because reading and spelling are so closely related many professionals believe that there needs to be a balance between authentic reading and writing with purposeful word study. The goal of educators is for students to become more proficient spellers. Educators continuously try various methods to teach children. As students progress from grade to grade, weaknesses and strengths

are assessed. Spelling is a topic of continual concern for both parents and educators. This subject

is often up for debate. At the site there is concern for the lack of spelling strategies used in daily

written work. This problem has been documented and probable causes explored.

CHAPTER 2

PROBLEM DOCUMENTATION

Problem Evidence

Evidence for the existence of the poor use of spelling strategies in daily written work was documented at the site. Information was derived from a developmental spelling test, spelling checklist, and student writing.

<u>Developmental Spelling Test</u>

The teacher's awareness of a child's developmental stage of spelling enables him or her to respond accordingly to the individual instructional needs. Administering a developmental spelling test can help the teacher gain an understanding of the spelling levels in the class.

The students at the site were given a developmental spelling test adapted from Gentry at the beginning of the school year in September. The classroom teacher gave the test in a group setting. The teacher read each word, used it in a sentence and then repeated the word. Each student wrote his or her own spelling attempt on paper provided by the teacher. The teacher maintained a calm, encouraging manner and promoted risk-taking by the children. Students were encouraged to use the sounds that they knew and to attempt the spelling of each word. The students were told that they would not always know the correct spelling but they should write the sounds that they could hear.

Eighty-eight students were included in the developmental test. Figure 1 exhibits

evidence of the developmental spelling stages of these children.

	September
■ Precommunicative	39%
☐ Semi-Phonetic	19%
■ Phonetic	27%
☐ Transitional	11%
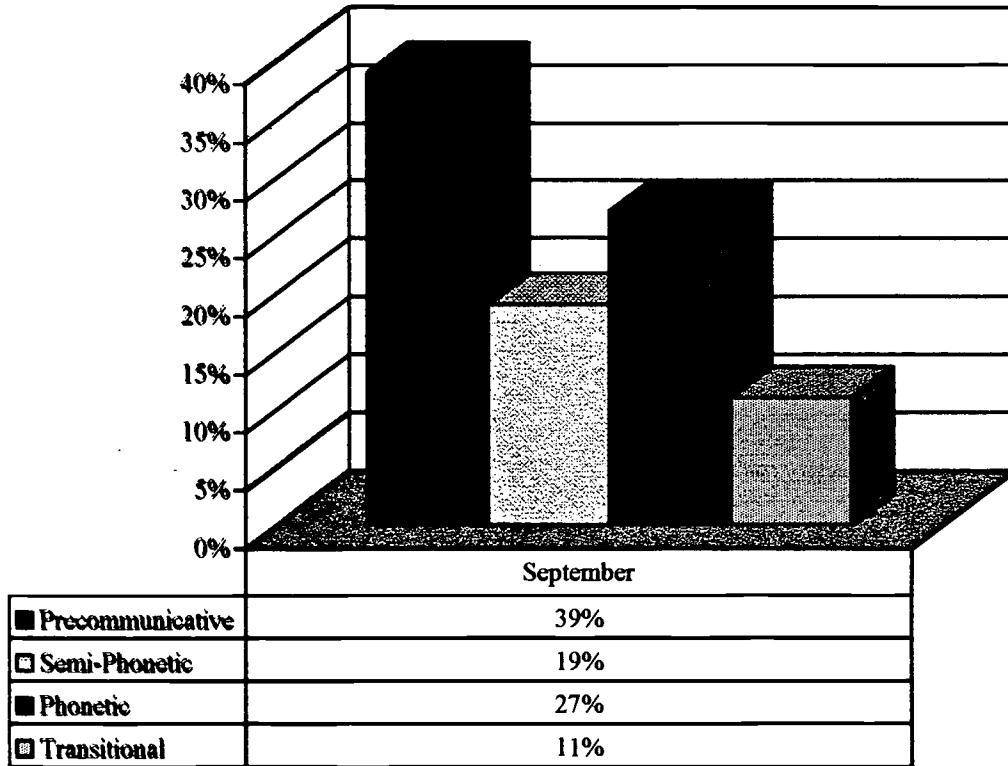
Figure 1. Developmental Spelling Stages of Students

Appendix B displays the developing spelling stages and the scoring chart for the test. The

results of the test indicate that the lower third of the students have placed in the

precommunicative stage. Appendix C shows the test of a child at the precommunicative stage.

Children randomly chose letters for their words at this stage. These letters do not correspond to

correct sounds in a word. Thus the children are candidates for participation in spelling games and

activities that will help develop their skills. The smallest number of students was placed in the

transitional stage. Appendix D shows the test of a child at the transitional stage. Transitional

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spellers exhibit the beginning usage of correct spelling. A visual memory of spelling patterns is apparent and typical spelling conventions are being developed. These children can also benefit from participating in spelling activities so that skills and rules are internalized and applied independently. Almost one third of the students displayed characteristics in the phonetic stage. Phonetic spellers spell words like they sound. Appendix E shows the test of a child at the phonetic stage. Nineteen percent of the students displayed semi-phonetic characteristics. Appendix F shows the test of a child at the semi-phonetic stage. Spellings are represented by initial and or final sounds. This indicates that the students at the targeted site lack the necessary skills at this point to be functional spellers. The use of a Developmental Spelling Checklist will further document the spelling and writing stages of the targeted students.

<u>Developmental Spelling Checklist</u>

The teachers at the site developed a spelling checklist shown in Appendix G to enable them to chart the needs of their students. A single writing sample was collected from each child. This sample was used as an indicator for the Spelling Checklist. This helped give further evidence of the spelling needs of the children in their daily writing. Writing samples were collected from 88 students. Before the writing session, the teacher modeled invented spelling techniques by writing a simple sentence using invented spelling. The children were then given writing paper. They had approximately 15 minutes to produce a writing piece. The children were encouraged to illustrate their papers. The students shared their writing samples with their classmates and teachers. The teachers collected the writing pieces and used one checklist per paper. The teacher looked at the words that the children attempted to spell and checked yes or no according to each item. The teacher looked for consistency in the student's spelling.

Forty-seven percent of the students were randomly choosing letters to spell words in their daily written work. Their skills at this point lack the knowledge of appropriate letters and sounds needed for spelling. Randomly choosing and writing letters on paper indicates that these students lack the necessary foundation to be proficient spellers and writers. Fifty-three percent of the students are in the emergent stage of spelling and writing. These students are able to put thoughts on paper and use skills already at hand.

The results of the Developmental Spelling Checklist/Rubric indicate that the students are non-risk, dependent writers. Therefore additional strategies need to be taught to encourage risk taking, independence and use of new spelling skills. The children's daily written work shows further evidence of the students' developmental spelling stages.

Daily Written Work

The student's daily written work shows further evidence of poor usage of spelling skills. Students write and draw in monthly journals. The journals contain plain paper at the beginning of the school year. Later in the year, when children develop more writing skills, lined paper is used. The journals have a fun monthly shape or theme. The children are encouraged to draw and write in the journals when they arrive at school or during a designated writing time. The children write for approximately 15 minutes after the teacher models a writing or spelling strategy. The teacher moves among the students to encourage and support the children's efforts. A writing session ends with a sharing time. The teacher writes a response or questions the student in the journal as another form of sharing.

Eighty-eight journals were collected in September. Daily journaling in September showed that students were not comfortable with writing. Forty-five percent of the students were unable to attempt any kind of writing. Their journal pages contained pictures but no words.

Appendix H displays an example of a student's inability to randomly choose letters in his or her writing. Therefore the child has not yet reached the stage of letter sense. Thirty-two percent of the children did attempt some writing but the spelling was at a random stage. The children understand that a letter has a sound but can not apply the correct sound symbol relationship. Appendix I presents a writing example of a child that randomly puts letters down in his writing. This shows the lack of a spelling foundation necessary for writing. Twenty-three percent of the children are using some beginning and ending sounds and so are considered to be in the semi-phonetic or emergent stage of writing.

Journaling and daily written work are strong components of a first grade spelling program. Teachers need to provide a strong, strategic background for students to be successful. It has been concluded that students at the site demonstrate poor use of spelling strategies. Professional educators have collected evidence that indicates spelling to be difficult for children to learn. It is often difficult to find just one single cause to an academic problem. There can be many causes of poor spelling from students. Education researchers have documented several reasons for the lack of spelling transfer in their studies.

Probable Causes

At the beginning of every school year, teachers face new students with a variety of language skills. Teachers positively anticipate the academic growth of students but often this expectation quickly fades. At our site, students are coming to first grade less prepared for the major skills of writing and spelling. At the beginning of the academic year, spelling and writing are introduced. Attempts are made by many students to put proper letter sounds and spelling on paper. Some students' attempts are not successful, often causing the feeling of defeat. Teachers often feel inadequate teaching spelling and are uncomfortable with their present spelling

curriculum. It has been the experience that " . . . many teachers express concern that they do not

have a strong foundation either in how to teach spelling or in the nature of the spelling system"

(Gill & Scharer, 1996, p. 89). Other probable causes include an ineffective spelling program, the

complexity of spelling mechanics, developmental readiness of the child and environmental

issues.

