

DOCUMENT RESUME

ED 420 054

CS 013 232

AUTHOR Carr, Teri; Davis, Debra; Durr, Rita; Hagen, Teri  
TITLE Improving Reading Readiness and Language Arts Skills through  
the Use of Phonemic Awareness.  
PUB DATE 1998-05-00  
NOTE 120p.; M.A. Research Project, Saint Xavier University.  
PUB TYPE Dissertations/Theses - Masters Theses (042) -- Reports -  
Research (143)  
EDRS PRICE MF01/PC05 Plus Postage.  
DESCRIPTORS Action Research; \*Beginning Reading; Journal Writing;  
Kindergarten; \*Kindergarten Children; Language Arts; Primary  
Education; \*Reading Improvement; \*Reading Readiness;  
\*Reading Skills; Whole Language Approach  
IDENTIFIERS \*Hand Gestures; Illinois (Central); \*Phonemic Awareness

ABSTRACT

An action research project described a program for improving reading readiness and language arts skills through phonemic awareness. The targeted population consisted of kindergarten students in a heterogeneous mix of upper middle class, middle class, working class, and low income families located in central Illinois. Data revealed that students entering first grade demonstrated a lack of transfer of letter and sound recognition. Analysis of probable cause data revealed that students reported a lack of skills related to the areas of reading readiness and language arts. These included: decoding, word building, segmenting, and categorizing, along with journal writing. Reviews of curricula content and instructional strategies revealed an over-emphasis on whole language and a lack of phonemic awareness. A review of solution strategies suggested by knowledgeable others, combined with an analysis of the problem setting, resulted in the selection of two major categories of intervention: implementation of phonemic awareness strategies and the use of hand signals to teach letters and letter sounds. These were used in conjunction with the already existing whole language program. Post intervention data indicated an increase in reading readiness and language arts skills. Students' phonemic awareness was enhanced through the researchers' implementation of phonetic tasks. These tasks, with the support of hand signals, brought about greater enthusiasm for the reading process. (Contains 31 references, and 8 tables and 5 graphs of data. Appendixes contain numerous inventories and survey instruments, hand signals, letters to parents, sample journals, and rhyming tasks.) (Author/RS)

\*\*\*\*\*  
\* Reproductions supplied by EDRS are the best that can be made \*  
\* from the original document. \*  
\*\*\*\*\*

IMPROVING READING READINESS AND LANGUAGE ARTS SKILLS  
THROUGH THE USE OF PHONEMIC AWARENESS

Teri Carr  
Debra Davis  
Rita Durr  
Teri Hagen

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

Saint Xavier University and SkyLight Training & Publishing

Field-Based Masters Program

Chicago, Illinois

May, 1998

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND  
DISSEMINATE THIS MATERIAL HAS  
BEEN GRANTED BY

T. Carr

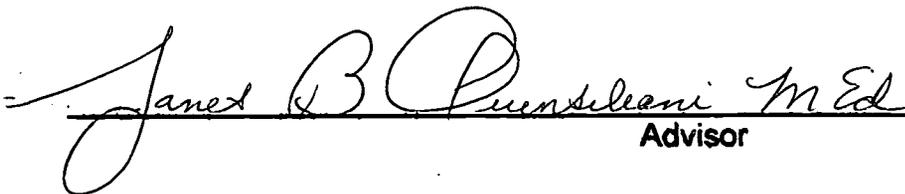
TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)

CS013232

**SIGNATURE PAGE**

**This project was approved by**

  
\_\_\_\_\_  
**Advisor**

  
\_\_\_\_\_  
**Advisor**

  
\_\_\_\_\_  
**Dean, School of Education**

## ABSTRACT

This report describes a program for improving reading readiness and language arts skills through phonemic awareness. The targeted population consisted of kindergarten students in a heterogeneous mix of upper middle class, middle class, working class, and low income families, located in central Illinois. Data revealed that students entering first grade demonstrated a lack of transfer of letter and sound recognition.

Analysis of probable cause data revealed that students reported a lack of skills related to the areas of reading readiness and language arts. These included: decoding, word building, segmenting, and categorizing, along with journal writing. Reviews of curricula content and instructional strategies revealed an over emphasis on whole language and a lack of phonemic awareness.

A review of solution strategies suggested by knowledgeable others, combined with an analysis of the problem setting, resulted in the selection of two major categories of intervention: implementation of phonemic awareness strategies and the use of hand signals to teach letters and letter sounds. These were used in conjunction with the already existing whole language program.

Post intervention data indicated an increase in reading readiness and language arts skills. Students' phonemic awareness was enhanced through the researchers' implementation of phonetic tasks. These tasks, with the support of hand signals, brought about greater enthusiasm for the reading process.

