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ABSTRACT

A balanced, systematic, instructional reading program was designed to increase word recognition in beginning readers. The targeted population consisted of first graders in an upper middle class community located in the Chicago suburbs. The lack of word recognition was documented through assessments revealing students' phonemic awareness, reading fluency, and print awareness. Analysis of probable cause data revealed that first grade students typically lack the skills and strategies necessary for word recognition and reading. The data also revealed that phonemic awareness, reading readiness, print awareness, and parental involvement are critical factors in beginning reading instruction. A review of solution strategies suggested by knowledgeable others, combined with an analysis of the problem setting, resulted in the selection of four major categories of intervention: assessment and review of phonemic awareness to insure reading readiness; a balanced, beginning reading instructional program; instructional focus on reading skills and strategies; and increased parental involvement. Post intervention data indicated an increase in students' phonemic and print awareness. The data also showed a substantial improvement in word recognition skills and an increase in the understanding and use of various reading strategies. Contains 33 references, 2 tables and 4 figures of data. Appendixes contain an early reading screening instrument and a test of phonological awareness. (Author/SR)



Improving Word Recognition Among First Grade Students

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An Action Research Project Submitted to the Graduate Faculty of the School of Education in Partial Fulfillment of the Requirements for the Degree of Masters of Arts in Teaching and Leadership

St. Xavier University & IRI/Skylight Field Based Masters Program Chicago, Illinois May 1999

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We would like to dedicate this work to the 45 first graders who have inspired us with their love for learning.



Abstract

A balanced, systematic, instructional reading program was designed to increase word recognition in beginning readers. The targeted population consisted of first graders in a upper-middle class community located in the Chicago suburbs. The lack of word recognition was documented through assessments revealing students' phonemic awareness, reading fluency, and print awareness.

Analysis of probable cause data revealed that first grade students typically lack the skills and strategies necessary for word recognition and reading. The data also revealed that phonemic awareness, reading readiness, print awareness, and parental involvement are critical factors in beginning reading instruction.

A review of solution strategies suggested by knowledgeable others, combined with an analysis of the problem setting, resulted in the selection of four major categories of intervention: assessment and review of phonemic awareness to insure reading readiness; a balanced, beginning reading instructional program; instructional focus on reading skills and strategies; and increased parental involvement.

Post intervention data indicated an increase in students' phonemic and print awareness. The data also showed a substantial improvement in word recognition skills and an increase in the understanding and use of various reading strategies.



iv

Table of Contents

CHAPTER 1 - PROBLEM STATEMENT AND CONTEXT	1
General Statement of Problem	1
Immediate Problem Context	1
The Surrounding Community	3
National Context of Problem	4
CHAPTER 2 - PROBLEM DOCUMENTATION	5
Problem Evidence	5
Probable Causes	12
CHAPTER 3 - THE SOLUTION STRATEGY	18
Literature Review	18
Project Objectives and Processes	32
Methods of Assessment	32
Project Action Plan	33
CHAPTER 4 - PROJECT RESULTS	43
Historical Description of the Intervention	43
Presentation and Analysis of Results	48
Conclusions and Recommendations	55
REFERENCES	58
APPENDICES	61



٧

CHAPTER 1

PROBLEM STATEMENT AND CONTEXT

General Statement of Problem

Children entering first grade lack word recognition skills. In order for students to become fluent readers who read with comprehension, they need to develop strategies to recognize words with automaticity. Evidence for existence of the problem included teacher observation, anecdotal notes, and assessments that indicated student performance of primary reading skills.

Immediate Problem Context

School A

The research was conducted in two elementary schools in the same district in an affluent northern suburb of a large Midwestern city. School A has an enrollment of 468 students with an average class size of 18. The ethnic makeup of the students is 90.4% Caucasian, 9.2% Asian/Pacific Island descent, and .4% is Hispanic. Of the students at School A, 4.9% are of limited English proficiency and are eligible for bilingual education up to five days per week. Low income students constitute .2% of the population. Low income students are from families receiving public aid, being supported in foster homes with public funds, or eligible to receive free or reduced-priced lunches. The attendance rate for School A is 96.7%. The student mobility rate is 10.3%. The mobility rate is based on the number of students who enroll in or leave school during the school year.

The certified support staff at School A includes an art teacher, two music teachers, two physical education teachers, four Learning Disabilities (LD) teachers, a French instructor, a Spanish teacher, three science teachers, two speech pathologists, an English as a Second Language (ESL) teacher, a school counselor, a



technology coordinator, a librarian, four band instructors, four orchestra instructors, and an extended math teacher. The extended math teacher coordinates the gifted math program. She tests the entire school population, and the students who score in the top five percent nationally are eligible for the pull-out program she teaches. The pupil-teacher ratio is 19.4 to 1.

School B

School B has an estimated enrollment of 315 students with an average class size of 18. The ethnic makeup of the students is 89.2% Caucasian, 9.8% Asian/Pacific Island descent, and 1.0% is Hispanic. Of the students at School B, 8.9% are of limited English proficiency and are eligible for bilingual education up to five days per week. Low income students constitute .3% of the population. Low income students are from families receiving public aid, being supported in foster homes with public funds, or eligible to receive free or reduced-priced lunches. The attendance rate for School B is 96.3%. The student mobility rate is 6.2%. The mobility rate is based on the number of students who enroll in or leave school during the school year.

The certified support staff at school B includes art, music and physical education instructors, three LD teachers, a French instructor, a Spanish teacher, two science teachers, two speech pathologists, an ESL teacher, an extended math teacher, a school counselor, a technology coordinator, a librarian, four band and four orchestra instructors.

District Wide

Schools A and B are two of three elementary (K-5) buildings. There is also a junior high in this district. The faculty and staff at the three elementary schools within the district consists of 145 staff members all of whom are Caucasian. Females comprise 88.3% of the teaching staff, while 11.7% of the staff is male. The average



experience level of the teachers is 13.9 years. Teachers with Master's degrees make up 44.4% of the staff. The average salary of teachers is \$40,722. The average administrative salary is \$71,351.

At Schools A and B, 48 minutes per day are devoted to teaching mathematics, 25 minutes are spent on science, 168 minutes are devoted to English which includes all of the language arts, and 20 minutes are spent on social science. Both Schools A and B use a literature-based reading series and incorporate a whole-language philosophy. There is also a reading intervention program called Reading Boost for first and second grade students. Manipulatives are used in math and science in addition to having a weekly science lab.

Four separate elementary school districts service the surrounding community. The district in which Sites A and B are located is governed by a seven member school board, one superintendent and one assistant superintendent. Each school in the district has one principal and Site A recently hired an assistant principal due to the large student population.

The district is committed to excellence in its educational program. It is the goal for each child to experience success in a school committed to teaching, learning, and caring. There is a high percentage of parent involvement. One hundred percent of the parents or guardians of Site A and Site B make at least one contact with the student's teacher during the school year.

The Surrounding Community

The district is located in a town of 32,862 people according to the 1990 census. Of the 32,862 people, 91.7% are Caucasian, 6.4% are Asian, 1.7% are Hispanic, and 0.2% are Black. The median age of the community is 40.9 years of age and 55.1% of the adult population are college graduates. The median income is \$73,362 per



household with 1.8% of the population below the poverty level.

People who work in this town do not live there; 90% of employees of the community live elsewhere. Wages from local corporations do not afford the ability to sustain a home and a family in the area. The town has a commuter link to a major city by a train system and expressways. The majority of students have parents who are in professional occupations. The socioeconomic status is generally upper middle class, and the community as a whole is considered affluent.

Regional and National Context of the Problem

One of the greatest challenges facing reading teachers in our country is that of helping students achieve their highest reading potential. Even though there is great effort by teachers and many pull-out programs, some children are still not progressing at an acceptable rate (Normand, 1996). This task seems difficult as students entering first grade are very diverse in their reading abilities. At age six, some students are reading while others still have difficulty with phonemic awareness.

An alarming conclusion from current research states "children who get off to a significantly slow start in reading during first grade do not generally catch up with their peers (Morris, 1992). The likelihood that a student who is a poor reader in grade 1 will remain a poor reader in grade 4 for example, is quite high, above 80%; ultimately, few poor readers in the intermediate grades possess good decoding or word identification skills (Pearson, 1993).

For these reasons, primary teachers must be aware of the challenge and gain the knowledge needed to be successful in providing their students with experiences that help them develop into strong readers. It is of utmost importance that beginning reading instruction be successful, yet how this success can best be achieved is one of the most hotly debated issues in education (Stein, 1993).



CHAPTER 2

PROBLEM DOCUMENTATION

Problem Evidence

In order to document the extent to which students lack word recognition in the beginning of first grade, three methods of data collection were used at the beginning of the school year. These methods included a student survey of phonemic awareness (Appendix A), The Early Reading Screening Indicator (ERSI) (Appendix B), and Curriculum Based Measurement (CBM).

Student Survey

A nine item survey (Stanovich, 1994) was used to measure different components for phonemic awareness. Students were questioned individually assessing the following categories: phoneme deletion, word to word matching, blending, sound isolation, phoneme segmentation, phoneme counting, deleted phoneme, odd word out and sound to word matching.