<u>Ineffective Spelling Program</u>

Due to the existing language arts program at the given sites, there is no formal first grade

spelling program or training for teachers in spelling. Teachers have posted the 34 basic, most

commonly written words in their classrooms. It is expected that the children will learn the

spelling of these words without any formal instruction. This is not happening. Studies have

found " . . . most students do not discover the different layers of information and the

corresponding sound and meaning of patterns on their own" (Templeton & Morris, 1999, p. 106).

The existing language arts program at the site is a whole language, thematically based

program. Teachers choose spelling words randomly for each thematic unit. According to Gentry

and Gillet (1993):

At the 1991 Whole Language Umbrella Conference in Phoenix, Arizona, Ethel

Buchanan, in her presentation on spelling, expressed concern. "If anything will

defeat whole language," she said, "it is what we do with spelling." According to

Conference participant Mary-Therese Croarkin, Buchanan's words "mirror the

attitudes of many of the teachers I spoke with during the conference. Many of the

teachers felt that the whole language model, in and of itself, does not have the structure

they need to teach spelling comprehensively. They are also concerned with the public's

perception of the ways in which spelling is treated in the whole language classroom. The

teachers realize that students need to learn conventional spelling, but they fear that overemphasizing this skill goes against the grain of whole language. (p. 1)

The whole language philosophy of immersion in print creates positive attitudes towards reading; however, it does not provide adequate spelling instruction. Teachers find that " . . . the explicit examination and exploration of words outside of actual reading and writing are necessary" (Templeton & Morris, 1999, p. 105).

Due to the fact that there is no formal spelling program in the site district, the first grade teachers have used the traditional methods of teaching spelling with drills and tests. "Skills and strategies taught only through drill and practice do not transfer easily to more meaningful reading and writing situations" (Collin, Brown, & Newman, 1989, p. 453).

Teachers have experienced frustration in teaching necessary spelling strategies to their first graders due to the lack of time allocated in the daily schedule. Though first grade concentrates heavily on language arts concepts, spelling seems to fall through the cracks. "Even in a print-rich environment, spelling development does not just happen for many children. There must be a predictable period of time set aside each day for the specific, intentional study of words and their spellings" (Gentry & Gillet, 1993, p. 63). Due to the lack of spelling instruction, children do not have spelling strategies. Another probable cause for the lack of spelling transference is that spelling is complex.

The Mechanics of Spelling is Complex

Learning to spell is difficult for first graders. Students need to possess a language system that entails phonetic ability, letter sight recognition, understanding of a word, visual memory ability and readiness. That is a large number of operations for a young child's developing brain. It is difficult to coordinate the complex thinking process of spelling. "Poor spellers do not

demonstrate equal ability to store and retrieve the visual form of a word; so they may revert to a lower-level strategy" (Gentry & Gillet, 1993, p. 52).

Good readers appear to learn spelling strategies on their own and can apply these strategies independently. As students acquire a sight vocabulary necessary for reading, their attention needs to be directed to common spelling patterns. "Most words can be read and spelled correctly once you learn the basic spelling patterns that make up our language. But the most common words are the least regular!""(Cunningham, 1995, p. 94). Spelling patterns can be a predictable measure for students to use when stumbling upon an unfamiliar word. Unfortunately, "the most frequently used words are often not pronounced like other words with that spelling pattern" (Cunningham, 1995, p. 61). Many teachers have included the use of whole language or integration of various spelling theories due to the fact that phonetics could not help with the spelling of many English words. Thus students' proficiency in spelling continues to be a major concern for educators. Another concern of educators is providing the necessary instruction for the various developmental spelling levels of each student.

<u>Spelling is a Developmental Process</u>

"Learning to spell is a developmental process that depends on a child's maturation and experience" (Zutell, 1996, p. 98). Each child comes to the classroom bringing unique characteristics. Each child has a specially designed brain pattern to help with learning. Teachers are becoming more aware of the developmental needs of the students. Spelling is an integral part of the developmental learning process helping children grow to become literate adults.

Professionals at the given site are educated in the developmental theories of learning to spell. Although no help has been mandated by the curriculum or in teacher workshops, the educators are pursuing diverse teaching techniques in spelling.

Invented spelling is a technique that has been introduced to emergent spellers. In classrooms, students have been encouraged to spell words in their writing as they read or hear it. The first grade teachers have found that invented spelling also has its drawbacks. Continual incorrect practice of a word does not further spelling growth. "Because you must write these common words often and because you can't predict the spelling of many of the dangers of children practicing them wrong so many times that they learn them wrong is real!" (Cunningham, 1995, p. 94). Students using print at home without proper spelling instruction may lack the skills for spelling readiness. It is often not uncommon for teachers to identify certain students who use invented spelling instead of applying known spelling rules or strategies. The site classroom teachers found this to be a concern in those students that may not be developmentally ready or lack the interest in learning to spell. Environmental issues often model student readiness in all language arts areas.

Environmental Issues

It is not new to educators that environment does play a factor in a child's learning. "Children from literate homes have over 1,000 hours of informal reading and writing encounters before coming to school" (Adams, 1990, p. 187). Home environment can aid a child at school or enable a child. How a parent models the value of reading and writing is important as to how the child perceives learning. An environment rich in literature, availability to books and writing material is important. It has been the site researchers' experience that parents who are actively interested and engaged in their child's learning by asking thought-provoking questions, reading to their child, drawing their child's attention to print do provide the greatest opportunities for their child. Realistically, many home circumstances cannot provide this type of environment for some children. The site school has a diverse population of learners. Many students come from

homes with two languages, thus making comprehension of spelling words and the use of letters difficult. This limits the amount of help that parents can give a child. Parents are struggling to make ends meet at home and both parents are working. The amount of time parents are able to give a child unfortunately can be limited. Knowing that environment plays a part in learning helps the teachers' provide benefits to parents and students.

Invested educators are aware of the probable causes hindering students in their spelling development. They are working towards meeting the challenges by providing the necessary experiences and activities to build good spellers for the future. Teachers need to model good spelling, establish a print rich environment, teach word patterns, use invented spelling and teach spelling games to create a positive spelling environment.

CHAPTER 3

THE SOLUTION STRATEGY

Literature Review

Learning to spell is a complex process. Teachers are drawing on the best practices without obtaining outcomes that are making students spellers. Since children learn differently, educators need to use various techniques and strategies. This is true in all academic areas but never appeared to be as necessary as now in the teaching of spelling. To become good spellers children need to experience a balanced approach. Teacher modeling, a print-rich environment, teaching of word patterns, using invented spelling and spelling games and activities are some of the ways that will help students become spellers and encourage good spelling.

Before any given strategy can be successfully implemented into a classroom, the teacher needs to be aware of the strengths, weaknesses and purpose. It is imperative that a teacher correctly models a new strategy to the students. Incorrect modeling may alter the expectations of a student and vary the child's progress.

Teacher Modeling

The teachers at the sites begin each school year with shared language experience activities. The purpose of this type of modeling for students is extremely rich and filled with all levels of teaching, enrichment and fun. Students learn the important concepts needed to make

sentences, find a sound or hear a rhyme. All of this is done in a positive setting with the teacher showing the children strategies and skills needed for continual learning in all areas of language arts.

Beginning a school year with nursery rhymes and poetry is a one way to ease a child into the learning environment. It has been noted by the site teachers that rhyming activities help make children aware of letters and sounds. Making rhymes and playing with words shows teachers that students are grasping control of their language. Using reading experiences and interesting rhyming patterns opens the door to fun and learning. One educator, Weaver, stated that helping students with rhymes leads to a discussion of words. "Discuss interesting patterns of onsets and rimes, in the context of shared reading experiences" (Weaver, 1994, p. 2). Routman (1998) backs up this activity by further using new language experiences in a daily morning message. Children begin to look for familiar words after continual repetition each day.

Special Child of the Day (Cunningham & Hall, 1997,) is a get-acquainted activity that is twofold. This child is now the focus of many literary learning activities. The class interviews each child and the teacher writes five or six sentences about the child. This develops necessary oral language skills and helps children see how speaking, reading and writing are connected. Focusing on a child's name begins the process of spelling. The children can identify initial sounds, put the letters of the name in correct sequence and spell the name out loud. Spelling has begun. The children have learned about the beginning of spelling and lots about their classmate. Immediately the teacher puts this language experience activity on the walls for the class to refer to. A print-rich environment is developing.

Print-Rich Environment

One strategy that is effective in providing a print-rich environment is the presentation of

the ABC Word Wall (Cunningham, 1995; Cunningham & Hall, 1997; Wagstaff, 1994, 1998).

The selection of the words varies from classroom to classroom but the idea remains consistent.

Words are chosen that students will and do use in their writing. Words are placed on the wall in

alphabetical order by the initial consonant. The words are written with a visual cue as well.

Drawing or cutting around letters displays the shapes of the words. The word wall will help

children become aware of different words that begin the same. The teacher can draw a box

around the word configuration to help give the word a shape. Students begin to look for the tall

and hanging letters. Students can easily refer to these words when writing. Figure 2 presents a

sample word wall.