## TABLE OF CONTENTS

ABSTRACT.....	i
CHAPTER 1 – PROBLEM STATEMENT AND CONTEXT.....	1
General Statement of the Problem.....	1
Local Setting.....	1
District Setting.....	5
The Surrounding Community.....	7
National Context of the Problem.....	9
CHAPTER 2 – PROBLEM DOCUMENTATION.....	12
Problem Evidence.....	12
Probable Causes.....	18
CHAPTER 3 – THE SOLUTION STRATEGY.....	23
Literature Review.....	23
Project Objectives and Processes.....	26
Project Action Plan.....	27
Methods of Assessment.....	30
CHAPTER 4 – PROJECT RESULTS.....	32
Historical Description of the Intervention.....	32
Presentation and Analysis of Results.....	42
Conclusions and Recommendations.....	46
REFERENCES.....	49
APPENDICES.....	51

## CHAPTER 1

### PROBLEM STATEMENT AND CONTEXT

#### General Statement of the Problem

The students of the targeted kindergarten classes exhibit difficulty in transferring letter and sound recognition into the areas of reading readiness and language arts. Evidence for the existence of the problem includes teacher observations, results of reading tests, teacher made tests, kindergarten screening, and parent comments.

#### Local Setting

This action research project takes place in three primary buildings. The targeted sites will be identified as A, B, and C. One teacher is at site A, one teacher at site B, and two teachers at site C.

#### Site A

The mission statement of site A is to provide a positive, stimulating, and challenging learning environment incorporating multi-age and individual experiences for all children so that they develop to their maximum potential (School Brochure, 1997).

Site A is a preschool to third grade facility that houses 192 students. The average class size is 24 students. The racial/ethnic background of the school is 100% Caucasian. The attendance rate is 96% with a student mobility rate of 8.9%. Forty point one percent of the students are from low income families receiving public aid or eligible to receive free or reduced-priced lunches (School Report Card, 1996).

In addition to the principal, there are 22 certified staff members, seven of which are preschool teachers and eight are kindergarten through third grade classroom teachers. One special education teacher services three classrooms in an inclusion setting. One

certified teacher staffs the learning center. There is one teacher for music and one for physical education. Both music and physical education are scheduled for 30 minutes twice a week. There is one part-time speech and language pathologist and there is one full-time Reading Recovery/Title I teacher. Support personnel constitute the balance of the staff. They include a counselor, a nurse, a special education learning consultant, a psychologist, a teacher for the gifted students, and a family educator. These faculty members serve multiple sites in the school district and come to the research site on a rotational basis (District Directory, 1996-1997). This facility also houses an Even Start program, which is comprised of infants, toddlers, preschoolers, and their parent(s). Although this program is housed at Site A, it services the entire district.

Other non-certified full and part-time staff includes a school secretary, a preschool secretary, a preschool clerk, six educational assistants, a health clerk, a latch-key supervisor, and one custodian. There are five part-time staff members who supervise the cafeteria and school grounds.

### Site B

Site B is a primary learning environment that challenges each child to develop his or her physical, emotional, social and academic potential by creating a nurturing, multisensory, developmentally appropriate environment. Goals that make this school unique are its determination to improve parent involvement, to improve parent involvement in learning at home, to improve communications from school to parents and the community through direct and community-wide communications, to assess, and investigate available resources for improvement, to design a plan to improve student achievement in mathematics, reading, writing, speaking, and listening, to improve the

safety, attractiveness and efficient use of the internal and external environment (School Strategic Plan, 1995-1997).

This site is a pre-k to third grade facility. The enrollment is 416 students. The average class size is 21 students. The racial/ethnic background of the school is 98.8% Caucasian, 0.7% Black, 0.5% Asian/Pacific Islander. The attendance rate is 95.2% with a student mobility rate of 17.1%. Forty-two point three percent of the students are from low income families receiving public aid or eligible to receive free or reduced-price lunches. (School Report Card, 1996).

In addition to the principal, there are 31 certified staff members, 15 of whom are regular classroom teachers, who teach one grade level. One special education teacher services three classrooms in an inclusion setting. There are two self-contained special education teachers. The learning center is staffed with one certified teacher. There is one teacher for music and one for physical education. Both music and physical education are scheduled for 30 minutes twice a week. There are three full-time speech and language pathologists who service 3 year-old walk-ins from within the district, and pre-k and primary age children housed at this facility. There are three full-time Reading Recovery/Title I teachers. There are three full-time early childhood teachers. Support personnel constitute the balance of the staff. They include a counselor, a nurse, a special education learning consultant, an occupational therapy assistant, a social worker, a psychologist, and a teacher for gifted students. These faculty members serve multiple sites in the school district and come to the research site on a rotational basis (District Directory, 1996-1997).

Other non-certified full and part-time staff include a school secretary, nine educational assistants, (one of which is a certified teacher), a health clerk, two latch-key supervisors, and one custodian. There are seven part-time staff members who supervise the cafeteria and school grounds.

### Site C

This research site is a diverse, creative, evolving, primary learning environment engaging children, parents, and community members in their personal quest for a life of learning; through affirmation of involvement, support for innovation, aggressive communication and a celebration of learning. Some of the things that make this school unique are effective collaboration and shared decision making within the school and community, an environment where technology and teaching are combined to enhance the learning environment, a range of classroom environments that appreciate a variety of teaching and learning styles. The staff believes that the role of the school is to empower children and families to assume responsibility for their learning (School Strategic Plan, 1995-1997).