Each task in the survey required a response relating to a student's knowledge of phonemic awareness. There were 9 questions each sampling one aspect of phonemic awareness. Question 1 shows students' ability to use phoneme deletion. This skill requires the student to take away a sound from a word and respond with the word made from the sounds remaining. The skill of word to word matching is the ability to compare the sounds in words by explaining if the beginning sounds are the same or different. This was displayed in question 2. In question 3, students were asked to put isolated sounds together verbally which is defined as blending. Question 4 represents initial sound isolation. A sound isolation sample was taken in question 5, which displays students' ability to identify initial and final sounds. Question 6 was used to



discover the students' ability to successfully count the number of sounds in a word. This appropriately is named phoneme counting. The task of deleting a phoneme was represented in question 7. This skill is similar to the skill described in question 1. The phonemic awareness skill of odd word out is defined as finding the word that starts with a different sound. This task was represented in question 8. The final skill that was identified in question 9 is called sound to word matching. This question asks students to answer whether an isolated sound is found in a given word.

Results of Phonemic Awareness Student Survey 100 Series 1 90 80 70 60 С 50 o 40 30 20 р 10 n 3 Question

Figure 1

Skills Assessed by Questions

- 1. Phoneme Deletion
- 2. Word Matching
- 3. Blending
- 4. Initial Sound Isolation
- 5. Sound Isolation
- 6. Phoneme Counting
- 7. Deleted Phoneme
- 8. Odd Word Out
- 9. Sound to Word Matching



7

The survey provided information pertaining to the phonemic awareness of the 45 students questioned. Figure 1 shows the results of this survey. The task with the highest percentage of success was question 4 which represents sound isolation. When asked to identify the first sound in a word, 93% of the students asked were successful. In reading development, sound isolation of the initial sound is one of the first skills in which students achieve mastery. The task with the least success was found in question 5 which related to phoneme segmentation. Only 28% of students asked were able to separate all the sounds found in the given word. Before students begin learning to read they have no reason to segment words into phonemes so it is not surprising that only about a quarter of the students were able to do so. The results of the survey were developmentally appropriate for beginning first graders. It is typical for emergent readers to write or identify initial and final sounds with an occasional middle sound represented. As the reader develops and discovers patterns and letter sound relationships he will become more successful when segmenting words into phonemes.

Early Reading Screening Indicator

The Early Reading Screening Inventory (ERSI) was used to identify students who will most likely experience difficulty in learning to read in a regular first grade classroom (Morris, 1992). The teacher researchers focused attention on beginning readers' print- related word knowledge. Specific test subsections were used, including alphabet knowledge, concept of word in text, and word recognition. These tasks are crucial components in learning how to read.

Since the basis of our writing system is the alphabet, the students were asked to produce and recognize upper and lower case letters in random order. The students needed to recognize and produce 100% of the alphabet in order to be successful with



the task.

The concept of word in text is another important aspect. Students needed to read words on the page and point to the individual words as they read. Mastery of this skill indicates that students are able to attend to the sounds within words and develop a one to one correspondence between spoken and written words. Although the majority of children entering the first grade have minimal word recognition skills, this is an area that needed to be included in the study since it is a building block in terms of creating a good sight word vocabulary. Next, two word sets consisting of 10 words each were administered to the children to determine their word recognition ability: decodable and sight words. Decodable words are those that can be phonetically "sounded out" (consonant-vowel-consonant). Sight words, on the other hand, are high frequency words used most in controlled vocabulary readers. The students needed to recognize all of the decodable and sight words to be counted as successful.

Table 1 displays the combined scores from the students in the three first grade classrooms in the areas of concept of word, identification of upper and lower case letters, and sight and decodable word recognition. The results of the initial pretest of the ERSI given to the students indicate that while concept of word and recognition of capital letters are fairly strong shown by scores of 75% and 60% respectively, recognition of lower case letters by students was only 28%. Students successful with sight word identification was 34%, and 26% of students were successful with decodable words.



Results in Percentage of The Early Reading Screening Instrument

<u>Tasks</u>	Percent of Students Successful with Task
concept of word	75%
recognition of capital letters	60%
recognition of lowercase letters	28%
sight word recognition	34%
decodable word recognition	26%
alphabet production	49%
	n=45

Table 1

The data gathered from the Early Reading Screening Instrument was not surprising considering the age group of the students tested. The most important skills needed in beginning reading were the first listed in Table 1, concept of word, recognition of capital and lowercase letters, and word recognition. When a student enters first grade his ability to differentiate between a word and a letter should be strong. It is also important for students to be able to identify words on a page. The majority of students when asked to point to individual words in a given sentence were successful. Yet, 25% of the students were unable to match one spoken word to a written word on paper. Although these students have the concept of "word," they clearly are lacking strategies for identifying which word is which. Word recognition is an extremely important skill that children need before they are able to read. This is an extremely important skill that children need before they will be ready to grasp the concept of reading.

A child ready to begin reading should also be familiar with both capital and lowercase letters. It was disappointing to read the results of the recognition and



production of upper and lowercase letters. First grade students should have the ability to recognize all of their capital and lowercase letters. There was a surprising percentage of students tested, 40%, who were unable to recognize all their capital letters. An even larger amount, 72%, were unable to successfully recognize their lowercase letters. This was a very disturbing result, but a helpful tool, to assist the teacher researchers as to where to start building the blocks toward successful readers.

When examining the sight word and decodable word scores, the results were more positive than expected. With the low level of skills previously discussed, it was surprising to see even a low percentage, 26%, of students decoding and recognizing all of the 2 groups of 10 words given. A larger percentage of students 34%, were successful when reading sight words. This could relate to extensive exposure to books and familiar words. The small percentage of students who were able to decode the ten words successfully 26%, was also similar to the percentage of students who recognized all their lowercase letters, 28%.

Curriculum Based Measurement

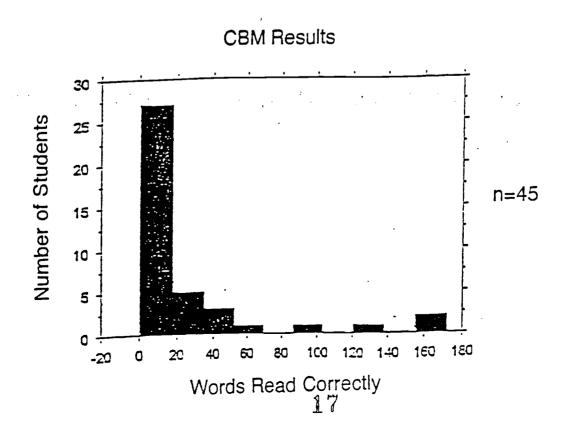
The first grade students were administered the CBM to assess their reading fluency and word recognition. The teacher researchers chose three reading passages for the grade level from the district's reading curriculum. Students were given one minute to read each passage. The number of words read accurately in one minute was recorded for each passage. This is expressed as words read correctly per minute (WRC), or oral reading fluency (ORF). Each student was given three scores and then the scores were averaged to give one final score. Within the district, this test is administered in the fall, winter, and spring with the same level of reading passages. In the fall, the CBM scores help teachers to set instructional goals and objectives for their students. In the beginning of first grade, a typical student is able to recognize a



few random words but is not reading fluently with understanding of content. When comparing the fall to winter results, the teacher researchers were able to measure if learning and fluency was being developed at an acceptable rate. Fluency is an important skill to measure because it is considered a mark of a skilled reader. In general, less fluent readers have poorer comprehension (Hasbrouck, 1992).

When reviewing the fall results of the CBM, it seems that the teacher-researchers had typical results within their classrooms. The majority of students were unable to recognize any words. Some students recognized a few words within the passage but not enough words to assist them in comprehending the passage. There were a few readers at the opposite end of the spectrum who were reading at a significantly higher fluency rate than their peers. Figure 2 represents the teacher researchers' findings:

Figure 2





Probable Local Causes

The students in the study come from affluent families and generally have well educated parents. They have been read with and exposed to literature from an early age. Most students have participated in rich language experiences within the home. The majority of students have participated in preschool classes before entering kindergarten. The kindergarten program in the district has a social-developmental approach while integrating age-appropriate academics. Even though, the researchers found some causes locally that contribute to poor word recognition in first grade.

The most pivotal cause is a common, developmental philosophy with teachers in the district that first grade is the year in which the highest percentage of academic growth naturally occurs. Therefore, children unable to master reading readiness skills are still viewed as developing normally. The problem associated with this perception is that in kindergarten there is a strong emphasis placed on socialization and not enough on reading readiness, which would be developmentally appropriate for the majority of kindergartners. Another cause for poor word recognition is the lack of a district-wide consensus of best reading practices. Teachers in the district follow the given curriculum, but may choose the practices they believe best to achieve the objectives. Due to the lack of consistency in the way educators teach the given curriculum, the objectives may not always be met. Also, the primary grades lack formal assessment tools, which in turn, affect accountability of the various practices.

Probable Causes Found in the Literature

There are many probable causes that lead to students having a lack of word recognition at the beginning of first grade. Although, an important point to consider is that this condition is not necessarily caused by something that has gone wrong, but is typical because of the child's developmental stage. The teacher researchers would



like to see the children more successful through their developmental growth in this stage. The probable causes can be organized into four general areas: insufficient reading readiness and lack of phonemic awareness, lack of word recognition strategies, a poor sight word vocabulary, and inadequate parent involvement.