A	B	C	D	E
and	blue	can	do	end
all	big	cat	did	
are	be		don't	

Figure 2. Word Wall

The Chunky Word Wall, developed by Wagstaff (1994), is another kind of word wall

helping the print-rich environment. This differs from the previous word wall in that words

placed on the chunky word wall are put in alphabetical vowel order according to the targeted

rime or letter patterns, which is always a vowel. The class will brainstorm words that fit in the

targeted rime pattern. Instead of hanging up all of the words, one sample word from the pattern

can be put on the wall. The teacher highlights that sample word while reading and writing. The

children practice reading and sorting the words from the chunking word wall. Students begin to

look at the Chunking Word Wall under various patterns looking for a matching chunk of a word.

Once they have found the matching chunk the spelling pattern is discovered and a new word is

spelled. The children will be able to spell new words when they hear a rime pattern from the wall. The teacher should point out words from the chunking word wall during shared writing or reading sessions.

Figure 3 presents a sample chunking word wall.

a	e	i	o	u
gate	hen	hit	cow	us
	pen	pit	how	bus
	ten			rush
can		like	hot	
pan	see	bike	not	use
than	bee		pot	fuse

Figure 3. Chunking Word Wall

Students begin to look at the Chunking Word Wall under various patterns looking for a matching chunk of a word. Once they have found the matching chunk the spelling pattern is discovered and a new word is spelled.

Often times within a classroom, there are also thematically related words on the walls not only providing continued print-rich environment, but also easing students into their writing on a current subject matter. "Literature theme units provide meaningful context for examining spelling patterns." (Hutchison, 1990, p. 8). Farm words can be sorted by consonant sounds (farm, farmer, and fence), plural (farms, pigs, cows), or r controlled words (farm, farmer, and barn). The site researchers have found with previous students that using spelling connections from vocabulary being studied thematically brings meaning, understanding and correct spelling to the student. Word patterns become evident to students and transference to independent writing can take place.

<u>Word Patterns</u>

"Children learn to spell pattern by pattern, not word by word." (Gentry & Gillet, p. 1993, p. 89). Using word families is a way the site teachers have found to teach common sounds and help children become aware that groups of words may have similar patterns. Young children learn by repetition. Patterning helps them perceive and make use of similar sounds. Word families can be found in rhymes, poems, songs or chants that are written on charts and hung around the room. The children read them often and glue copies of the poems in a poetry journal. The children brainstorm words for each word family and these charts are also hung around the classroom. At a word center (Gentry 1998) the children can sort words from different word families. The site researchers observed that the use of word patterns or word families helps children when spelling unfamiliar words with the same pattern. Organizing spelling words by common sound patterns gives the students the confidence to be a risk taker when writing an unfamiliar word or when using invented spelling during a writing or journaling session. Figure 4 presents some word families.

at	en	im	in	it
hat	pen	him	pin	hit
cat	hen	Tim	win	pit
fat	when	swim	fin	sit

<u>Figure 4</u>. Word Families

<u>Invented Spelling</u>

It has been the site classroom teachers' experience that a positive environment will help students put their thoughts on paper. In positive classrooms the children become risk takers in writing and move through the developmental stages to become good spellers. "Research on invented spelling shows us that children who are reading, writing and noticing how spelling

patterns work will move through stages towards conventional spelling." (Henderson, 1990, p. 95).

Invented spelling is when a child takes a risk in writing by writing what he or she thinks the word looks or sounds like. There are various stages a child travels through before becoming a conventional speller. For example, a first grader may attempt spelling the word **cat** by writing only the letter **c**. Another student may invent **ct** for cat while yet another student may randomly choose the letters **dsm**. Children invent the letters necessary for spelling a word according to their developmental stage. Invented spelling is tied to familiarity with letters, awareness of sounds and understanding of a word. These factors help a student become a speller. "Children who are allowed and encouraged to spell it so you can read it, write longer and better first drafts than children who only write words they know how to spell" (Cunningham, 1995, p. 91).

Daily and traveling journaling, peer communications and writers workshop (Graves, 1983; Caulkins, 1986) are all areas that provide the use of invented spelling. "Students invent their own spelling using whatever visual and letter sound knowledge they have, and they write about anything they choose from personal happenings and family, to stories and poems." (Routman, 1988, p. 105). Peer communication when writing a note or letter to a friend using invented spelling allows a child to communicate with a classmate. Journals at school or one that travels back and forth from school to home provide written communication with parent and child. In order for this to be successful, parents need to be informed about the developmental spelling process. This could be accomplished during a parent night at the beginning of the school year. Understanding the value of a child's spelling stage while using invented spelling helps provide enjoyment in shared writing.

Writers workshop, introduced to teachers by Graves (1983) and Caulkins (1986), is a

genuine worthwhile tool giving students freedom to write, using skills at their level but also

allowing the teacher to follow up on the accountability factor of helping the children become

good writers and spellers. Children are free to write their thoughts and ideas without being

fearful of misspelling a word. The teacher can then concentrate on a spelling strategy according

to the child's level. By examining, teaching and correcting invented spelling, teachers find

"words that students consistently spell correctly are those words that have patterns that make

sense to them and fit their current theory of how words are spelled." (Bear, Invernezzi, &

Templeton, 1996). During a writing or journaling session, the children are practicing the

spelling strategies that they learn from teacher modeling, word games and other spelling

activities.

Using Spelling Strategies

The site teachers have found that the use of games and activities can be an effective tool

when teaching first graders no matter what the subject matter. Providing these resources

encourage students to accept the challenge of spelling and begin using spelling strategies.

Several appropriate games or activities are discussed. These could be used at a spelling

workshop as described by Gentry (1998).

Word sorts. Word sorts (Barnes, 1989; Henderson, 1990; Bear et al., 1996) are a strong

method of exploring words. In word sorts, students compare and contrast words according to

patterns and how words are similar and different. Working with a partner on this activity and

showing each other spelling patterns can be a social component to learning spelling. Sorting can

be done with pictures, initial sounds, rhyming words, and vowel patterns or length of words.

Cunningham (1995) describes a word sort using environmental print that young children would

be familiar with. In this type of sort, the teacher uses words and pictures from items that the

students would recognize such as the oo pattern from a box of <u>Fruit Loops</u> cereal or the ing

pattern as seen in <u>Burger King</u>. As children become more comfortable with the vowel patterns in

words then they could work on more complex word sorts. Figure 5 presents sample word sort

categories

<u>hat</u>	<u>make</u>	<u>rain</u>
back	take	paid
ham		

Words to be sorted may include:

back	have	stamp	face	wait
paid	last	said	crab	black
ham	crash	champ	rain	lake

<u>Figure 5.</u> Word Sort Categories

    <u>Making words.</u> Making Words (Cunningham, 1995; Cunningham & Hall, 1997) is an

activity where students are given letters to make words. Students make little words and progress

to larger words until a final word, sometimes called the mystery word, is made. The mystery

word always includes all of the letters that the children have received. Children are always eager

to find out what the mystery word is. This is a hands-on manipulative activity, allowing children

to look for patterns in words and giving them the opportunity to see how changing just one letter

or the placement of a letter can change a whole word. This activity can lead into independent

making and writing words.

    <u>Making and writing words.</u> This activity is a variation of Cunningham's (1995) Making

Words. In Making and Writing Words (Rasinski, 1998) the teacher selects a mystery word and instructs the students to write the consonants and vowels on the paper designed for this activity as seen in Appendix J. The students will write the small words that can be formed using the letters from the mystery word. The teacher calls out words that the children will spell on the paper. The activity starts with two letter words and increases one letter at a time until all of the letters are used. The students attempt to figure out the mystery word before the teacher shares it with the class. This activity is excellent for helping students gain greater awareness of word structure and practice in spelling.

Have a go cards. Have a Go cards (Powell & Hornsby, 1993) help to further reinforce spelling patterns. Children investigate different spellings and choose the one that looks right to them. The teacher or the spelling expert chosen for the day writes the correct form. The children learn to become risk takers without fear of being wrong and also begin making a visual picture in their mind of the correct spelling. Students should also be encouraged to make their own corrections.

Word banks. Word Banks (Powell & Hornsby, 1993; Tompkins, 1990) help give the student's ownership of their spelling words. Once the children have selected five or six words they individually would like to learn they enter them into their personalized word bank. A word bank could be a notebook, a file card box, an envelope or other convenient container. The children could decorate the word bank so that it is thematically related. Practice with these words can occur randomly through the week. Students may play word games, write sentences, alphabetize, sort or practice with a friend. The use of the dictionary may be introduced here to individuals that appear ready.

Spelling workshop/centers. Time management is an important factor in an elementary classroom and one of the major concerns of teaching spelling. A spelling workshop or spelling centers can help provide structure in a schedule. During this time students are actively engaged in activities that focus on spelling. This time is used primarily for intensive study of words and spelling patterns. "Workshop activities may include spelling games, group work on common patterns, word building, activities to strengthen visual memory, work with word families, rhyming, dictionary activities, and proofreading" (Gentry & Gillet, 1993, p. 63). All of these initially help children became better spellers. These activities help students with spelling lists.