This study will be conducted in a pre-k to third grade facility. The site was built in 1976 and houses 400 students. The average class size is 23 students. The racial/ethnic background of the school is 99.1% Caucasian, 0.5% Hispanic, 0.2% Asian/Pacific Islander, and 0.2% Native American. The attendance rate is 95.6% with a student mobility rate of 6.9%. Thirty-eight point three percent of the students are from low income families receiving public aid or eligible to receive free or reduced-price lunches (School Report Card, 1996).

In addition to the principal, there are 26 certified staff members, eighteen of whom are regular classroom teachers. Of these, eleven teachers are in team teaching situations; six teachers work in a multi-age environment. One special education teacher services five classrooms in an inclusion setting. There is one self-contained special education teacher. One certified teacher staffs the learning center. There is one teacher for music and one for physical education. Both music and physical education are scheduled for 30 minutes twice a week. There is one full-time speech and language pathologist and there are three full-time Reading Recovery/Title I teachers. Support personnel constitute the balance of the staff. They include a counselor, a social worker, a nurse, a special education learning consultant, and occupational therapy assistant, a psychologist, and a teacher for gifted students. These faculty members serve all of the school district and come to the research site on a rotational basis. One Head Start class is housed in the facility (District Directory, 1996-1997).

Other non-certified full and part-time staff includes a secretary, four educational assistants, a health clerk, a latch-key supervisor, and one custodian. There are five part-time staff members who supervise the cafeteria and school grounds.

#### The District

This elementary district consists of six primary, two intermediate and two junior high schools. The primary buildings are comprised of grades pre-k, kindergarten, one two and three. The intermediate buildings are comprised of grades four, five and six. The junior high buildings consist of grades seven and eight.

The district has provided for children with special needs by creating self-contained classrooms, inclusion classrooms and providing sites that are handicapped accessible.

These services are under the supervision of the district special education office and its administrators.

The administrative structure of the school district is divided into a central office and the building administrators. The structure of the central office is: the superintendent, assistant superintendent, director of human resources, director of finance and operations. An administrative intern also assists each intermediate and junior high building.

As cited in the 1996 School Report Card, the characteristics of the student body were as follows: 98.6% were Caucasian, 0.6% were Asian/Pacific Islander, 0.4% were Mexican American, 0.3% were Black and 0.1% were Native American. Our total student enrollment was 4,150.

The demographics include a heterogeneous mix of upper middle class, middle class, working class, and low income families. Low income students are from families receiving public aid, living in institutions for neglected or delinquent children, being supported in foster homes with public funds, or eligible to receive free or reduced lunch. The total number of students classified as low income was 39.2%.

The attendance rate for the district was 95.2%, with student mobility at 13.1%. Student mobility rate was based on the number of students who enroll in or leave a school during the school year. Students may be counted more than once. The chronic truancy rate was 0.4%. The average class size as reported in the School Report Card was kindergarten 23.2, first grade 22.3, third grade 22.6, sixth grade 24.8, and eighth grade 25.4.

There are 255 certified teachers who have an average of 16.3 years experience; 33% have a master's degree or above. The faculty consists of 85.1% female and 14.9% male;

the faculty is entirely Caucasian. The average salary for a teacher in the district is \$34,196. The average administrative salary is \$60,768. Operating expenditure per pupil is \$4,400, with a district total expenditure fund of \$20,396,701.

On October 2, 1996, as cited in The Dirksen Congressional Centennial Report, the United States Department of Education awarded a \$3.5million Technology Challenge Grant to the district. The five-year grant, "Learning Community 2000," is a project that combines civics instruction with a high level of community-wide, online discourse about local, state, and national issues. The district has long enjoyed the use of technology in teaching and learning. Now with our partners, we are able to go beyond the walls of the school and the clock of the day to involve learners of all ages. Our schools will become community centers. We believe that "Learning Community 2000" will have profound implications for how our society resolves the issues of today and chooses the leaders of tomorrow (The Dirksen Congressional Centennial Report).

The mission statement of the district states: We are a visionary, innovative elementary district committed to preparing responsible, productive, life-long learners by fostering active partnerships among schools, students, families, and community.

### The Community

The targeted school district serves an agricultural and industrial area, nestled on the Illinois River seventy miles south of the center of the state. One fifth of America lives within 250 miles of the metropolitan statistical area of which the district is a part (Peoria Journal Star Market Report, 1994). The community itself has a population of approximately 33,000 according to the 1995 Census Report. Of that number, 98.82% are

Caucasian, 0.44% are Hispanic, 0.17% are Asian/Pacific Islander, and 0.16% are Afro-American (The 1990 School District Data Book).

The median family income is \$31,533 with per capita of \$12,246. Poverty is of concern to community residents because 7.4% earn less than \$5,000 per year; 11% earn \$5,001-\$9,999; and 12.2% earn \$10,000-\$14,999 (1992 Census Report). Approximately 12% of the working population is employed by a major industrial conglomerate, and another 15% work in outsourcing or supplying that manufacturer of heavy equipment. Other major local employers are a nationally known insurance company, an electrical energy company, the local hospital, and the school districts themselves (Charles H. Renner, Executive Chamber of Commerce, personal communications, May, 1997).

Median age of residents is 34.7 years. Seventy-five point seven percent have a high school degree. Ten point five percent have a bachelor's degree or more (1992 Census Report). The average assessed home valuation is \$15,000. The average sale price of a home was \$67,000. In this community, 60% of the residents are homeowners.