Inadequate Reading Readiness and a Lack of Phonemic Awareness

In the beginning of the year, the typical first grade classroom is comprised of children who have had many different experiences with language and have different levels of skills. Miller (1988) states if immature children or slow-learning children are presented with a formal reading program before they are ready, they are likely to fail in it almost as soon as they begin. Experts assert that low-readiness children require direct systematic, and intensive instruction in phonemic awareness (Chapman, 1996). Educators must ensure reading readiness for beginning readers.

Phonemic awareness is the understanding that speech is composed of individual sounds (Snider, 1995). It includes the ability to break spoken words into their smallest sound units (phonemes) and to represent these sounds with print symbols (Chapman, 1996). It is demonstrated by a variety of skills that include generating rhyming words, segmenting words into syllables and into discrete sounds, and categorizing groups of words based on a similarity of phonemic segments.

There is a growing consensus that phonemic awareness bears an important relationship to achievement in reading. Currently, there is debate as to whether 1st-grade children acquire phonemic awareness "naturally" through interactions with print or whether it must be taught; and if some teaching is appropriate, then should phonics be taught as a separate subject, or can it be informally taught as occasions crop up in context? Many believe that instruction in phonemic awareness improves reading skills. Furthermore, students with reading problems seem to lack phonemic awareness.



Direct teaching of phonemic awareness has increased reading achievement among preschoolers, kindergarten and 1st grade children, low-readiness first graders, and students with learning disabilities. This suggests that instruction in phonemic awareness is beneficial to all children (Snider, 1995).

Word Recognition Strategies

The word recognition strategies that were dominantly found in educational research included phonics patterns, sound symbol relationships, context and picture clues. According to Jeanne Chall, in her classic book Learning to Read: The Great Debate (1967) programs that included phonics as one component were superior to those that did not. For beginning readers, phonics is taught using familiar word patterns called "word families". These patterns consist of a vowel consonant combination and different words can be made or read by noticing a change in the beginning sound. Understanding these patterns allows students to sound out longer words containing the same vowel consonant patterns. Some examples of "word families" are as follows: at, cat, fat, that, mat and it, pit, kit, wit, sit.

Sound symbol relationships is another principle that can be addressed when teaching word recognition strategies. Many teachers present sounds individually yet research has shown that when sounds and symbols are presented in a meaningful context they are more easily remembered. Teaching sounds in the context of literature keeps students interested and motivated. Students can also practice sounds and symbols by using inventive spelling to sound out the production of words. Reading their own creation by using the sounds written helps students practice the concept of sounding out words to decode.

Word recognition strategies such as context clues and picture clues are also helpful to emergent readers. These clues monitor word recognition. They assist a



student trying to predict an unknown word by providing answers to the questions "What is the picture telling me?" and "Would the word I am thinking of make sense in this story?" Context and picture clues help students confirm words more than identify them. They help students eliminate possibilities but they do not help them decode a word. Many poor readers rely too heavily on these clues because they lack decoding skills. Context and picture clues are tools, yet they cannot be the only skills applied when attempting to recognize unknown words.

Word recognition strategies allow the reader to attack unknown words quickly and efficiently. Children need to be taught specific word recognition strategies that become automatic and effortless. It is common knowledge that reading problems are rarely caused by a single factor, but rather a combination of factors. Reading teachers need to be aware of various strategies and how to best utilize them for each student. Research shows that children learn in a variety of ways. Therefore, giving children different word recognition strategies will allow them to progress at an appropriate rate.

Poor Sight Word Vocabulary

Sight word vocabulary is very important in all stages of reading. Research conducted by Goswami and Bryant (1990) suggests that once children have some words they can read and spell they use these known words to figure out unknown words. This is termed word recognition by analogy. Later, extensive and automatic word knowledge frees fluent readers to focus on the meaning of what they read, rather than figuring out or guessing at unfamiliar words.

Beginning readers enjoy predictable books they can "read" with familiarity.

They joyfully "read" through the book without really paying attention to the text.

Attention is important if they are to learn the words. A number of studies offer evidence that children learn words faster and more completely when words are studied in



isolation (Johnston, 1998).

Inadequate Parent Involvement

There has been an abundance of research in the past few years about the importance of parent involvement in education. Most studies have found evidence that student achievement is enhanced by parental involvement (Henderson, 1987; Ost, 1988). The home-school connection plays a vital role in supporting literacy. When parents play a bigger part in their involvement with school, they will begin to view themselves as instrumental in helping to educate their child.

Although most children do not enter kindergarten able to read in the conventional sense of the word, preschool and kindergarten children with strong language and emergent literacy skills show a consistent advantage in reading, writing, and academic achievement throughout the school years (Barnhart, 1991; Stanovich, 1986). Children can grow and benefit from a connection between the parent and the school. Parents help to provide the continuity that children need to feel successful as they progress through the education system.

Reading begins in the home. To a greater or lesser degree, depending on the home, children acquire knowledge before coming to school that lays the foundation for reading (Strickland, 1990). Many times, though, inadequate prior experiences are often a concern in early literacy. There is concern about the inadequate preliteracy skills some children have when they start school. It is important to remember literacy development can take place in all types of settings if there is parental involvement. Daily literate behaviors that children are exposed to are crucial in the development of reading and writing. Sometimes there are barriers that need to be considered in order to attain the connection between home and school. Parents may have substantial demands placed upon them in order to meet the needs of their family, so time may be



a factor. Another barrier in reaching the goal of parent involvement is that that educators may simply lack the training to work effectively with families.

This is an area of great importance that needs our attention. In order for children to feel and be successful in reading, parents and educators must work as a team. According to the National Center for Educational Statistics Reading Report Card for the Nation and the States (1994), the support for literacy development that students experience at home may be at least as important as their instructional experiences in school.

In summary, probable causes were observed locally and many were mentioned in the literature. Some of the causes include teaching philosophies, stages in developmental growth, and lack of appropriate and efficient strategies. Parental Involvement also plays a crucial role in the development of beginning readers. In as much as the causes have been identified, the solutions can be examined.



CHAPTER 3

THE SOLUTION STRATEGY

Literature Review

How to best teach children to read has long been debated. Adopting a balanced approach, one that includes direct, explicit instruction as well as extensive opportunities for authentic reading and writing, has been advocated by many reading educators for decades (Adams, 1990; Chall, 1967). Learning to read is based on complex, cognitive, emotional, social, and instructional factors. The purpose of reading is to construct meaning from print. At the heart of being able to construct meaning is the ability to recognize words automatically. This is why word recognition is so important.

Teaching Reading Readiness and Phonemic Awareness

At the beginning of school in a typical 1st grade classroom, the students have a wide range of abilities as a result of the developmental process and different experiences from home. Studies have shown over the past 25 years that the acquisition of phonemic awareness is developmental and certain skills are acquired earlier that others (Majsterek, 1995). Some students enter first grade with strong phonemic awareness and reading readiness skills, yet others need to develop them in order to become successful readers. There is a growing consensus that phonemic awareness bears an important relationship to achievement in reading and instruction in phonemic awareness improves reading skills (Snider, 1995).

According to the International Reading Association's position statement there is no single definition of phonemic awareness. The term has gained popularity over the past decade as researchers have attempted to study early literacy development and



reading disability. Phonemic awareness is typically described as an insight about oral language and in particular the segmentation of sounds that are used in speech communication. Phonemic awareness is characterized in terms of the facility of the language learner to manipulate the sounds of oral speech. A child who possesses phonemic awareness can segment sounds in words (for example, pronounce just the first sound heard in the word top) and blend strings of isolated sounds together to form recognizable word forms. Often, the term phonemic awareness is used interchangeably with the term phonological awareness. To be precise, phonemic awareness refers to an understanding about the smallest units of sound that make up the speech stream: phonemes. Phonological awareness encompasses larger units of sound as well, such as syllables, onsets and rimes. The International Reading Association uses the term phonemic awareness throughout their position statement because much of the theoretical and empirical literature specifically focuses on phonemes. They also chose to use the term because of its more common use in the professional literature and in professional discussions. Therefore, the teacher researchers will use the term phonemic awareness in this document.

It is also important to note the difference between phonemic awareness and phonics. First and foremost, phonemic awareness is not just another word for phonics. Phonemic awareness is an understanding about spoken language. Children who are phonemically aware can tell you all the sounds in the spoken word *dog*. They can tell you that if you take the last sound off *cart*, you would have *car*. Phonics, on the other hand, is knowing the relationship between specific printed letters (including combinations of letters) and specific, spoken sounds. You are asking children to show their phonics knowledge when you ask them which letter makes the first sound in *bat* or *dog*, or the last sound in *car* or *cart*. The phonemic awareness tasks that have predicted success in reading are tasks that have students attend to spoken language,



not tasks that asked students to name letters of tell which letters made which sounds. (IRA, 1998) In fact, if phonemic awareness just meant knowledge of letter-sound relationships, there would have been no need to coin a new term for it.

There are theoretical and practical implications in the research regarding the instruction of phonemic awareness. Theorists interested in determining the casual contribution of phonemic awareness to learning to read have conducted experimental studies in which some students are explicitly taught phonemic awareness and some are not. Many of the early studies in this genre focused on treatments that emphasize oral language work only. The findings from these studies suggest that phonemic awareness can be taught successfully (IRA, 1998).