Spelling lists. Depending on the classroom, spelling lists can be designed according to patterns, sight words, most commonly written words, or self-selected words. The lists may be used as a weekly spelling quiz if one is required by the school district. The list should be posted in the classroom and the words should be referred to when they appear during group writing or reading sessions. The words can be found in a poem, chant or song for the children to read. After practicing the words, they should be added to the word wall or children's word banks. The use and spelling of the words by the students in their writing should be continually assessed. The word lists could be sent home so parents can reinforce the learning.

When choosing a spelling list, teachers should help children look carefully at the spelling patterns (Henderson, 1990) of a new word and to search through words they already know with the same pattern. "When the speller learns how patterns work the possibilities for correct spelling increase significantly because the speller has more information that can be brought to bear in order to generate the conventional spelling" (Templeton & Morris, 1999, p. 104).

Sight words (Templeton & Morris, 1999) are words that students know automatically how to read upon seeing them. If the spelling list is being used as a weekly test then the words

must be ones that the children know by sight. There would be little hope for the correct spelling of the words to transfer to children's writing if they do not know the words automatically.

Most commonly used words. Print-rich classrooms often have the most commonly used words randomly posted on classroom walls. These words are also taped to students' desks so that the children can easily refer to them. The list is on a special poster for the classroom wall. The teacher points to the list often during group reading and writing sessions. The teacher also instructs the students that they will be expected to learn these words by the end of the school year. It has been the site classroom teachers' experience that most students do learn to correctly spell the words because they are used so often. The list is sent home to parents as another reinforcement. As the year progresses, the teacher will need to note how each child is spelling the words. By the end of the year, misspellings in writing pieces should be corrected by the children. The children are quizzed on the words when they begin second grade.

Self-selected words. Self-selecting words (Templeton & Morris, 1999) in a list is a highly motivating technique to help students learn. These words can be words that a child has a particular interest in, are words chosen from an interest unit or words that are causing that child difficulty. Because the words are ones that the child has picked, the students feel ownership in their schoolwork. The student feels empowered by making a choice and therefore motivated to learn. These are not the only words on the list. These words are added to a core list that has spelling patterns. As with other word lists in the classroom, this list would be available to the student during any writing time. The student can refer to the list as often as necessary until the child can spell the word independently.

Spelling dictation. Classroom teachers use spelling dictation as a method to help the students and teachers to become aware of spelling progress. Dictation can be done in a

workshop/center activity with a buddy with peer assessment. Dictation games done with the entire class sounding out letter by letter and then writing the word is another method by which this method can be accomplished. At the end of the day, children may need to spell a word dictated by the teacher as an exit slip. Dictation helps to determine strengths and weaknesses. Student and teacher are made aware of progress. The developmental levels of the children are identified, as well as areas for remediation.

Dictionaries. The site researchers use dictionaries to model how they can be used to improve spelling. Teachers encourage students to write words that are difficult into their individual dictionaries for further use. Making a word dictionary for the children and having the child title the book Words I know can help students keep track of words that are difficult for them in their writing. This Words I Know dictionary can also reinforce the alphabetical order of words. Children with varying ability levels can use the book to write definitions, synonyms, antonyms, and even begin building a thesaurus. The value of picture dictionaries is endless, particularly for the emergent speller ready for a challenge and risk taking. The student can practice alphabetizing when searching for a word. Picture clues help verify the word. The child can also use strategic skills such as looking for a known vowel pattern; sound blend or word ending to determine which word is being examined.

The role of the teacher and the knowledge that is brought to the classroom is of utmost importance. Spelling begins with modeling and inspiring success and confidence, which comes from the teacher. Each child needs to be given consideration of its developmental level to help progress along the spelling continuum.

Spelling is one part of a language arts program which is the largest curriculum block in a first grade classroom. A teacher would need the support of parents and administrators for any

spelling program. Parents should be informed about the developmental stages that the children will go through so that they support the process. Writing and reading should be encouraged in all homes. Parents should be informed about their child's progress through report cards and conferences. Newsletters tell parents about word families, spelling lists and vocabulary words being used in the classroom.

The teaching of strategies such as word patterns gives each child a tool to help further their learning ability. As students develop strength, the tool can be eliminated and new risks take its place. It's then that educators will see children self-select words, make little words from big words, use dictionaries to find meaning, incorporate their own spellings and have the ability to find their own errors.

Teachers need to pick and choose among all of the spelling strategies listed. The developmental level of the students determines the timing and selection of lessons. Some of the games and lessons, such as making words and using dictionaries, require a higher level of maturity and development. They would be most appropriate during the second half of the school year. A teacher should begin working on vowel patterns and word families early in the school year. The children will soon begin seeing small words inside of larger words and recognize word families in reading and writing. Students will utilize the word wall in the first weeks of school. The site researchers believe that it would be appropriate to work on spelling skills for short time periods, 15 to 30 minutes each day, so that the spelling lessons are being reviewed and reinforced. Children will internalize the skills if they are practiced and repeated frequently.

Spelling is a life long tool. It is a tool that can be difficult to learn. Easing students into skill building activities using appropriate strategies will take away the fear of spelling. With

proper training and knowledge, educators will teach the subject with ease and observe positive

rewards from their students.   According to Templeton & Morris (1999, p. 111)

To plan effective instruction, the teacher must know not only where the student

presently is, but where he or she needs to go next: this calls for knowledge of the

spelling system. The challenge ahead is to blend our understanding of the system

to be learned.

Project Objectives and Processes

As a result of the implementation of a spelling intervention program and a print-

rich environment during the period of September, 1999 to January, 2000, the targeted first grade

students will increase their spelling skills and transfer of spelling words across the curriculum.

The spelling checklist, spelling developmental test and student writing will measure this.

In order to accomplish the targeted objective, the following processes are necessary:

1.   Model shared language arts experiences.

2.   Create an environment that is rich in print and language.

3.   Implement learning and writing activities to encourage the use of spelling

     strategies.

4.   Design a developmental spelling checklist to determine individual

     growth.

5.   Collect and assess student artifacts.

Project Action Plan

The spelling program will consist of formal and informal instruction. There will be 60 to

75 minutes of formal instruction per week. Instruction will occur daily. Direct spelling

instruction will include Month-By-Month Phonics For First Grade, (Cunningham & Hall, 1997).

Informal instruction will include word walls, word games and spelling centers, daily writing activities and print enrichment. Informal instruction will be integrated into other curricular areas on a daily basis.

The strategies introduced and modeled in the fall, are emerging skills, thus, mastery is not expected at this time. This is a multi-leveled plan that builds progressively on previously learned skills. As students become proficient in various strategies new games, projects and activities will be introduced. The purpose of these suggested monthly activities is to enable the child to become an independent speller.

September: Phonics:
        Beginning and ending consonant sounds
        Rhyming words
    ABC Word Wall:
        Children's names
        34 basic words
    Chunking Word Wall:
        Word patterns
        Rhyming words
    Writing:
        Journaling
    Print-Enrichment:
        Nursery Rhymes/Poetry
        "Special Child" of the Day
    Spelling Checklist

October: Phonics:
        Beginning and ending consonant sounds
        Introduce vowel patterns
        Rhyming words
    ABC Word Wall:
        Children's names
        34 basic words
        Commonly used words
        Thematic units
    Chunking Word Wall:
        Word patterns
        Rhyming words
    Writing:

Journaling
Begin writer's workshop
Print-Enrichment:
Poetry
"Special Child" of the Day
Language Experience Charts
Games and Center Activities:
Begin word sort (beginning/ending consonant sounds, length of
word, word patterns, etc.)

November: Phonics:
Vowel patterns
Blends
ABC Word Wall:
34 basic words
Commonly used words
Thematic unit words
Chunking Word Wall:
Word patterns
Rhyming words
Writing:
Journaling
Writer's workshop
Peer communication
Print-Enrichment:
Poetry
Language Experience Charts
Games and Center Activities:
Word sort activities
Making words
Have-A-Go cards
Word banks
December: Phonics:
Vowel patterns
Blends
Suffixes (-s, -ed, -ing)
ABC Word Wall:
Thematic words
34 basic words
Commonly used words
Chunking Word Wall:
Word patterns
Rhyming
Writing:
Journaling
Writer's workshop

                        Peer communication
                Print-Enrichment:
                        Poetry
                        Language Experience Charts
                Games and Center Activities:
                        Word sort activities (include blends)
                        Making words
                        Have-A-Go cards
                        Word banks
                        Word Detective
January: Phonics:
                        Vowels
                        Blends
                        Suffixes (-s, -ed, -ing)
                ABC Word Wall:
                        Thematic words
                        34 basic words
                        Commonly used words
                        Dictionary skills
                Chunking Word Wall:
                        Word patterns
                        Rhyming words
                Writing:
                        Journaling
                        Writer's workshop
                        Peer communication
                Print-Enrichment:
                        Poetry
                        Language Experience Charts
                Games and Center Activities:
                        Word sort activities (including blends)
                        Making words
                        Have-A-Go cards
                        Word banks
                        Word Detective
                Spelling Checklist
                Individual Spelling Conferences

Methods of Assessment

In order to assess the effects of the interventions, the developmental test given in

September will be re-administered in January. In addition, student writing samples will

be collected throughout the intervention and analyzed using the spelling checklist. Finally, daily

written pieces such as journals will be evaluated for developmental spelling growth.