Educational institutions within the community include six primary (K-3) buildings, two intermediate (4-6) buildings, two junior high (7-8) buildings, three elementary parochial buildings. Currently the high school consists of two campuses. The East Campus houses juniors and seniors with the West Campus housing freshman and sophomores.

Community resources add depth to the educational opportunities in the district. A congressional research center provides hands-on government experiences to all community members, including programs specifically directed toward students. Since the high school's east campus is adjacent to an extensive park district, the two bodies

often share such facilities as an ice-skating arena, soccer, baseball and softball fields, and tennis courts.

Community support goes well beyond shared facilities. Active volunteers in classrooms, booster clubs, and extracurricular activities bolster both school districts. Local businesses are generous with services and products as well as monetary contributions to student incentive programs. Most notably, in 1995, the community narrowly approved a \$16.2 million referendum to fund construction necessary to unify both high school campuses on one site. Construction has already begun and is expected to be completed for occupancy by the 1998-99 school year.

#### National Context of the Problem

To understand the literacy problem one must understand the importance of multi-sensory learning and phonemic awareness, the difference between phonics and phonetics and implicit and explicit phonics, how reading is taught today and why there are so many children who are said to have learning disorders (Haws, 1997). According to the National Commission (1985), twenty-six million American adults can not read or write above a fifth grade level. Other literacy rates, according to the National Institute of Education (1997) are: 47 percent of 17-year-old minority youths; 60 percent of inmates of correctional institutions; 75 percent of unemployed persons; 56 percent of Hispanic Americans, and the number is growing. According to "Books in Our Future", by the Library of Congress (as cited in Haws, 1997), adult illiterates are increasing by about 2.3 million each year. Research has demonstrated that children lack the ability to understand letter sounds, therefore, have difficulty making the transfer into reading and language arts. The aspect of language that young children typically lack, however, is phonemic

awareness, an understanding that speech is composed of a series of individual sounds (Yopp, 1992). To succeed at beginning reading, children must be aware of the individual phonemes (sounds) within spoken words. Fortunately, phonemic awareness is not simply a function of genetics or maturation; rather, it can be developed and strengthened through instruction and practice (Adams, 1990).

Although the term “phonemic awareness” is a rather new one to reading educators, teachers who work with primary grade children (and many older children with severe reading problems) have seen learners with difficulties in this area for a long time. Unlike phonics, which refers to sounds in written words, phonemic awareness refers to sounds in spoken words. However, phonemic awareness is considered an important prerequisite for learning phonics, and for learning to read. According to Ball & Blachman (1991), and Uhry & Shepherd (1993), teaching children to be aware of sounds in spoken words improves their reading and spelling abilities, and these effects seem to be relatively long-lasting.

The student’s task is to understand the relationship of the letters in the writing system to the phonemes in the language. This requires the student to recognize that speech can be segmented into smaller units, that is, that the student become phonemically aware (Yopp, 1992).

The relationship between phonemic awareness and learning to read can be interpreted several ways. Two seemingly contradictory hypothesis are (a) that phonemic awareness is a consequence of learning to read, and (b) that phonemic awareness is a prerequisite of learning to read. While some studies support the notion that phonemic awareness is a consequence of exposure to print and formal reading instruction, there is also substantial

evidence that at least some level of phonemic awareness is a prerequisite for learning to read. In fact, the relationship between phonemic awareness and learning to read is most likely one of reciprocal causation or mutual facilitation. While phonemic awareness is a significant piece of phonics, phonics plays a major role in the process of whole language instruction. These components create a balanced approach to teaching reading readiness skills.

*In order to benefit from formal reading instruction, youngsters must have a certain level of phonemic awareness. Reading instruction, in turn, heightens their awareness of language. Thus, phonemic awareness is both a prerequisite to and a consequence of learning to read (Yopp, 1992).*

## CHAPTER 2

### PROBLEM DOCUMENTATION

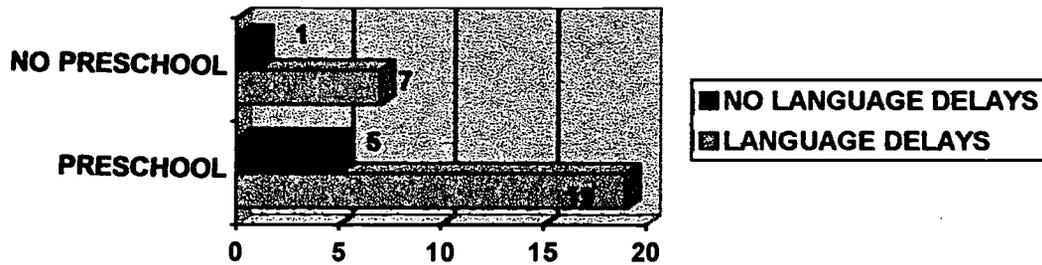
#### Problem Evidence

In order to document the need for an effective reading readiness and language arts program, evidence will indicate a weakness concerning student's ability to transfer letter and sound recognition into the areas of reading and language arts. What constitutes a given child's abilities is affected not only by genetic endowment and maturation but also by prior experiences and exposure (Durkin, 1989). This is evident through parent observation environmental forms (Appendix F), health questionnaires (Appendix E), and Kindergarten Readiness Inventories (Appendix A) (Pekin District 108 Screening Team, 1996), that were conducted during the kindergarten screening in the district. Other evidence of these problems is shown through family surveys, child surveys, student interviews, observational notes, and phonemic awareness pretests that were conducted at the four kindergarten research sites.