More recently, there have been studies of phonemic awareness instruction that combine and contrast purely oral language approaches to approaches that include interaction with print during instruction. These studies suggest that programs that encourage interaction with print through read-alouds, shared reading, and invented spelling yield as much growth in phonemic awareness abilities as programs that only focus on oral language teaching. These studies also suggest that the greatest impact on phonemic awareness is achieved when there is interaction with print and explicit attention to phonemic awareness abilities. In other words, interaction with print combined with explicit attention to sound structure in spoken words is the best vehicle toward growth (IRA, 1998).

Along with phonemic awareness, basic print awareness, word awareness, and letter recognition are all capacities that teachers should seek to develop in kindergarten and preschool - well before first grade. Collectively, the research suggests that if teachers could do so universally, they would enormously reduce the rate of primary school failures (Adams, 1990). Some ways in which to promote this knowledge is by practicing a letter a day at the beginning of first grade for a review. A



letter is presented and modeled by its corresponding sound with pictures, words, puppets and manipulative toys. Skillful readers of English thoroughly process the individual letters of words in their texts. The impressive ease and speed with which they do so is owed to the fact that they have learned, at an automatic level, a great deal about the sequences of letters they are likely to see. In essence, because of their vast experience in looking at English words, skillful readers do not recognize the letters of a word independently of one another (Adams, 1990).

After students have mastered a few letter sound correspondences, a review is important in order to introduce new sounds in the context of literature. When reading a big book with students, students are asked to "point to the word that starts with the letter _____. " The sounds in the word would be modeled then blended together to model the making of a word (Kameenui, 1996). Through the reading of big books, children can be engaged not just in listening to the language of books but also in the collective exploration of their visual and thematic composition. In reading a big book aloud to children, the teacher needs to point to each word as it is read. This serves at once to illustrate that text proceeds from top to bottom and left to right and to introduce the status of printed words (Adams, 1990).

In order for students to be ready to read, a solid foundation of print awareness must be set as the base. Acquisition of reading skills depends in part on the child's conscious awareness of the phonological structure of speech. It depends equally on conscious awareness of the nature of print. No matter the child's level of phonemic awareness, to make use of it she or he must learn the visual identities of the individual letters. No matter the child's sureness with individual letters or their sounds, such knowledge can only be productive only given an awareness that words consist of strings of letters and print of strings of words (Adams, 1990). Children enter school with varying backgrounds and experiences. They are exposed to environmental print in the



community since print seems to be everywhere once you are aware of it. Many have been read to regularly, yet others have not had these opportunities. According to Juell (1991), students must pass through a predictable set of stages in the word identification processes in order for these children to be successful readers. The young reader progresses through three stages. In the *selective -clue stage*, the child relies on almost random features of words (length, letter features, smudges, page location) to identify words. In the *spelling-sound stage*, a kind of "gluing to print" phase, the child gains knowledge of the spelling sound information that underlies written language and uses it to gain lexical access. In the *automatic* stage, the reader who formally "sounded out" a word may well recognize it on the basis of its "orthographic" features alone (Pearson, 1993).

<u>Developing Word Recognition Strategies</u>

Word Recognition isn't just about learning words. It's about learning processes and strategies for examining and thinking about words as children read and write. To read and write words appropriately and fluently and to appreciate fully how words work in context, instruction must balance authentic reading and writing with purposeful word recognition strategies. Students are not just taught words- they are taught processes and strategies for examining and thinking about the words they read and write. Think about the child who puts their finger under a word and asks, "Teacher, what's this word?" Indirectly, what they are saying is, "I don't know what to do here except ask for help." Word recognition strategies provide options for the child to utilize. Teaching word recognition strategies to all readers, no matter what level reader they may be, empowers them. It builds confidence, constructing an independent reader who is able to build a self-improving system of problem solving so the reader learns something new every time he engages text.



One way to develop word recognition strategies is to teach phonics. Phonics refers to a system of teaching reading that builds on the alphabetic principle, a system of which a central component is the teaching of correspondences between letters or groups of letters and their pronunciations (Adams, 1990). Children get a better start in reading if they are taught phonics. Learning phonics helps them understand the relationship between letters and sounds and helps to "break the code" that links the words they hear with the words they see in print. Identifying words quickly and accurately is one of the cornerstones of skilled reading and phonics improves the ability of children to both identify words and to sound out new ones. In her now classic book, Learning to Read, Jeanne Chall concluded on the basis of evidence available at the time, that programs that included phonics as one component were superior to those that did not. More recently, there has been an abundance of research supporting this position. Perhaps the most influential arguments for teaching phonics are based on studies comparing the relative effectiveness of different approaches to beginning reading. Collectively these studies suggest, with impressive consistency, that programs including systematic instruction on letter-to-sound correspondences lead to higher achievement in both word recognition and spelling, at least in the early grades and especially for slower or economically disadvantaged students (Adams, 1990). We can no longer ignore the compelling data linking systematic, direct instruction in word identification, particularly phonics, to later success in reading.

Research has shown phonics instruction is necessary and the issue is no longer, as it was several decades ago, whether children should be taught phonics. The issues now are specific ones of just how it should be done (Anderson, et al., 1985) Phonics can be taught directly or indirectly and that is what the phonics debate is centered around currently. According to Burns (1999), direct teaching is explicit and systematic instruction of the sound-letter correspondences and of spelling patterns



using decontextualized, direct instructional strategies. Direct phonics instruction is based on the assumption that knowing how to learn may not come naturally to all students, especially to beginning and low-ability learners. Indirect teaching occurs during shared or guided reading or during writing experiences as the need occurs. A combined approach uses explicit instruction drawing the content for the lesson from literature. Because phonics is a reading tool, it is best taught in the context of reading instruction, not as a separate subject to be mastered. However it is necessary to be direct, intentional, and systematic. Research insists that children who are taught systematic phonics did significantly better with word recognition, spelling, vocabulary and reading comprehension at least through the third grade (Chall, 1989). Systematic phonics can be defined as teaching sound symbol relationships centrally and explicitly. In addition, Chall found that systematic instruction and phonics as compared to teaching sound-letter correspondence as the need arose, resulted in significantly better word recognition.

Good phonics strategies include teaching children the sounds of letters in isolation and it words, and how to blend the sounds together. Phonics should be taught early but not over-used. If phonics instruction extends for too many years, it can defeat the spirit and excitement of learning to read. Phonics helps children pronounce words approximately, a skill they can learn by the end of second grade. In the meantime children can put their phonics skills to work by reading good stories and poems.

Another activity called Making Words developed by Patricia Cunningham is an active, hands-on, manipulative approach in which students develop letter-sound relationships and learn how to look for patterns in words. Making Words is an activity in which children are individually given some letters and use the letters to make words. In the beginning children are only given one vowel letter, but a different one in each



lesson. The vowel letter is a different color and the children know they need to use it to make every word. The emphasis is on how words change by adding different letters and the importance of where letters occur in words. Later, two or more vowels may be added. This changes the emphasis to contrast the sound of the different vowels by the order in which the teacher directs the children to make the words. For instance, after the children make the word *ball*, the children are directed to change the vowel to make the word *bell*. After making the words children help the teacher sort the words by beginning letters, spelling patterns, vowel sounds and endings. During the fifteen-minute activity, children make approximately fifteen words, beginning with two-letter words and continuing with three-, four-, five-letter and bigger words until the final word is made. The final word always includes all the letters they have that day, and children are usually very excited about making the word that can be created from all these letters. They also learn that changing just one letter or even just the sequence of the letters changes the whole word (Cunningham & Cunningham, 1992).

Making Words is a multilevel, developmental activity because within one instructional format there are endless possibilities for discovering how our alphabetic system works. It is a quick, manipulative activity that actively involves each child. Since the lessons begins with short, easy words and end with a big word using all the letters, even the slowest learner is provided with practice and there is a challenge for everyone. Children who lack phonemic awareness seem to develop that awareness as they listen for the sounds in words in order to make them. Children who have phonemic awareness learn letter-sound correspondences and spelling patterns. Most importantly, children learn that there are patterns to be found in the way words are pronounced and spelled. The emphasis on this activity is on how words change as different letters are added and on helping children begin to understand the importance of where letters occur in the words. Children who lack phonemic awareness and are



not quite "ready to read" seem to develop that awareness as they listen for the sounds in words in order to make them (Cunningham and Hall, 1994). The teacher can also manipulate the word list to connect with the weekly theme or literature activities.

When students are given the opportunity to write and reread thoughts expressed on paper, a bridge between writing and reading is built. Stretching words out orally "like a rubber band", writing the sounds heard, and reading what was written gives meaning and purpose to sounds (Calkins 1994). Developmental or inventive spelling is a writing and therefore reading strategy in which a child attempts to represent on paper the initial sound, middle sounds, and final sound he recognizes. This knowledge, in turn, is applied to exploring new words students encounter in reading (Bear & Templeton, 1998). The evidence that invented spelling activities simultaneously develops phonemic awareness and promotes understanding of the alphabetic principle is extremely promising, especially in view of the difficulty with which children are found to acquire these insights through other methods of teaching. Exercise in writing and invented spelling may significantly enhance children's attitudinal and linguistic readiness for reading. As such, it may invaluably complement instruction in reading (Adams, 1990).