CHAPTER 4

PROJECT RESULTS

Historical Description of the Intervention

The objectives of this project were to improve spelling skills in daily writing in the primary grades. Various strategies were used to attempt to achieve this goal such as providing a print rich environment, daily journaling, writer's workshop, displaying the most commonly used words and providing spelling strategies. Other components included pre and post spelling tests, and spelling checklists.

Print Rich Environment

The school year began with each first grader as the Special Child of the Day. Each student was introduced to the routine of school, introduced to letters and sounds, new vocabulary and print with the help of the other students. Special Child of the Day emerged students into the world of print and according to the site teachers provided the students with a comfortable atmosphere for learning. As the students interviewed the designated child, the teacher wrote sentences on chart paper recording the information. The teacher modeled correct spelling while writing the charts. The Special Child of the Day allowed students to get to know each other, hear a story about their classmates and begin spelling strategies. The children compared the spellings and the number of letters in the names. The charts were hung around the room for reading.

It was then that the teachers introduced the ABC word wall. The first few weeks were spent reviewing the letters of the alphabet. As the children practiced these letters, they were placed on the word wall. The special child of the day's name was put on the word wall. When students were exposed to a new reading vocabulary, these words were also placed in the on the word wall. During group writing sessions, the teacher referred to the word wall to model how to use it for spelling support.

The students were provided strategies to help them become aware of different words that began with the same sounds. Picture clues were provided to help students identify beginning sounds. Students were encouraged to look for tall letters, hanging letters, as well as identifying words in alphabetical order.

As the students' reading vocabulary improved they began to cluster words into rhyming words, which in turn helped build word family connections. The first word family introduced was all. This fit in perfectly with the nursery rhyme, Humpty Dumpty. This helped introduce the students to the Chunking Word Wall, another way to provide a print rich environment. Increased emphasis was placed on the formation of the Chunking Word Wall to help the students become aware that groups of words may have similar patterns. The children brainstormed words for the word families. Again, the teacher modeled how to use the Chunking Word Wall during group writing sessions. The use of the ABC Word Wall and the Chunking Word Wall became an integral part for the children while writing daily in their journals and during writer's workshop.

Journaling and Writer's Workshop

Daily journaling began the first day of school to allow the teacher immediate assessment of her students' writing needs. This also allowed the teacher quick observation to what spelling strategies the children might have brought to first grade.

From the beginning of the school year the children were encouraged to use invented spelling in their journaling. Children were supported in their efforts to sound out words in the positive site classroom settings. After each day of journaling the children read back their journal entry to the teacher. It was here that students needs were immediately reinforced. Misspelled words that were on the word walls were circled and the students were encouraged to find the word and respell it correctly. Those children not able at that time to read a particular word were given a mini lesson on the beginning and ending sounds of the word.

The traveling journal for the student of the day or student of the week was another form of writing that began early in the school year. When the designated student brought the journal home, he or she wrote a short story in the notebook. The traveling notebook helped keep parents involved in their children's writing and spelling.

As the students became more comfortable in their journaling the teacher began a formal writer's workshop. The workshop consisted of an organized format helping the class put their thoughts on paper. During this time spelling strategies were taught to those students that demonstrated readiness. The teachers modeled spelling and writing strategies during mini-lessons. The children were encouraged to practice the strategies during the writing session. Students edited their papers for spelling and punctuation before publishing. Peer editors also checked stories.

Writer's workshop and daily journaling provided the necessary practice and independent use of the spelling strategies being taught to the students. Instructional emphasis was placed on editing misspelled words the children used in invented spelling thus helping the students to visually see the corrections and aid in their independent writing. Teachers had formal instruction of these words daily for 20 minutes. The children were then accountable for spelling in their

writing. The children were also accountable for the most commonly used words for first graders. As encouragement, words had been placed around the room for easy reference.

Most Commonly Used Words

When the first graders of each class entered their classroom in the fall each desk had the most commonly used words for first graders taped on it. These words were also the first words the children were exposed to as vocabulary words. As these words were placed on the ABC word wall or the chunking word wall the students identified these words with a red dot on their desk chart. This was done to make reference to the words easy for each child. A classroom chart was also provided to help students refer to these words as frequently as necessary. Teachers first pointed to the chart and word walls when students asked for spelling support.

As the children developed better letter, sound and word awareness, teachers strengthened sight vocabulary of the most commonly used words. Individual readiness and development for the reading and spelling of the words varied. When students spelled a word from the word wall consistently in their writings, the word was highlighted in yellow on their desk chart. This served as a tool for self-correction for the student, identifying self-growth and for quick teacher observation and assessment. Students were given spelling buddies to help in peer editing journals to keep new skills strong. Spelling buddies highlighted new spelling words on their buddy's desk when words were correctly spelled in journals. The use of spelling strategies, both individually and with partners, became an integral part of the spelling intervention to help the students succeed.

Spelling Strategies

As the year progressed and skills improved, the teachers and children spent time on spelling games, activities and projects to promote spelling strategies. One of the first activities

the children participated in was word sorts, where the students placed words in proper categories according to pictures, and initial and final sounds, rhyming words and vowel patterns. This helped with the pre-readiness skills making students aware of letters and sounds.

Students soon participated in Making Words, a hands-on activity where the children made words and looked for strategic spelling patterns. Specific word families were chosen to help reinforce rhyming words and vowel patterns. Usually the teacher worked on this activity in small groups to insure proper spelling, though using that as a whole classroom activity is also possible as well as in a spelling center once the children are acquainted with the procedure. Students are given two or three letter words to spell at the beginning of this activity, building to five or six letter words until a mystery word using all the letters the children have are used to spell the last word. Teachers used Making Words or word sorts twice a week for 15 minutes for reinforcement of spelling strategies.

Each first grade classroom approached the teaching of spelling by using vocabulary from the thematic unit being taught at the time. The words were written on large charts and hung around the room for easy reference. Teachers numbered the words so children could easily identify a vocabulary word for correct spelling. As the children learned these thematic words, they placed them in their word banks for future use. The children often used their word banks in the spelling centers. Activities the participants were required to work on were placing words in ABC order, rewriting scrambled words in the proper order, writing words in a good sentence and editing the words, as well as practicing the words with a spelling center partner.

Those thematic words were easily accessible to the students by being placed in a hanging chart in an envelope with each child's name on it. Often misspelled words found by the teacher in a child's writing were placed in the envelope with the correction. The student was then given

individual activities for those words. This served as a reminder for the students on which words they needed to watch for in their writings for the week. This also served as a good center activity during spelling time. Thus word banks played an important part in the teaching of spelling.

Each student's development was taken into consideration when spelling centers were made. Accountability of each child was also considered depending on ability and readiness skills. Some students were only accountable for one or two words a week, while others may have had five or six words. Some students had progressed beyond the most commonly used words and were accountable for the thematic words in their writings. Spelling centers provided differentiation according to need, helping to build confidence and success for each child.

As the year progressed the children were again given the developmental spelling test and the individual spelling skills in the student's writings were placed on the spelling checklist to help assess growth. Teachers also checked journals and other daily written work to assess spelling changes taking place.

<div align="center">Presentation and Analysis of Results</div>

At the end of January a series of assessments were given to the students to determine the effects of the spelling program. The developmental spelling test was given, the spelling checklist was applied to children's writing, and students' daily writing was collected and analyzed.

Developmental Spelling Test

The developmental spelling test was given to the students under the same conditions as when it was given in September. The students were given the test in a whole class setting. The teacher read the words on the spelling list and used the word in a sentence. The children were encouraged to write the sounds that they heard in the words. The children were also told to use any of the spelling strategies that had been learned since the beginning of the school year. The

atmosphere in the classrooms was positive and encouraging. The results were compared and they are presented in Table 1.

Table 1

Comparison of the Developmental Spelling Test

Developmental Stages	September	January
Precommunicative	39%	7%
Semi-Phonetic	19%	7%
Phonetic	27%	28%
Transitional	11%	37%
Correct	0%	8%

The children showed improvement in their spelling skills. In September, no children met the criteria for the correct stage. In January, a small percentage used their spelling skills effectively and new results were evident in the correct spelling stage. Appendix K shows an example of a child at the correct spelling stage. At this stage, children are spelling grade level appropriate words correctly. There was a notable increase in the percentage of children at the transitional stage. At this stage, children are using vowel patterns correctly. The greatest change was at the precommunicative stage. In September the largest percentage of the students were at this stage and now it is the smallest percentage. The semi-phonetic stage also showed a decrease. The phonetic stage stayed virtually the same. The children moved from the precommunicative and semi-phonetic stages to the phonetic level. The improvement in the children's spelling is also evident in the spelling checklist used on writing pieces.