Of the 95 kindergarten students in site A, B, and C, 32 were targeted in the district screening process. The results of the child's previous preschool experience and developmentally appropriate language ability are indicated in Graph 1. These results were derived from the parent observation environmental forms that were completed during the screening process.

Graph 1

Sites A, B and C



As evident in Graph 1, 24 of the 32 targeted students had preschool experience yet 19 exhibited significant language delays. An even higher percentage of students who had no preschool experience demonstrated significant language delays. Language delays seem to be a problem that is only partially remedied by preschool experience.

A student interview was conducted with the targeted group of 32 students. The researchers interviewed the students on an individual basis. Sites A and B are single classrooms and Site C has two classrooms. Results are shown in Table 1.

Table 1

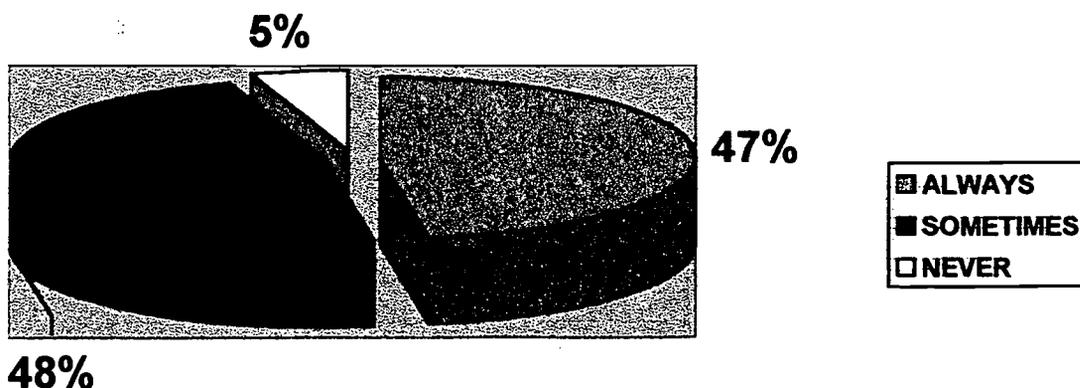
SITE	LIKES TO READ	LIKES BEING READ TO	FAMILY READS IN FREE TIME
A	8 out of 8	8 out of 8	7 out of 8
B	7 out of 8	8 out of 8	7 out of 8
C	13 out of 16	14 out of 16	12 out of 16

Table 1 indicates the majority of the targeted students like to read, and like listening to stories. It also indicates most of the targeted student's families read in their free time.

The results of a survey that was given to 83 families are documented in Table/Graph 1. Families were interviewed and results were recorded about the specific experiences in which children were involved. Table/Graph 1 indicates that there is a varying amount of time spent by parents reading to their children.

Table/Graph 1

	ALWAYS	SOMETIMES	NEVER
READS TO CHILD	39	39	4

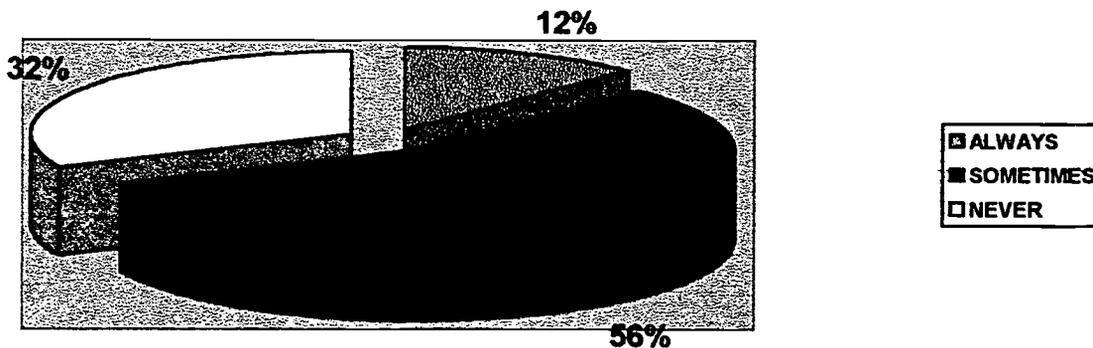


The family survey was given to parents in the presence of the teachers, consequently there is some question about the accuracy of the answers.

Table/Graph 2

Table/Graph 2 shows the number of family visits to the library.