Word sorts are a particularly powerful means of exploring words. In word sorts, students compare and contrast words, thinking explicitly about how they are alike or different. Encouraging this type of thinking also allows students to show one another what patterns they see among the words they are studying. As in all learning, there is a social component to learning about spelling. Through this type of active work with words, students make generalizations about words and related patterns that can then be applied to the reading and spelling of unknown words in actual reading and writing tasks (Barnes, 1989).

Spelling pattern and word family instruction has a long history in American



reading instruction. Research shows weekly instruction of word families implemented in a direct and systematic fashion increases word recognition. Word families are words with the same rime and differing onsets. Onsets (consonants and consonant clusters) and rimes (vowels followed by consonants in a syllable) are important concepts that beginning readers strategically use. Research shows readers look for letter patterns rather than individual letters as they decode words (Allen, 1998). For example, it is easier for a child to segment sat into s-at rather than sa-t or s-a-t. The basic idea behind this strategy is that children can read an unknown word, such as splat, by knowing other similar and common words containing the same rime, such as cat and hat. Currently, research is converging from several areas which supports the longstanding practice of word family/phonogram/spelling pattern instruction. The research of Treiman (1985) suggests that both children and adults find if much easier to divide syllables into their onsets (all letters before vowel) and rimes (vowel and what follows) than into other units. Another area of research supporting spelling patterns is the research conducted on decoding by analogy (Goswami & Bryant, 1990). This research suggests that once children have some words they can read and spell they use these known words to figure out unknown words.

Brain research provides a different sort of support for word family instruction. Current theory suggests that the brain is a pattern detector, not a rule applier, and that decoding a word occurs when the brain recognizes a familiar spelling pattern or, if the pattern itself is not familiar, searches through its store of words with similar patterns (Adams, 1990). For example, if the word *knob* was unfamiliar, the, child who knew many words that began with *kn* would automatically relate the *kn* to the "n" sound. The initial *kn* is stored in the brain as a spelling pattern. If the child knew only a few *kn* words and hadn't read them often, the child wouldn't have kn as a known spelling pattern and would have to do a quick search for known words that begin with *kn*. If the



child found the words *know* and *knew* and then tried this same sounds on the unknown word *knob*, that child would have used the analogy strategy. Understanding that the brain is a pattern detector explains the popularity of reading instruction using word families and spelling patterns since, in one syllable words, the vowel and following letters is the pattern which is most helpful in decoding (Cunningham & Hall, 1994). Realizing the brain is a pattern detector also explains why all patterns don't need to be taught in order to be a successful reader. Children who know patterns exist and read a lot of material will discover more patterns.

Developing Sight Word Vocabulary

Sight words are words that are recognized instantaneously because they have been previously analyzed and encountered so many times. Sight words may be decodable or irregular in that they do not follow regular phonemic patterns. For example, the words *have, where and was* are hard to decode and are among the most frequently used words in print. Being able to recognize these words automatically allows a reader to devote attention to decoding phonetically regular words (e.g., *dog*) unfamiliar to them. In addition to being able to recognize the words, children learn to spell sight words so they can be easily incorporated into writing activities. Children can learn to recognize and spell sight words through various activities such as by chanting, clapping, or snapping fingers as the words are spelled out; cloze activities; and word bingo, word memory and other games (Allen, 1998).

Beginning readers may zip through predictable books with joyous familiarity without paying much attention to print. Attention is important if they are to learn words. A number of studies offer evidence that children learn sight words faster and more completely when those words are studied in isolation. Activities such as flash card drills help focus children's attention on the printed form of words in isolation (Johnston,



1998). Good readers read words quickly and effortlessly. They have automatic word recognition skills. Flash cards can foster automaticity by helping children to read words accurately and quickly (Nicholson, 1998). Once children can recognize words and read fluently, the are able to engage in the pure enjoyment of reading. Tan and Nicholson (1997) have found that a short session of flash card training (say, 20 minutes) set up a below-average reader for a positive reading experience.

Another strategy that has been found to be particularly effective for teaching the high frequency words is Words on the Wall (Cunningham, Moore, Cunningham, and Moore, 1989). Four to five words are selected each week to add to a wall or bulletin board in the room. Words are included that students will need often in their reading and writing and that are often confused with other words. First-grade teachers may select high frequency words taught in the basal.

Beginning readers rely heavily upon their sight word vocabulary. Once children have some words they can read and spell they use these known words to help them figure out unknown words. A reader confronting the word *could* for the first time might access the known words *would* and *should* and then use these words to generate a probable pronunciation for *could* (Goswami & Bryant, 1990). Automatic word knowledge also frees more fluent readers to focus on the meaning of what they read rather than the decoding of unfamiliar words.

Parent Involvement

A challenge for improving the home-school connection is to involve families in meaningful reading activities that support the curriculum being taught in the classroom. In fact, communication is the key to building better support and understanding for emergent literacy programs. Helping parents understand how children become readers and writers is one of the teacher's and the school



administrator's most important missions (Enz, 1995).

Many reading experiences begin in the home. The key to fostering this growth throughout the school years and beyond so that it leads to successful reading experiences is parent involvement. One way to guide this connection is involving parents by implementing a reading program between home and school. Sometimes it is difficult for parents to find the time to visit a library, but if furnished with a book every night, they would be more inclined to read it with their children. The Baggie Book program encourages this connection by having children bring home books every evening to read with their parents. A sign out sheet is given to the parents and thoughts are communicated between the teacher and the parents regarding the level of the book or other comments and questions they may have. Family storybook reading plays a special role in young children's literacy development. Sharing books with young children has long been recognized as a crucial aid to their language and literacy development and as a socializing process within families (Strickland, 1990).

Another important way to strengthen the home-school connection is by encouraging parents to work with their children on spelling. Conventional, as well as inventive spelling guide children in becoming aware of letter-sound relationships. Sending home weekly spelling lists is a great way to reinforce what is being taught in the classroom and keeping parents informed of how the children are progressing. Research by Goswami and Bryant (1990) suggest that once children have some words which they can read and spell, they use these known words to figure out other unknown words.

Parents and educators working as a team can accomplish our most important goal, which is helping our young students feel successful and confident about their reading efforts.

In conclusion, word recognition skills can be attained and improved by many



methods. Reading readiness and phonemic awareness strategies are vitally important in the beginning stages of reading instruction. Phonemic awareness, basic print awareness, word awareness, and letter recognition are all capacities that teachers and parents should seek to develop well before first grade. Practice in writing and inventive spelling is an avenue in which to develop phonemic awareness, which in turn leads to strengthened word recognition. Word recognition can also be developed through the use of phonics strategies such as direct, systematic phonics instruction and hands-on letter-sound activities such as Making Words developed by Patricia Cunningham. Research shows that word family instruction also increases word recognition as well as developing a sight word vocabulary through word walls and flash cards. Parental involvement helps children learn more effectively. Therefore participation from parents enhances instruction.



Project Objectives and Processes

As a result of the implementation of word recognition strategies, during the period of September, 1998 to January, 1999, the targeted1st grade students will demonstrate an improvement in word recognition, as measured by the CBM (Curriculum-Based Measurement), ERSI (Early Reading Screening Inventory), and an informal survey.

Process Statements

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

- 1. Locating sufficient read-aloud and big books for teaching letter-sound correspondences.
- 2. Gathering various word family activities to enhance decoding skills.
- 3. Preparing a word wall display and word cards to post on the display.
- 4. Sending home weekly word wall spelling lists and phonics readers to encourage home involvement.
- 5. Resupplying class library with baggie books.



Project Action Plan

Week One~September 7

Gather baseline data

ERSI

CBM's

Phonological Awareness Survey

Week Two~September 14

Reading Readiness

sound and letter recognition -identify initial consonants

letter of the day - letters Aa-Ee

group reading of big book: Chicka Chicka Boom Boom by Bill Martin Jr.

Building a Sight Word Vocabulary

begin word wall with five high frequency words: the, you, me, of, and

kinesthetic tapping, clapping, and slapping of

"word wall" words

Learning Strategies

inventive spelling: Write own version of Brown Bear, Brown Bear,

Weekend News Reports: Students write about their weekend.

phonics within the context of literature: sounds of: ch, a,b,c,d,e

Week Three~September 21

Reading Readiness

sound and letter recognition: initial consonants/ final consonants

letter of the day Ff-Jj



reading big books to encourage "pointing skill":

I Like Me by Nancy Carlson

Building a Sight Word Vocabulary

word wall with five high frequency words: I, like, have, with, my high frequency flash card games: memory

Learning Strategies

inventive spelling-makes phonics meaningful: write <u>All About Me</u> Books phonics within the context of literature: initial /final consonants Aa-Jj

Encouraging Home Involvement

begin baggie books and flash card practice send I Like Me and All About Me home to read

Week Four~September 28

Reading Readiness

sound and letter recognition :initial/ middle/ final consonants

letter of the day : Kk-Oo

reading big books to encourage "pointing skill":

Soccer Game by Grace Maccarone

Building a Sight Word Vocabulary

word wall with five high frequency words: we, all, they, get, is

Learning Strategies

inventive spelling: Write about your favorite sport.