Spelling Checklist

The spelling checklist was used on a single writing piece collected in January. The writing piece came from a writing workshop lesson in which the class first brainstormed writing ideas about the current thematic unit of dreams and nightmares. Then the children used an outline format to help them organize their important story elements. The children wrote and illustrated their stories during a thirty to forty minute writing session. They were encouraged to use an editing checklist to edit their papers for correct punctuation. The teachers collected the writing samples and used one spelling checklist on each piece. As in September, the teachers looked for consistent spelling skills evident in the writing when giving a check for each spelling category. The results were compared and they are presented in Table 2.

Table 2

Comparison of the Spelling Checklist

Spelling Stages	September	January
Random	47%	7%
Emergent	53%	37%
Developmental	0%	27%
Transitional	0%	28%

The table shows that in September the children's spelling skills were at the random or emergent stage. They had few spelling strategies. They used either random letters or the consonant sounds heard in words. In January, there was a significant decrease in the number of children in the random stage. Most children can now identify a sound symbol relationship for each word. In September, no students met the criteria for the developmental stage. In January,

just over one fourth of the children are at the developmental stage. They are beginning to develop a sight vocabulary and they are using vowel sounds in their spelling. These children are not using the vowel sounds correctly at this stage. At the transitional stage, the students are able to use vowel sounds, consonant blends and endings correctly. They have internalized many spelling rules but they may overgeneralize the use of these rules. Spelling skills develop over time so using journals or other daily writing to evaluate growth may provide a more accurate picture of the student.

<u>Journals</u>

Journals were analyzed for spelling development. The children write in their journals when they begin the school day, as a writing workshop or when other work is completed. The writing sessions are usually short and may end with a sharing time. The classroom teacher responds back in writing to the student about what he or she has written. The journals have a monthly shape or theme. The paper is now all lined but children can create an illustration to match their text. When writing in a journal, the children select their own topics and the writing pieces are short. Spelling development becomes apparent over time so journals are valuable resources for teachers to use for evaluation.

When evaluating the journals, the site classroom teachers looked for the developmental spelling stages of the targeted students. Children who are using letters to represent words but writing the letters in a random order are considered to be in the random or precommunicative stage. The letters do not correspond to sounds. The teachers examined the spelling attempts for the use of beginning and ending consonant sounds and blends as found in the emergent or semi-phonetic stage. Children who spell words like they sound are in the developmental or phonetic stage. These children attempt to use some vowels, blends and endings but the spelling may be

unconventional. The teachers looked for children at the transitional stage who could think about how words look in print and use their spelling strategies independently. In the correct stage, children have developed an internal monitor for conventional spelling. They are consistently spelling grade level appropriate words correctly. Table 3 presents a comparison of the developmental spelling stages found in the students' daily writing.

Table 3

Comparison of Developmental Spelling Stages

Spelling Stages	September	January
No Writing	45%	0%
Random	32%	14%
Emergent	23%	23%
Developmental	0%	29%
Transitional	0%	33%
Correct	0%	4%

There has been spelling growth in the students' daily writing. When the school year began, many children were unable to attempt any writing independently but now in January, all children can make some kind of spelling attempt. A small group of children are still using random letters for their writing but that number has decreased since September. Appendix I shows an example of a student spelling at the precommunicative stage. The number of children at the emergent stage has stayed the same as children have moved from the non-writing and random stages to this level. Appendix L shows an example of a student spelling at the emergent stage. There were substantial increases in the developmental and transitional stages. There were

no children at these stages at the beginning of the school year and now almost two-thirds of the children are at these levels. Appendix M shows an example of a student spelling at the developmental stage. The transitional stage has the largest percentage. These students are using the spelling lists, word walls, word families, and spelling rules independently. Appendix N shows an example of a student spelling at the transitional stage. There are also a small percentage of children who are spelling words correctly in January that would not be expected to spell correctly until the end of the school year. Appendix O shows an example of a student spelling at the correct stage. All of the journals and daily writing pieces show the growth of spelling skills over time.

Conclusions and Recommendations

Overall, the teachers felt that the program was a success. All three of the evaluation tools used by the teachers showed that the children had improved their spelling skills. The developmental spelling test and spelling checklist for a single writing piece showed that the children moved from beginning developmental stages of spelling to more advanced levels. The children's daily writing in journals showed how the use of spelling skills had grown over time.

The developmental spelling test shows that the children are moving from having few spelling and phonetic strategies to having many spelling resources. They are making connections to the many spelling activities and lessons that have been presented. The children have confidence in themselves as spellers. When the developmental spelling test was given in September, there were some children in tears of frustration. Some children gave up and did not even attempt to spell the words. In January, all children felt that they could make spelling attempts and there were no tears. Many children remarked that the test seemed easy. They are beginning to use more vowel sound patterns. They are showing improvement in using middle

sounds and endings. It is important that some of the children are now able to use their strategies so well that they are spelling most words at a correct developmental level. These children have internalized their spelling skills and can apply them when spelling any word.

When examining the results of the spelling checklists, it is clear that most children have developed good spelling skills. They are using the strategies that they have been taught in their writing. The single writing piece can be a tool for evaluation but it can give a false impression of the spelling levels of some children. The piece may lack sufficient writing to show the teacher consistent spelling. The writing topic may be one in which the child does not show a strong interest. The site teachers found it important to evaluate all of the assessments when determining a child's spelling growth.

The evaluation tools showed how children had internalized the spelling strategies and were using them independently in their daily writing. The spelling interventions presented in this program have proven to provide a beneficial effect on student performance.

Based on the experiences with the targeted students, the spelling program in first grade demonstrated a marked improvement in spelling usage. The students appeared to have transferred spelling strategies to their independent writing both in daily journaling and writer's workshop. The students were aware of the appropriate use of the ABC and Chunking word walls and continued to use the word list when necessary. The amount of teacher time redirecting students to the use of spelling strategies became less as the school year continued as students developed in their spelling skills.

It was apparent to the research teachers that the study of spelling was greatly enhanced when the students were provided a print rich environment. The ABC word wall and the Chunking Work Wall helped the students' awareness of word families. The targeted students

were able to make spelling connections from the word walls to new and unfamiliar words in their writings. When it was necessary for the students to edit a word or words, the word walls were the first source of clarification. Introduction of this strategy for spelling at the beginning of the school year and continued modeling of word wall use is imperative in order to set the necessary guidelines for the children's continual use throughout the school year.

It is suggested by the research teachers that journal writing also begin upon the student's entrance into first grade. It is then than the teacher indicates where on the spelling checklist the students are assessed. From this early on assessment both teacher and student can begin the developmental study of spelling strategies. It is also at this point in the teaching of spelling that modifications can be made for the varying levels of student learning.

Upon developing confidence in their writing from daily journaling, the students should be introduced to Writer's Workshop. At this point in the school year, first graders will begin to use invented spelling. Invented spelling has been encouraged by the research teachers to maintain a high level of confidence in writing for their students. It is advisable that Writer's Workshop begins in a structured format providing specific guidelines at the beginning of the school year. The purpose behind this thought is to provide a confidence building, success orientated atmosphere when writing. Spelling is the major component to being successful and being able to read back a child's writing. When introducing Writer's Workshop, modeling to the students how to use the word wall is important as well as reminding them of the word families already available to them. It was found by the researchers that beginning writers tended to use familiar words.

More confident writers immediately made word family connections to new words. If trained properly from the beginning of school, the word walls will provide the essential exposure

of words for the students until they become more proficient in their spelling skills. This has been particularly evident to the research team when observing the development of pre-readiness spelling skills. Students use invented spelling with more ease knowing they can identify beginning and ending sounds.

The posting of the most commonly used words for first graders in the classroom can be a successful component to this spelling guide. Once students become aware of words and know where to find the word, then only can proper usage and eventual spelling of the word for young spellers take place. It is suggested that each child red dot the words that can be read on the word chart taped to the desks. This allows the continual development of the varying levels. If the less capable child is still have difficulty reading and finding the words of the most commonly used words chart, then it is advised to build their skills with the ABC wall. Continual encouragement and provided activities with the most commonly used words along with the use of the word walls provides the necessary repetition some children may need.

Providing spelling buddies appeared to the researchers to lessen pressure of not being able to spell. Students that were developmentally lower in the spelling stages appeared less inhibited when working with a peer. This was where the team noted that buddies were giving mini lessons. Thus, various spelling strategies were shared among classmates.

When the site classes were introduced to word sorts and Making Words activities the majority of the students were already developing the sense of spelling. Those children not quite ready for this activity worked in small groups or individually with the teacher building words by hearing and identifying beginning and ending sounds. Thus all students were provided opportunities to be successful at their own level. These activities and strategies were then shared among the students in centers or buddy time. It is suggested to wait until there is an awareness of

letters and sounds before introducing these activities hindering lack of success or frustration. This is an activity that provides student and teacher the opportunity to excel and enrich when appropriate. The entire class does not and in reality should not all begin at the same time if varying levels are taken into consideration.

Word banks helped the site teachers provide spelling words and strategies for all levels in the classroom. More difficult vocabulary was provided for those that displayed readiness along with specific spelling strategies that they were made accountable for. To ensure success for all levels the teacher must continually assess the developmental progress of the students. This activity should not be overlooked. It was noted that when providing spelling words, the students were able to pick out sounds, word families, and little words within a big word and make the necessary connections to becoming proficient spellers. Those students given time and the correct steps developed appropriately in their risk taking in spelling. Those students were on the road to gaining the skill of a life long speller. It has been indicated by the site teachers that learners became risk takers when each learning step was acknowledged and celebrated, a must for primary students.