	ALWAYS	SOMETIMES	NEVER
VISITS LIBRARY	10	46	26

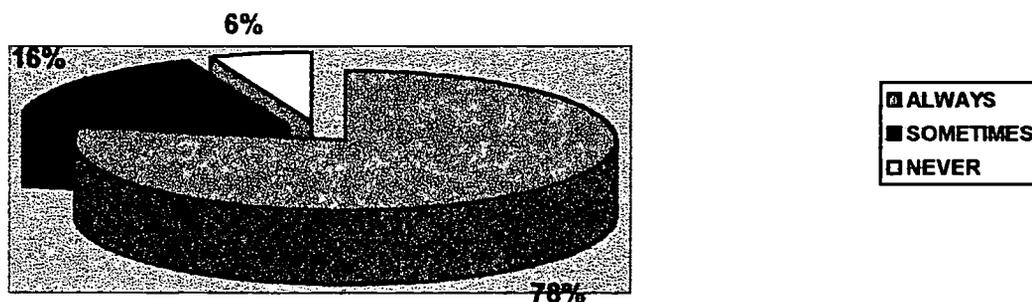


Thirty-two percent of the targeted student's families have never visited the library, and 56 percent only visit occasionally. These percentages indicate there is limited exposure to various reading materials, as the library would be the likely source.

Table/Graph 3 shows the numbers and percentages of the targeted students' ability to recognize common signs in their environment.

Table/Graph 3

	ALWAYS	SOMETIMES	NEVER
RECOGNIZES COMMON SIGNS IN ENVIRONMENT	64	13	5

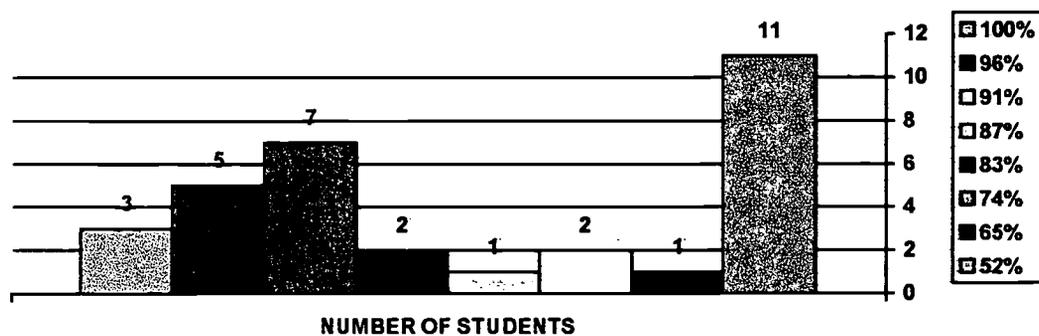


Table/Graph 3 indicates a majority of the targeted students recognize common signs in their environment, such as McDonalds and Wal-Mart, as indicated in the family survey. This demonstrates that the students have the ability to recognize common environmental signs, yet lack the experience with books and other reading materials.

The Kindergarten Readiness Inventory was given to the targeted students before they entered kindergarten. This authentic assessment was given to the children individually, the spring before kindergarten. The children were unfamiliar with the environment and the screener. Results suggest the need to implement a balanced language arts curriculum. As indicated in Table/Graph 4, there is a wide range of readiness skills.

Table/Graph 4

	NUMBER OF STUDENTS
100%	11
96%	1
91%	2
87%	1
83%	2
74%	7
65%	5
52%	3



Table/Graph 4 indicates the scores of the targeted students on the Kindergarten Readiness Inventory. There is a varying degree of abilities when the children enter kindergarten.

The Phonemic-Awareness Inventory (Creative Teaching Press, 1997) was given to the targeted group during the first week of school. The inventory was given orally and individually to each student by the researchers. The results of the pretest are in Table 2.

Table 2

Pretest	% Correct
Whole Word Discrimination	79%
Rhyming Word Recognition	52%
Rhyming Word Application	51%
Blending	12%
Approximation	8%
Phoneme Isolation	5%
Segmentation	3%
Phoneme Deletion	1%
Phoneme Substitution	1%

In Table 2, the low percentages indicate students who need instruction in phonemic awareness. The results of the inventory indicate a lack of exposure and understanding of letter-sound recognition.

#### Probable Causes

According to research the exact numbers are disputed, but no one doubts that we have a massive literacy problem involving tens of millions of Americans. How can we teach all children to read with comprehension and effectively help the millions of adults who already have this handicap? The goal of our research is to provide evidence that incorporating whole language and phonemic awareness we will create a balanced approach to learning. When implemented in the kindergarten classrooms, this combined curriculum will foster the skills needed to become emergent readers.

In the past, one of the most impassioned arguments in education has been the role of phonics instruction in early reading. In the early 1900's reading instruction involved the whole word method in which children learned to read and memorize entire words rather than decoding words according to their sounds. By 1950, the whole word method was still the dominant method used for teaching reading. Reading skills were still dropping and too many students were graduating from high school functionally illiterate. A change came when Rudolf Flesch attacked the whole word method in his book Why Johnny Can't Read (1955). This led to many public debates and new studies, which by the 1970's had caused most schools to return to a more phonetically based method. Measurable improvements in reading abilities during the late 1960's and all through the 1970's were observed. The U.S. Department of Education noted in their recent National Assessment of Educational Progress (NAEP) reading survey that student performance had been increasing significantly until 1984. From that point on, reading scores have been dropping until 1992, at which time they fell below the scores from the early 1970's. Not surprisingly, this coincides with the rise of whole language as a "new" reading method (Haws, 1997).

Instead of choosing a single approach to reading, instructors should focus on what works best for the individual child. Teachers need to understand both systems, whole language and phonics, and use the best of both, together with other effective reading programs. Many combinations are necessary to accommodate the different learning styles for reading that can be found within a single classroom (Carbo 1995).