phonics within the context of literature

Encouraging Home Involvement

sent Soccer Game home to read

baggie books and flash card practice



Week Five~October 5

Reading Readiness

letter of the day: Pp-Uu

students given individual copies of Freight Train by Donald Crews

practice "pointing skill" in individual copy of literature

blends and digraphs: tr,gr,br,cr,dr,fr, bl, fl,cl, sl

Building a Sight Word Vocabulary

word wall with five high frequency words: this, by, in, big, next

word wall with color words: red, orange, yellow, green, blue, purple,

brown, black, white

Learning Strategies

inventive spelling-makes phonics meaningful: write a train book :

I Can inspired by The Little Engine That Could

phonics within the context of literature: sounds Aa-Uu

begin Making Words activities

Encouraging Home Involvement

baggie books and flash card practice

students take home individual copies of Freight Train

Week Six~October 12

Reading Readiness

students given individual copies of Ten Black Dots by Donald Crews

letter of the day: Vv-ZZ

blends and digraphs: review blends: tr,gr,br,cr,dr,fr, bl, fl,cl, sl

introduce digraphs: th,sh,ch,wh

Building a Sight Word Vocabulary



word wall with five high frequency words: what, or, day, for, are

Learning Strategies

inventive spelling: write class book:

What You Can Make With Black Dots

phonics within the context of literature: blends and digraphs

Encouraging Home Involvement

baggie books and flash card practice

students take home individual copies of Ten Black Dots by Donald Crews

Week Seven~October 19

Reading Readiness

group reading of big book: Bug in a Jug

students are given their own unillustrated xeroxed copy of Bug in a Jug

begin weekly word families: ap, at,

Building a Sight Word Vocabulary

word wall with five high frequency words: because, did, was, she, friend

Learning Strategies

inventive spelling: students write poems with rhyming words

phonics within the context of literature: finding final consonants or

clusters that make words rhyme

Encouraging Home Involvement

students take home their copy of Bug in the Jug with their own

illustrations

baggie books and flash card practice



Week Eight~October 26

Reading Readiness

students are given individual copies of <u>I Am An Apple</u> by Jean Marzollo word families: all, an, ag

Building a Sight Word Vocabulary

word wall with five high frequency words: live, have, all, come, ready

Learning Strategies

inventive spelling: students write apple math stories

phonics within the context of literature: review blends/digraphs

short vowel words

Encouraging Home Involvement
students take home individual copy of I Am An Apple
baggie books and flash card practice

Week Nine~November 2

Reading Readiness

students are given an individual copies of spider poems:

Little Miss Muffet

Itsy Bitsy Spider

Down in the Meadow

word families: et, ed, en

Building a Sight Word Vocabulary

word wall with ten high frequency words: her, away,down, eat, said, mother,again, came, he, up

Learning Strategies

inventive spelling: students research a kind of spider and write a report



phonics within the context of literature : short a and short e word families

Encouraging Home Involvement

students take home copies of spider poems they illustrated baggie books and flash card practice

Week Ten~November 9

Reading Readiness

students read individual copies of <u>I Love Spiders</u> by John Parker word families : review short a and short e families

"ing" word family

Building a Sight Word Vocabulary

word wall with ten high frequency words: little, old, fast, funny, too, love, think, pretty, jump, look,

Learning Strategies

inventive spelling: Weekend News Reports, Spider Reports phonics within the context of literature: word families, blends, digraphs

Encouraging Home Involvement

baggie books and flash card practice students take home a copy of <u>I Love Spiders</u>

Week Eleven~November 16

Reading Readiness

students read individual copies of Pumpkin, Pumpkin by Jeanne

Titherington

word families: in, it, ip

Building a Sight Word Vocabulary



word wall with ten high frequency words:until, but ,boy, had , there, were under, sun, every, some

Learning Strategies

inventive spelling: students write their own pumpkin sequence book
phonics within the context of literature: blend / digraphs review
short vowel word family review

Encouraging Home Involvement

baggie books and flash card practice

students read copy of Pumpkin, Pumpkin

Week Twelve~November 30

Reading Readiness

students read individual copies of <u>Caps, Hats, Socks and Mittens</u>
by Louise Borden

word families: ap, ed, it, ock, ug

Building a Sight Word Vocabulary

word wall with ten high frequency words: look, make, boy,color,not, play, saw, girl, good, see

Learning Strategies

inventive spelling: students write about their favorite season phonics within the context of literature: short vowel words/ "silent e" rule

Encouraging Home Involvement

students read copy of <u>Caps</u>, <u>Hats</u>, <u>Socks and Mittens</u> baggie books and flash card practice



Week Thirteen~December 7

Reading Readiness

word families: ow, ot, op

Building a Sight Word Vocabulary

word wall with ten high frequency words: put, out, ride, run, go, stop, help, here, him, house

Learning Strategies

inventive spelling:students write "flip books"

describing their own winter wear

phonics within the context of literature: word families, rhyming words

Encouraging Home Involvement

baggie books and flash card practice

students read copy of Jacket I Wear in the Snow

Week Fourteen~December 14

Reading Readiness

students read individual copy of <u>A Snowy Day</u> by Ezra Jack Keats word families: ay, ame, ope,

Building a Sight Word Vocabulary

word wall with ten high frequency words: morning, once, over, cold, far, talk, find, that, very, from

Learning Strategies

inventive spelling: students compare and contrast themselves with main character

phonics within the context of literature: word endings: ed, er, est

Encouraging Home Involvement



baggie books and flash card practice students read copy of A Snowy Day

Week Fifteen~January 11

Reading Readiness

students read individual copies of Mama Do You Love Me?

word families: ike, ide, ime, ose, ook

Building a Sight Word Vocabulary

word wall with ten high frequency words: story, ran, round, soon, thank, flag, know, walk, why, many

Learning Strategies

inventive spelling: students write Alaska math story problems

phonics within the context of literature: /oo/, long vowel words, short

vowel words, blends, digraphs

Encouraging Home Involvement

baggie books and flash card practice

students read copy of Mama, Do You Love Me?

Week Sixteen~January 18

Gather post baseline data

ERSI

CBM's

Phonological Awareness Survey



Methods of Assessment

In order to assess the effects of the interventions, students were given an informal survey to evaluate growth in phonemic awareness categories such as phoneme deletion, word to word matching, blending, sound isolation, phoneme segmentation, phoneme counting, deleted phoneme, odd word out, and sound to word matching. Students participated in the Early Reading Screening Indicator. This assessment focused on students improvement in beginning readers print-related knowledge. The CBM or Curriculum Based Measurement demonstrated student growth in reading fluency and word recognition.



CHAPTER 4

PROJECT RESULTS

Historical Description of the Intervention

The ultimate objective of this project addressed the need to improve students' word recognition. The teacher researchers accomplished this through the implementation of various word recognition strategies. The targeted classrooms were comprised of 1st grade students.

Various activities were selected to improve students' word recognition. In order to accomplish the objective the teacher researchers focused on four major areas: reading readiness, building a sight word vocabulary, learning strategies, and encouraging home involvement. These objectives were taught in a fourteen week time-frame. The three teacher researchers devoted two hours per day to directly teaching word recognition strategies. It was evident after several weeks that no deviation from the action plan was necessary.

The teacher researchers' interest in such an objective arose from a desire to investigate new word recognition teaching strategies. Recommendations from professional literature were sought. The process began with the recognition of the need to improve word recognition as evidenced by a variety of data collected. The three assessments used were as follows: Curriculum Based Measurement (CBM) task assessing the reading fluency of the first grade students, a phonemic awareness survey (Appendix A), and ERSI (Appendix B), a print related word knowledge assessment focusing on alphabet knowledge, concept of word in text, phoneme awareness, and word recognition. After analyzing the collected data, it was decided what plan of action would follow. Students would develop greater word recognition skills through a balanced reading program including letter of the day, word families, a



word wall, inventive spelling, phonics within the context of literature, big books, and a home reading program.

Routine and consistency were essential parts of the teacher researchers' intervention. Many of the activities were initially introduced and then continued with variations throughout the 14 weeks. The following is an example of a lesson promoting reading readiness. The teacher researchers used the big book <u>I Like Me</u> by Nancy Carlson as a resource for group reading. Students sat on the floor in an area where they could clearly see the pages of the big book. The teacher researchers introduced the Big Book by calling attention to the colorful pictures and the words in the title of the story. Before the words were read on a page, the teacher researchers asked students to predict what the words might say by looking at the picture. The students enjoyed listening to the teacher researchers read page by page as they pointed to each written word. The teacher researchers helped students discover that the print on the page matched the picture. The reading lesson that followed was based on the same title, yet students were given their own copies of the book. Once again, students were encouraged to study the pictures. When students were ready to enjoy the story, they were encouraged to point to each word as they read it and/or heard it being read. These lessons were meant to promote the knowledge that one spoken word is equivalent to one written word. This is an important task in reading readiness.