By January, the students participating in the spelling research activities had become active risk takers. Some students, by January, were able to use most of the spelling strategies independently. Others continually needed to use the word walls and chart of words. The use of these strategies will be encouraged throughout the remainder of the school year.

The goal of this research project was to improve spelling skills in daily writing in the primary grades. Various strategies were implemented in order to achieve this goal. The targeted group of first grade classrooms appeared to display developmental growth in the area of spelling. Due to the fact that spelling was indeed an issue that has plagued many school districts, a

spelling guide as structured as the one provided could be implemented at all primary levels. From reading the current research on spelling it is obvious to the team researchers that there are a variety of interventions to use when teaching spelling. This project provides some effective ways to teach spelling. The strategies provided have made an impact on the spelling skills of first graders in their daily writing. Knowing that spelling is a developmental skill for emergent writers, this guide provides various opportunities for all learners. It is of utmost importance that educators provide the necessary differentiation in spelling as in any other developmental skill. Providing opportunities and a comfortable environment to initiate success was an additional goal set by the site researchers. Therefore, to positively and effectively teach spelling to primary children, it is crucial for educators to be flexible and provide learning opportunities for all— students.

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APPENDIX A

CHARACTERISTICS OF THE DEVELOPMENTAL STAGES OF

LEARNING TO SPELL

Characteristics of the Developmental Stages of Learning to Spell

---

Preliterate/Prephonetic

    Scribbles

    Imitates reading and writing

    Is aware of print

Preliterate/Phonetic

    Learns alphabet (reading and writing)

    Strings letters to spell words

Letter Name

    Uses logic to predict spelling (names of letters, own name as basis, environmental print as aid)

    Begins development of sight vocabulary (reading and writing)

    Often exchanges short vowel sound for closest long vowel sound when predicting spelling (that is, a for short c, e for short 1, etc.)

    Makes common spelling errors - aff-rications jriv for drive), nasal) bop for bump), exaggerated sounding (palana for plane)

Within Word

    Develops growing sight vocabulary (reading and writing)

    Correctly uses short vowels

    Marks long vowel sound (sometimes incorrectly - caek for cake, flote for float)

    Uses -d for past tense (skiped or skipped instead of skipt)

    Understands words have two elements-beginning consonant pattern and a vowel plus ending - to inform predicted spellings.

    Begins to internalize rules (doubling, e marker, etc.)

    May overgeneralize rules (doubles when not needed-sufferring for suffering, drops e before adding any ending - earful for careful

---

APPENDIX B

DEVELOPING SPELLING STAGES

SCORING CHART

DEVELOPING SPELLING STAGES / SCORING CHART

This scoring chart is provided to help you analyze students' spelling. Before going further, think about the features that you will look for at each developmental level.

1. Precommunicative spelling is the "babbling" stage of spelling. Children use letters for writing words but the letters are strung together randomly. The letters in precommunicative spelling do not correspond to sounds.
2. Semiphonetic spellers know that letters represent sounds. Spellings are often abbreviated representing initial and/or final sounds.
3. Phonetic spellers spell words like they sound. The speller perceives and represents all of the phonemes in a word, though spellings may be unconventional.
4. Transitional spellers think about how words appear visually; a visual memory of spelling patterns is apparent. Spellings exhibit conventions of English orthography like vowels in every syllable and vowel digraph patterns, correctly spelled inflectional endings, and frequent English letter sequences.
5. Correct spellers develop over years of word study and writing. Correct spelling can be categorized by instruction levels; for example, correct spelling of a body of words that can be correctly spelled by the average fourth grader, would be fourth-grade level correct.

	1	2	3	4	5
WORDS	PRECOMMU-NICATIVE	SEMI-PHONETIC	PHONETIC	TRANSI-TIONAL	CORRECT
bed	random	b	bd	behd	bed
truck	random	t k	t r k	truhk	truck
letter	random	l t	l d r	ledder	letter
bumpy	random	b p	b m p	bumpee	bumpy
dress	random	j s	j r s	dres	dress
jail	random	j l	g a l	jale	jail
feet	random	f t	f e t	fete	feet
shopping	random	s p	s p e n	shoping	shopping
monster	random	m	m n s t r	monstur	monster
raced	random	r	r a s t	raist	raced
boat	random	b	b o t	bote	boat
hide	random	h i	h i d	hied	hide

Look at the student's list. Use this chart to highlight the student's responses. At which level were most of the student's responses? This is the student's probable developmental level. You may feel that a student truly falls between two categories. Use teacher discretion and try to identify one level per child. Record the child's approximate developmental stage on this page and on the class record form.

APPENDIX C

PRE-COMMUNICATIVE STAGE

Developmental Spelling Inventory

Name _____ Date _____

1. $\triangle C$

2. $cB\Gamma$

3. $CCB\leq HQSR$

4. $oBAHIK$

5. $HAB\text{o}\text{a}$

6. $AB\subset WM$

7. $MMNA\subset$

8. $K\subset ooBL$

9. $\Gamma Bo\text{k}$

10. So

11. $BBomNM$

12. $_BK$

APPENDIX D

TRANSITIONAL STAGE

Developmental Spelling Inventory

Name _____   Date 9-13-97

1. B ᵃD   7. fEⱯt

2. druC   8. Shiping

3. Lutr   9. MiSTr

4. BapiE   10. rasT

5. Dras   11. BOoTE

6. gⱯuL   12. HIUED

APPENDIX E

PHONETIC STAGE

Developmental Spelling Inventory

Name _____ Date 1-13-9

1. bED

2. Trac

3. LArr

4. BaPe

5. DreS

6. LaYeL

7. FeT

8. SniPes

9. MiSTR

10. RasT

11. BoT

12. HiD

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APPENDIX F

SEMI-PHONETIC STAGE

Developmental Spelling Inventory

Name _____   Date <u>SEP 1 3 1999</u>

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

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APPENDIX G

DEVELOPMENTAL SPELLING CHECKLIST

Developmental Spelling Checklist

Name _____   Date _____

|	Yes	No
1. Randomly chooses letters when spelling.		
2. Can identify and use initial consonants.		
3. Can identify and use final consonants.		
4. Uses vowels when spelling.		
5. Uses vowels correctly when spelling.		
6. Spells the first grade 34 basic spelling words correctly.		
7. Uses spelling strategies independently.		