As children become proficient in spoken language, they learn to attend to its meaning rather than its sounds (Adams 1990). Young children are unaware that speech is

composed of a series of individual sounds. According to Adams (1990), if children cannot hear and manipulate the sounds in spoken words, they have an extremely difficult time learning how to map those sounds to letters and letter patterns, which is the essence of decoding.

Specific experiences which a child has before he goes to school may affect his progress once he gets there. Recent research has shown that many children have experiences which show beginning literacy learning before they enter school. There are rich descriptions of what preschoolers have been learning from their environments about books and writing (Strickland and Morrow, 1989). What used to be regarded as individual differences in intelligence turns out to have a great deal to do with opportunities to learn about books and writing. Not only do children bring to school huge differences in the amount of reading and writing experiences they have had, but they also come with their own personalities. In putting together a beginning literacy program, we recognize that children entering school are very different in what they know and have experienced. The best way we can meet their individual needs is to provide a program rich in phonemic awareness and whole language.

The preschool child's language development is vital to his progress in reading. We are concerned not only with the development of vocabulary or articulation of sounds, but with the range and flexibility of the patterns of sentences that he is able to control. His development is critically dependent on the preschool opportunities he gets and the amount of conversation he holds with an adult. The more of this experience he enjoys, the more mature his language will be on entering school. Children, like adults, like to talk about themselves, their possessions, their home, family and pets, their friends, neighbors,

relatives. Children need to be engaged in conversation about the things that they know about because the familiar content provides them with opportunities to experiment with ways of expressing themselves which correlates with the whole language approach to reading (Clay, 1991). However, the need for explicit phonic instruction is particularly clear for at risk children who, lacking much exposure to reading and writing, have had fewer opportunities to figure out how our alphabetic system works.

To some children, their own ideas and imaginations are much more interesting than anything a faraway author may have written. These children love to express themselves. They love to talk and tell stories and be the center of attention. These expressive children also love to write; as they write, they use and learn words that they can recognize when they read. The children with writing personalities will read, but for them reading is a means, not an end. Reading is one of their sources for ideas about which they can write. Likewise, some children are better at learning and using letter/sound relationships. They have an ear for sounds much like the ear some have who become musicians. Other children labor over the letters and sounds and aren't able to blend the sounds they know into words that they know. One of the major reasons for providing a balanced approach to literacy is because children bring different personalities into our schools. While it is not possible to clearly determine which children will learn best with that approach, it is clear that when a teacher provides more routes to the goal of literacy, more children will find a route that suits them, (Cunningham, Allington, 1994).

Research states that there are a growing number of children living in poverty and there is a relationship between poverty and school failure. Even though poverty and school failure are highly correlated, not all poor children fail, and that some who do fail

are economically well off. Many children are at risk for failure in our schools because their personalities do not match the approach taken to instruction. Research, observation, and common sense all tell us that there is no single approach that will succeed in teaching all the different personalities teachers have in their classrooms.

## CHAPTER 3

### THE SOLUTION STRATEGY

#### Literature Review

Phonics instruction is usually highly sequential, organized, direct, and predictable. Youngsters who do well with phonics tend to have strong auditory and analytic reading styles. Whole-language programs usually emphasize fun, popular literature, hands-on learning, and peer interactions. Children who do well in whole-language programs tend to have visual, tactile, and global reading styles (Carbo, 1995). Through this action research project, it will be demonstrated that a balanced approach to reading readiness and language arts skills, using phonemic awareness and whole language strategies will enable maximum learning to take place.

Phonemic awareness is a powerful predictor of success in learning to read. Share and Stanovich assert that phonemic awareness is the most important core and casual factor separating normal and disabled readers (1995). According to Adams (1990), if children cannot hear and manipulate the sounds in spoken words, they have an extremely difficult time learning how to map those sounds to letters and letter patterns, which is the essence of decoding. Jo Fitzpatrick (1997) also states that children must be able to hear and manipulate oral sound patterns before they can relate them to print. Phonics instruction builds on a child's ability to segment and blend together sounds he or she hears. Without this ability children have difficulty with basic decoding skills, an integral component of any reading program. Therefore, phonemic awareness can be fostered through language activities that encourage active exploration and manipulation of sounds that will accelerate reading and writing growth.

Whole language attempts to cover the whole gamut of language learning including reading, writing, and speaking. Much of the philosophy is derived from that used in developmentally appropriate practice, teaching and other forms of student-centered instruction. In studies conducted by Goodman (1980), it was shown that in a whole-language classroom, children were immersed in reading and writing projects at the expense of systematically teaching specific reading or writing skills. Goodman states that, “Language development is natural whether written or oral. It develops in a social setting because of the human need to communicate and interact with significant others in the culture”. Students are encouraged to recite what the teacher reads aloud from an entertaining big print book. They are allowed to write using inventive spelling. Writing experiences may include, but are not limited to journal writing, responding in a log, and free-writing. One of the essential beliefs is that language is learned from “whole to part”, with word recognition skills picked up in the context of actual reading and writing in a print-rich classroom. Children need time to gain an awareness of themselves as readers and writers, and from this they develop a need for phonics in order to communicate through written language (Dahl, Purcell-Gates, and McIntyre, 1989).