Another essential piece in the puzzle of learning to read the English language is sight words. An example of a lesson in increasing sight word vocabulary includes activities using word walls in the teacher researchers' classrooms. Word walls in the teacher researchers' classrooms were posted in highly visible places in order to be available and practical to every student. Word wall lessons were daily mini-lessons which took approximately 15-20 minutes. The teacher-researcher chose five high frequency words during the first six weeks of the intervention and then increased the



number of words to ten. These words were found in the literature or Big Books being studied that particular week. One such group of chosen words related to the book Love Spiders by John Parker. The teacher researchers chose the words little, old, fast, funny, too, love, think, pretty, jump, and look. Not only are these words relevant to the children because they're found in the literature, they're also common sight words. Each day for 15 minutes the students were directed to say the word then chant each letter of the word in a "clap" then a "snap", then a "slap", and finally a "tap". Of course adjustments can be made pending the level of energy of the students that day and or the energy or headache level of the teacher researchers. Some other suggestions were to "wiggle" the letters, "stomp" the letters and even "blink" the letters. The weekly words were posted on the word wall in alphabetical order to be read and used by the students daily. Students could look at the word wall during the kinesthetic spelling activities and were encouraged to use the word wall when doing a writing activities.

Phonics within the context of literature and letter of the day were two strategies that the teacher researchers used in order to promote phonics in a meaningful and interesting way. In the beginning of the intervention, the teacher researchers reviewed the letters and sounds in the alphabet by celebrating one letter per day. Letters such as "Q" and "U" which are typically found together in words are celebrated on the same day. The particular letter chosen for the day was "celebrated" by looking for it around our print rich room and throughout the school when we went on "handwriting hunts". Students were given a clipboard and paper with "writing roads" or lines on it. They were asked to find lowercase and capitals of the letter and write the letter on their paper. Another way in which the letter and its sound were practiced was with a giant poster of the chosen letter. The poster was laminated and colorful. Students were told that they had three minutes to think of all the words that started with that sound. The teacher researcher started the timer and students raised their hands to share their



words. When the timer rang, the teacher researcher stoped writing and the students were asked to estimate how many words they thought were written on the poster. Finally, the students and teacher researcher counted the words and wrote the number on the poster. The class as a group "read" the words to which the teacher pointed. The teacher researchers also used literature to "celebrate" the letter of the day. When reading a big book together the teacher researcher would ask students to point to "the letter" or find a word that starts with the "b sound". Using phonics within the context of literature is a way that the teacher researchers made learning the sounds and word families interesting and meaningful. When reading the book The Jacket I Wear in the Snow, it was about time in the year that the first graders knew all of their letters and sounds and the teacher researchers were focusing on word families as the center of their phonics instruction. At this point in the year, the teacher researchers would use literature in the form of a big book to have students find words that rhymed with "snow" or find words that belong in the "-et" word family. Students loved reading the big books and finding the words and word endings that related to the sounds they were becoming familiar with throughout the day.

Inventive spelling was another learning strategy used daily in the classroom of the teacher researchers. This type of spelling process was taught to students to allow them to express their creativity in writing words they were unable to correctly spell. Students in the process practiced their letter-sound knowledge and found meaning in print. One such lesson used to teach this strategy was used every Monday morning in the classroom of the teacher researchers. The students knew of it as "Weekend News Reports." Every Monday for approximately 15 minutes the teacher researchers would model in front of the students by writing on chart paper. The topic being written about consisted of the events (or in some cases made-up events) which occurred in the teacher researchers' weekends. The teacher researchers would first print their names,



then print the month, day and year, and finally begin with a topic sentence expressing the enjoyment of her weekend. The topic sentence was known as an "open the door sentence." The teacher researchers would then write about specific events and details about each event. The "Weekend News" example was completed with a closing sentence restating her impression of the weekend. This was known as the "close the door sentence." Next, students were asked to write about what they did over the weekend. They were asked to close their eyes and think of their "open the door" sentence. In the beginning of the year the following sentence starter was presented to the students: "I had a -----weekend." When their thoughts were present in their minds they were asked to raise their hands. When called upon, students would whisper their topic sentence to the teacher researchers. This being the "ticket" back to their seats to get started writing about their events and details. When students had difficulty spelling a word, the teacher researchers encouraged them to "stretch it out like a rubber band", which is understood by six-year olds as saying the word very slowly and carefully to hear each sound. Another strategy used to help students hear and represent the sounds of a word is to "tap" each sound they hear on their fingers. For example, if the child was unsure how to spell the word weekend, he would tap his fingers to represent each sound he heard. Typically a child will tap six fingers (w...e..k...e..n...d....) while slowly saying the sounds in the word. This kinesthetic technique helped the students count how many sounds they heard in order to clearly represent the word they were trying to write.

The teacher researchers implemented a nightly reading program referred to as "Baggie Books" to encourage home involvement. This activity consisted of a classroom library of 50 books which concentrated on different phonetic skills. Each night the teacher researchers would send home one title per student in a Ziploc bag, hence the name "Baggie Book." Students were encouraged to read the book every night and



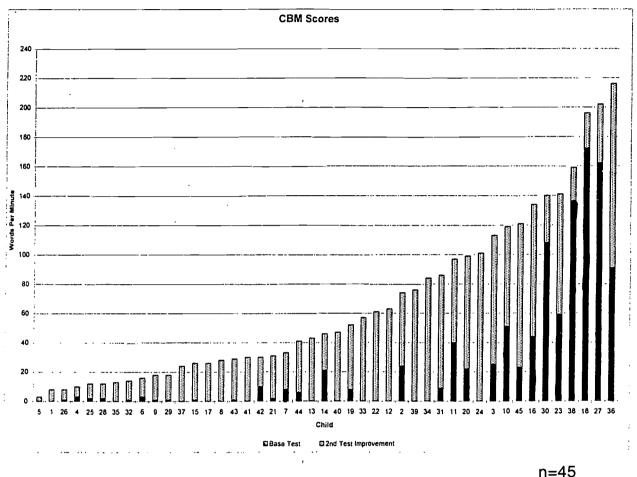
return the book when mastered to receive a new title. Some readers kept the book home more than one night to build confidence in rereading familiar words. Students put up a sticker on a chart for every night they read to chart their "Baggie Book" progress. With every book sent home the teacher researchers included a parent communication log which required the parents' signature acknowledging they read with their child and allowed room for comments providing constant communication between the parents and the teacher researchers. Occasionally, parents would respond with comments such as "Sam did very well sounding out words with blends" or "Julia had difficulty with the long vowel words in this book." Although the time spent reading at home was not strictly monitored, the teacher researchers suggested approximately 15 minutes nightly.

Presentation and Analysis of Results

Three forms of assessment were used to gather baseline data before the intervention. The three assessments used are as follows: Curriculum Based Measurement (CBM), a task assessing the reading fluency of the first grade students, a phonemic awareness survey (Appendix A), and the ERSI (Appendix B), a print related word knowledge assessment focusing on alphabet knowledge, concept of word in text, phoneme awareness, and word recognition. Following the intervention, the same forms of assessment were used to gather post intervention data.



Figure 3
Pretest and Post Test CBM Scores



Note: The numbers along the x axis only identify student numbers

The teacher researchers used the CBM test to assess the reading fluency of the 1st grade students in the fall and then after the intervention. The students were given three grade level reading passages to read as the teacher researchers recorded correct words read per minute. The average number of words read per minute was recorded for each student. When the base test was administered, more than half of the 45 students were reading twenty words per minute or less. After the intervention, only eleven students were reading twenty words per minute or less. The number of



students reading twenty to eighty words per minute increased from nine students to nineteen students after the intervention. Students reading 80 words and higher per minute on the base test numbered five yet when tested after the intervention the number of students increased to fifteen. The average number of words read per minute on the base test was 23 words. This average increased to 65 words read correctly per minute when students were retested after the intervention. This growth in fluency among the first graders was related to a variety of factors such as an increase in word recognition, exposure to sight words, and reading practice over four months both in school and at home. The most probable cause of an increase in fluency is linked to the variety of strategies students learned when approaching written text.

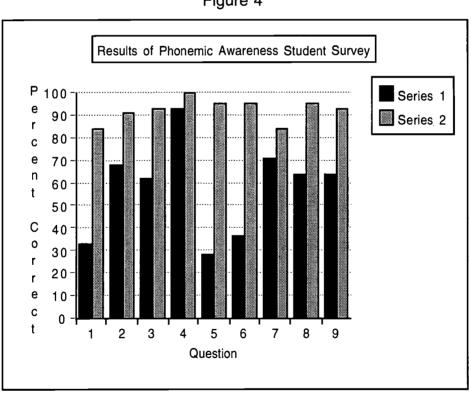


Figure 4

Skills Assessed by Questions

- 1. Phoneme Deletion
- 2. Word Matching
- 3. Blending
- 4. Initial Sound Isolation
- 5. Sound Isolation
- 6. Phoneme Counting
- 7. Deleted Phoneme
- 8. Odd Word Out
- 9. Sound to Word Matching



The intervention appears to have had a positive effect on all targeted areas represented in the phonological awareness survey. Phoneme deletion increased by 51 percent. This is more than double the original percentage of success. It seems that "hands-on" or kinesthetic activities practicing word families such as Making Words Lessons helped students develop this skill. Word Matching by recognizing words that start with the same sound was an area with a high percentage of success in the fall. The increase was only 23 percent yet it brought the percent correct into the 90 percent range. This may be attributed to the word wall weekly activities which categorize words by the beginning sound. Blending was a skill that noticeably increased by 31 percent. Writing using inventive spelling as well as making words activities were helpful in this skill area. Students were successful from the fall being able to recognize the initial sound in a word. The successful answers on the question regarding initial sound isolation increased by 7 percent. This was the only area in which all 45 students answered correctly. When asked to decide what sounds are in the word "hot" there was a substantial increase in the number of correct responses. Sound isolation increased by 67 percent. This was the largest area of growth. The success could be attributed to large amount of time students spent "stretching words out like a rubber band" to spell. Successful phoneme counting was a task that was increased by 58 percent. When asked the question in series 2, many students who had since become readers, were confused because the word "cake" contains a silent e. The students were only asked to count the sounds in the word. Many student counted the letters. The lowest percentage of success in series 2 was for the deleted phoneme task. This was not the lowest percentage of success in series 1 but only increased by 13 percent after the intervention. Odd word out or asking which word started with a different sound had an increase of 31 percent. This seemed to be a simple task yet many students needed the question repeated. The last question which dealt with sound to word



matching had an increase of 29 percent. The success rate in series 2 was surprising. Although the success measured in the 90 percent range, it seemed to be a skill that all of the students should have been able to master. Many students were confused by the directions given for the previous task which focused on the initial sounds rather than sounds found within the words.