APPENDIX H

WRITTEN SAMPLE – NO WRITTEN EXPRESSION

SEP 2 1 1999
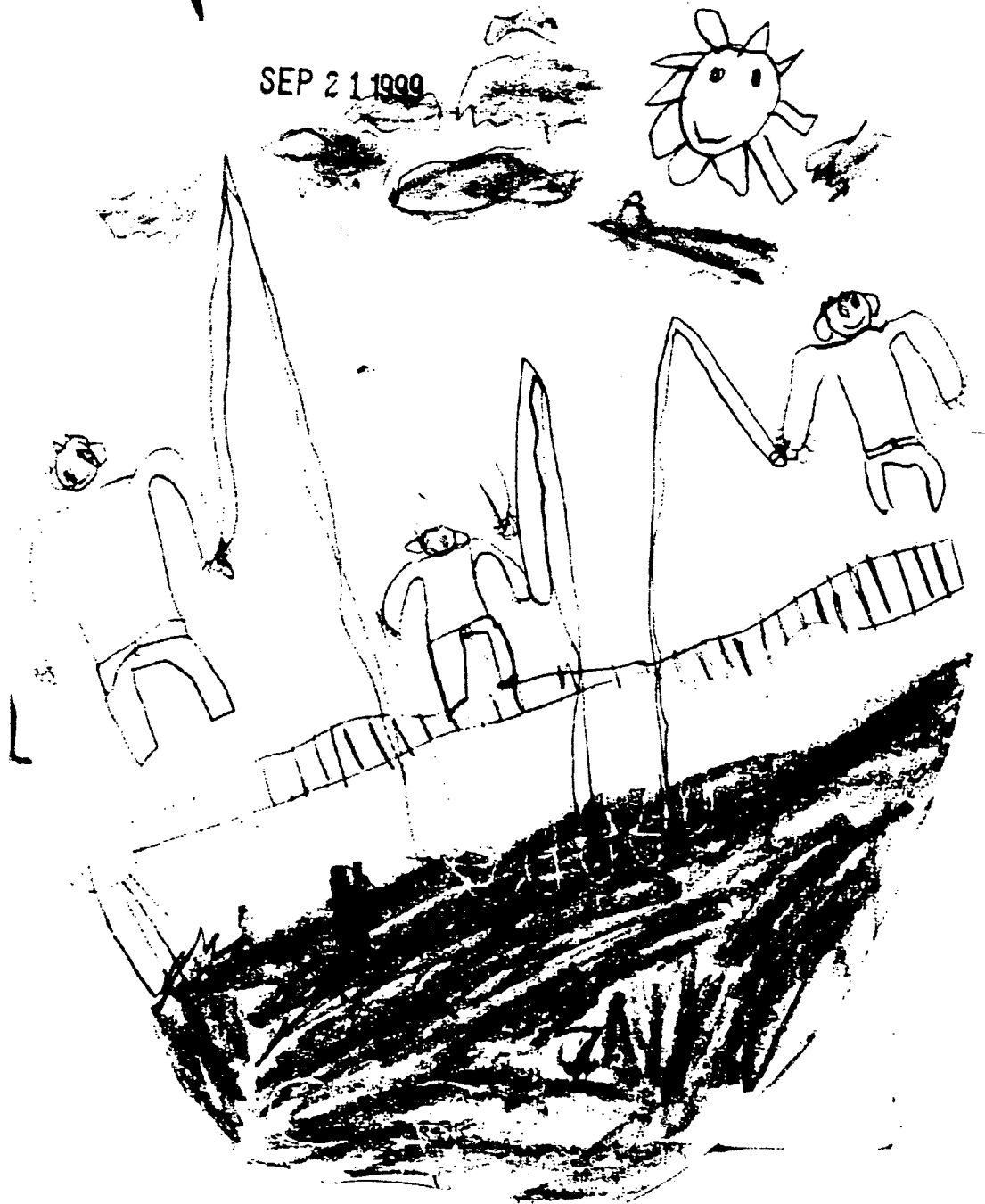
BEST COPY AVAILABLE

APPENDIX I

WRITTEN SAMPLE – PRECOMMUNICATIVE STAGE
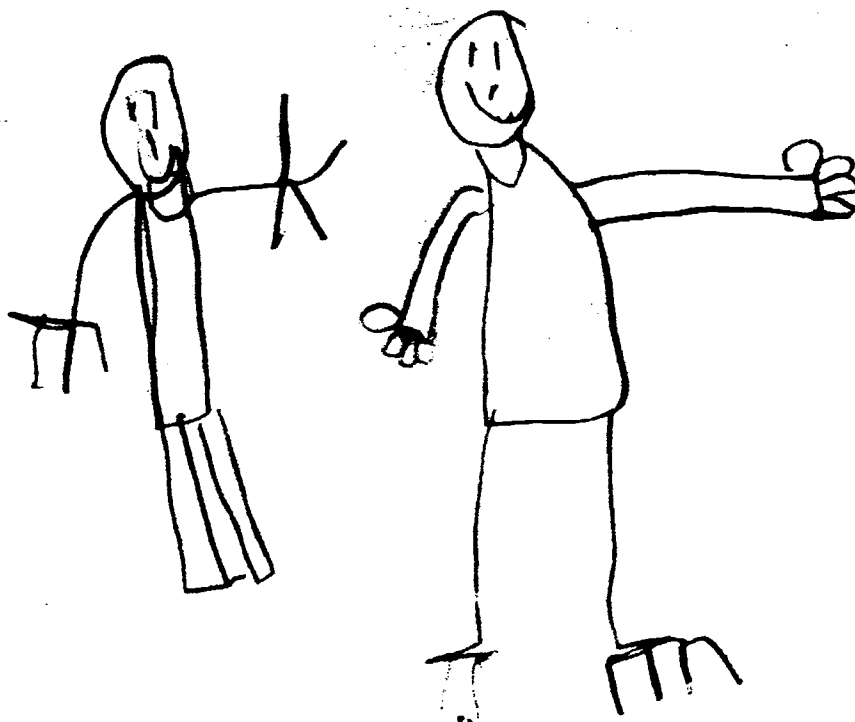
Mifcof

what is your friends name?

APPENDIX J

MAKING AND WRITING WORDS

Making and Writing Words

Vowels	Consonants	
	1.	6.	11.
	2.	7.	12.
	3.	8.	13.
	4.	9.	14.
	5.	10.	15.

T-1	T-2	T-3

Adapted from Rasinski, Timothy. Making and Writing Words.

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APPENDIX K

CORRECT STAGE

Developmental Spelling Inventory

Name _____ Date 1/31/00

1. Bed

2. truck

3. Letter

4. Bammpy

5. dress

6. Jaul

7. Feet

8. shopping

9. monster

10. Rast

11. Boat

12. hide

APPENDIX L

WRITTEN SAMPLE – EMERGENT STAGE

ELMBITHD

ELJOrdan.

SEP 14 ~~1999~~

You will have a good birthday! **SEP 14 1999**

Make a wish &
Blow out
your candles!
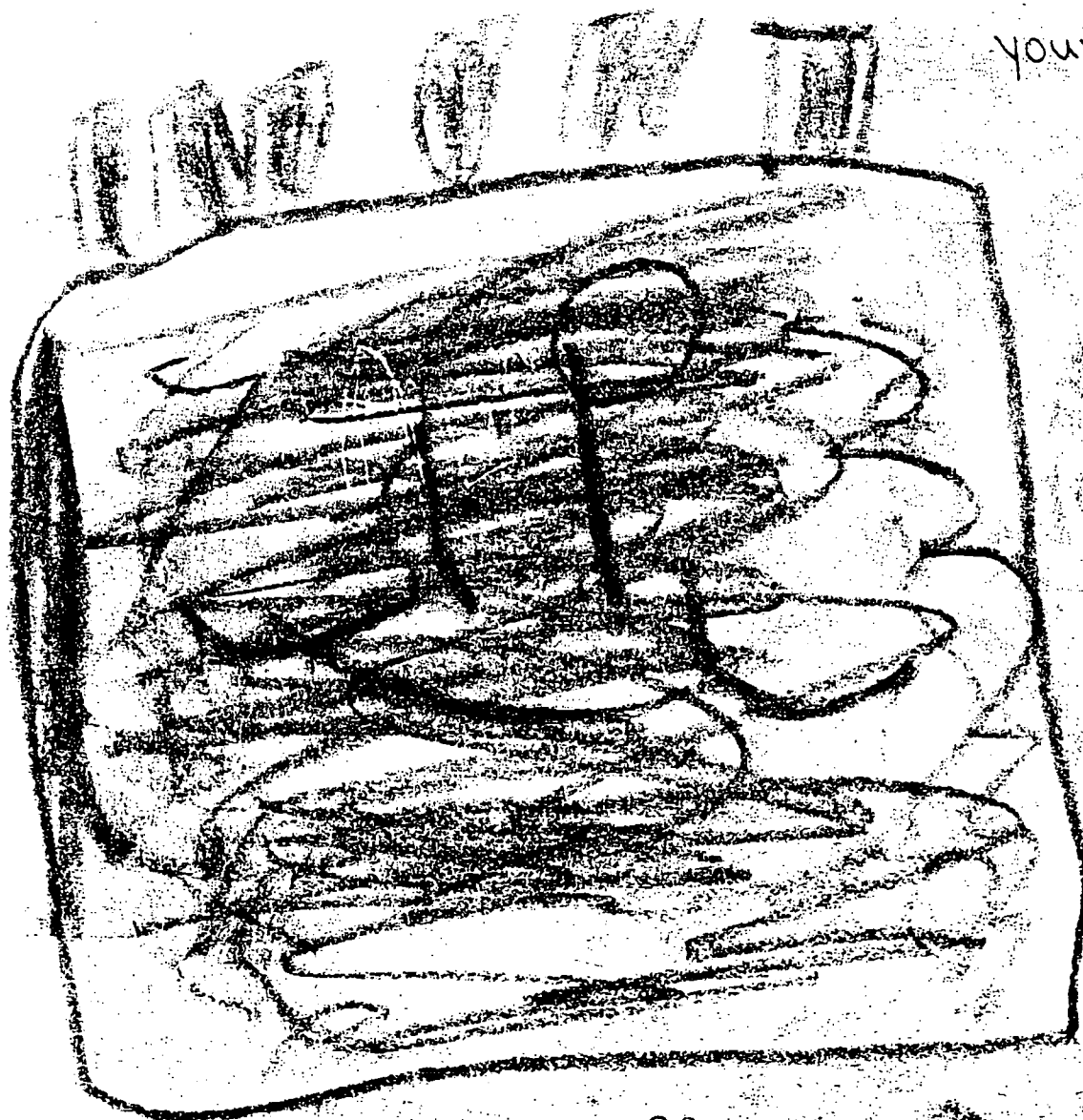
APPENDIX M

WRITTEN SAMPLE – DEVELOPMENTAL STAGE

My Frst daa av [78]
school I Mat frie
friends Tha
Nams Tha
wi o Rachel 3
Laura
3
Evan 3
I Wss SGr

APPENDIX N

WRITTEN SAMPLE – TRANSITIONAL STAGE

I Love My
Famale Joey and Vanessa
and Anthony and Danny
Love Me. My Mom
and DaD Drov
Me to Scool.
I had a
now Stodit hr
Name was Abigail
She got to be
My Frad so ESaie
Jordyn was aer
Frad too We Playd
togathr at resas

APPENDIX O

WRITTEN SAMPLE – CORRECT STAGE

The SnowMan [82]

It was a Loge Time agoe wene I made a snowman it had a hat it had a carrotnose BUt The Snow man didd't have a friend to play with or to go with or to eat with So She went to The play Place to foind a friend BUt thay didd't Get a friend So She went to The

maliand she Got a friend.

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