Table 2

Results in Percentage of The Early Reading Screening Instrument

<u>Tasks</u>	Percent of Stude	ents Successful with Task
	Sept. 98	Jan. 99
concept of word	75%	100%
recognition of capital letters	60%	96%
recognition of lowercase letters	28%	98%
sight word recognition	34%	82%
decodable word recognition	26%	51%
alphabet production	49%	98%
		n=45

Table 2 indicates the growth made during the four month intervention. In the concept of word portion of the ERSI, the scores increased 25 percent. The September score of 75 percent seems to indicate that was a substantial number due to the plentiful big book reading experiences in kindergarten. Many reading activities in the classroom this year have also focused on attending more to matching the spoken words to written words as they are read. The students' recognition of capital letters also showed an improvement of 36 percent. The increase and success can be attributed to the modeling and writing experiences in the classroom each day. At this



point of the school year, most of the students should be able to be successful with the task of recognition of capital letters. However, it appears that some students confused the capital letter "I" for a lower case "I" as seen on this computer. The typical font the students are exposed to in class could have affected the recognition of some of the letters. It is important to note that in order for the students to be successful on the ERSI, every question in each section needed to be correct. If one letter was not recognized or written correctly, it would not be counted as successful. An astounding 70 percent increase in recognition of lower case letters was found to be attributed to the interventions implemented over this period. Making Words, word walls and writing via activities such as "weekend news reports" contributed to the growth shown. The students improved in their sight word recognition, showing a rise of 48 percent. This substantial jump is due to flash card drills and the word wall. Through the use of flash cards, children learned to recognize words automatically. Word walls aided by being a constant visual in the classroom to further strengthen these skills. Despite the interventions, the decodable word recognition score was not as substantial as the sight word recognition task with an improvement of only 25 percent. This could be attributed to the large amount of phonetic rules in existence. Alphabet production was the final task tested with an difference of 49 percent from September to January. The teacher researchers found some letter reversals, which could not result in a correct score.

The ERSI provides a quick but valid estimate of beginning readers print-related word knowledge. There are other factors to consider such as spoken language, concept of story, interest in books, desire to read, maturity, etc. that play an important role in learning to read. However, it is impossible to assess all these factors in an efficient manner.

Although many students showed visible growth there were some students who



didn't progress as much as the teacher researchers would have expected. There are several factors that can be attributed to the limited progress of these students such as second language, learning disabilities, inability to concentrate, immaturity, and developmental delays. The students with a second language typically had difficulty discriminating different sounds within words. They also seemed to lack the ability to conceptualize illustrations and use them as context clues. Students who have learning disabilities differ according to their specific problems yet, in general, many were unable to recognize patterns within words and apply previously learned reading strategies. Immature students and those with difficulties concentrating have low attention spans which causes them to miss valuable instruction and practice time. Students who are developmentally delayed lack the cognitive capacity for the complexities of reading the English language at his time.

Literature, writing and hands-on learning activities were essential elements in the teacher-researcher's intervention. There were many benefits from the print-rich learning environment that surfaced. Children were actively engaged in reading and writing activities on a daily basis. It was exciting to observe the children in meaningful activities that were purposeful to them. All students improved their word recognition skills yet at various rates.



Conclusions and Recommendation

Based on the presentation and analysis of the data collected, the teacher researchers saw marked growth in word recognition among the students at each site. Well planned, explicit, instructional times within the context of the existing curriculum were central to the success of this intervention. Some of the interventions included direct teaching of word families, Making Words, word walls, a baggie book program, and phonemic awareness activities.

Previously the teacher researchers' reading programs did not include all of these various activities in a systematic and regimented way. The teacher researchers became more aware of including activities from many different modalities in a methodical manner. Daily routine and repetition enabled students to automatically process and transfer learned skills. After introducing the children to these various activities, their word recognition improved drastically.

An increase in knowledge was exhibited through assessments, test scores, and surveys. The post test scores supported the original contention that students will have increased their word recognition. These scores showed that students' word recognition was higher after the intervention was implemented.

Most students quickly and efficiently recognized sight words which increased their fluency and allowed for greater comprehension. This occurred due to the fact that students with greater word recognition skills are able to concentrate on the meaning of the word rather than struggle to decode. The less frequently a student stops to attack an unknown word, the greater the understanding she has of the reading passage.

The phonemic awareness survey showed that the students now have the basic foundation for reading and writing. The kindergarten year, when letters and sounds are typically introduced appears to be the optimal time to implement explicit instruction in phonemic awareness. The teacher researchers conclude it's important that children



also have phonemic awareness opportunities prior to entering school to build a foundation for formal instruction. Continued phonemic awareness instruction in first grade ensures that students maintain skills to facilitate the development of the reading and writing process.

For educators desiring to improve word recognition, the teacher researchers recommend a balanced reading program using a variety of activities suited to different learning styles. These must be presented in a systematic way. For instance, when reviewing letter of the day the teacher researchers chose to present the letters and sounds in alphabetical order. However, after implementing the action research plan it was concluded that sound letter instruction should begin with the most dependable sound letter correspondences to the least. If letter of the day is begun in alphabetical order the only consistent letters in the first five are "B" and "D", therefore the children never form the generalization of one symbol equaling one sound.

The teacher researchers suggest focusing on four major areas to improve word recognition. These areas are reading readiness, building a sight word vocabulary, various learning strategies, and encouraging home involvement. Some examples of how the teacher researchers suggest to improve word recognition through reading readiness are letter of the day review, practicing the pointing skill using literature and phonics instruction (word families, blends, digraphs). Improving word recognition through developing a sight word vocabulary can be achieved by flash card games and drills and the implementation of a word wall. The teacher researchers found the word wall to be instrumental in the development of sight words and highly recommend it. Implementing various learning strategies also increases sight word vocabulary. Some examples of these learning strategies are the use of invented spelling to make phonics meaningful, teaching phonics in the context of literature, and making words. Making Words proved to be another invaluable tool in phonemic awareness and breaking



words apart to help in decoding. The final area the teacher researchers focused on was encouraging home involvement. This was achieved through the implementation of a baggie book program. This program encouraged nightly reading, flash card and spelling practice.

The advantages of the intervention cannot be fully appreciated by simply analyzing the assessments, test results, and surveys. However, due to the positive correlation the teacher researchers will continue to use interventions and strategies mentioned throughout this action research project in order to increase word recognition among future students.



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Appendix A

Student Survey

Informal Survey of Phonological Awareness Tasks

- 1. What word would be left if the /k/ sound were taken away from cat? (phoneme deletion)
- 2. Do pen and pipe begin with the same sound? (word to word matching)
- 3. What word would we have if you put these sounds together: /s/, /a/, /t/? (blending)
- 4. What is the first sound in rose? (sound isolation)
- 5. What sounds do you hear in the word hot? (phoneme segmentation)
- 6. How many sounds do you hear in the word *cake*? (phoneme counting)
- 7. What sound do you hear in *meat* that is missing in *eat*? (deleted phoneme)
- 8. What word starts with a different sound: bag, nine, beach, bike? (odd word out)
- 9. Is there a /k/ in bike? (sound to word matching)



Appendix B

Early Reading Screening Instrument (ERSI)

Alphabet	(n <u>owled</u> c	je

						EXS	1 300)(62 11)	eer					
Alot	<u>abe</u>	t Kno	wled	<u>ge</u>										
	Rec	ogni	ition:											
	Α	F	Ρ	W	K	Z	8	С	Н	0	J	U	Υ	
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	m	d	ļ	q	n	S	x	i	g	ſ	е	٧	t	
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					_							•	2	_
	2. §	l She	sees		<u>ට</u> ු ලැ	og.							1	
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2.								2.	and					_
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4.								4.	dow					
5.								5.						_
6									car			_		
7.								7.		e				_

8. friend _____

680. chair _____

9.

λoπ



10.

Appendix B Continued

ERSI

Concept of Word Test Directions

- 1. Ask the child what he/she thinks is happening in the picture. (Acknowledge the child's response.)
- Now I want you to read with me.
 (You read and point to each word as the child freadst with you
- 2. The sentence down here tells what is happening in the picture. Watch while I read the sentence and point to each word.
- 4. OK, this time you're to read the sentence and point to the words.

(If necessary, help the child point to the first word only.)

Scoring: + if correct

· if not correct



Katie is walking in the rain.



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She sees a big dog





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