Environmental conditions also play a major role in teaching reading readiness skills. Three factors that were evident through the district’s kindergarten screening include lack of reading materials in the home, lack of practice at home (e.g. letter recognition, letter/sound correspondence), and lack of print awareness and letter recognition. These are also apparent through observations and checklists.

After reviewing the recent literature involving phonemic awareness and whole-language, it is evident that a balanced approach to reading and writing is essential in

order to meet the needs of every child. In order to create this type of program, the following strategies will be implemented: 1. focus on literature (i.e. read aloud, allow time to read individually and with a partner), provide sufficient modeling for reading out loud, yet provide adequate structure and some step-by-step skill work; 2. provide activities that actively engage students in their learning while providing sufficient tools for decoding words in order to allow them to work independently; 3. include games which enhance hands-on learning; 4. develop a well-stocked classroom library giving children adequate time to browse, read, and discuss books. Yopp (1992) also suggests several activities which foster phonemic awareness development for pre-kindergarten, kindergarten, and first grade students. These include the following: 1. attend to the separate words of sentences (e.g., rhyming songs, print tracking); 2. break up words into syllables (e.g., clapping syllables); 3. detect and generate rhymes; 4. engage in alliterative language play (e.g. listening for or generating words that begin with a specific initial phoneme); 5. blend phonemes to make words (e.g. /b/-/a/-/t/= bat); 6. make new words by substituting one phoneme for another (e.g. change the /h/ in “hot” to /p/ for “pot”); 7. identify the middle and final phonemes of words (e.g. cat and cat); 8. segment words into phonemes (e.g. dog = /d/-/o/-/g/). The balanced reading readiness and language program will incorporate all the above strategies and activities.

### Project Objective

As a result of the implementation of phonemic awareness strategies during the period of August 1997 to January 1998, the kindergarten students from the targeted classes will increase their ability to transfer letter and sound recognition into the areas of reading readiness and language arts, as measured by teacher observations and anecdotal records, results of phonemic tests, kindergarten screening, and parent and child surveys.

### Process Statements

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

1. Teacher materials and actions that foster phonemic awareness will be developed.
2. A series of learning activities that address phonemic awareness will be developed.
3. Within the teacher lesson plans, time will be scheduled to include phonemic awareness activities to increase reading readiness and language arts skills.

The following are the components to the solution:

1. Teacher materials and actions that foster phonemic awareness will include: hand signals, Phonemic Awareness Pocket Activities (Creative Teaching Press), Phonemic Awareness Playing with Sounds to Strengthen Beginning Reading Skills (Creative Teaching Press).
2. Learning Activities that address phonemic awareness will include: rhyming words and songs, poems, fingerplays, CVC (consonant-vowel-consonant) books, robot talk, segmentation, word building, decoding, along with journal writing.
3. Approximately 20-30 minutes per day in the teacher lesson plans will be devoted to the phonemic awareness activities previously stated.

## Project Action Plan

The following plan was designed to implement the following solution component: improving reading readiness and language arts skills through the use of phonemic awareness. The plan will be in effect during the period from August 1997 to January 1998.

May - June 1997

Kindergarten screening was completed and reviewed.

The kindergarten tools used and reviewed included:

readiness inventory (word recall, letter recognition and writing and recognizing letters in name)

social and emotional checklist

speech and language screening inventory

assessment of phonological process

health and dental information

parent observation form

August 1997

Families completed the survey during kindergarten conferences which took place between August 28 and September 5.

September 1997

Student interviews will be completed individually between student and teacher.

The pretest: Phonemic Awareness Inventory will be administered.

Teacher observations and anecdotal records will begin.

The following sounds and corresponding letters will be introduced: Bb, Ff, Dd, Gg, Oo.

The following strategies will be developed: rhyming tasks, making words, sound blending (robot talk) and beginning sound tasks.

The monthly theme for September will be “All About Me.”

The rhymes corresponding to this theme will be:

Head and Shoulders

Open, Shut Them

If You’re Happy and You Know It

Here We Go Round the Mulberry Bush

I Have Two Eyes

October 1997

Teacher observations and anecdotal records will continue.

Journal writing will begin.

The following sounds and corresponding letters will be introduced: Hh, Jj, Aa, Tt.

The following strategies will be developed: rhyming tasks, making words, sound blending (robot talk), beginning sound tasks, and segmenting tasks.

The monthly themes for October will be “Fall,” and “Halloween”.

The rhymes corresponding to these themes will be:

Acorns Falling

The Apple Tree

Five Little Pumpkins

The Bat Flies Here

The Owl Says Whoo

Eensy Weensy Spider

November 1997

Teacher observations, anecdotal records, and journal writing will continue.

The following sounds and corresponding letters will be introduced: Nn, Ee, Mm.

The following strategies will be developed: rhyming tasks, making words, sound blending (robot talk), deletion tasks, beginning sound tasks, and segmenting tasks.

The monthly themes for November will be “Harvest and Thanksgiving” and “Nursery Rhymes.”

The rhymes corresponding to these themes will be:

Peanut, Peanut Butter

Over the River

A Hunting We Will Go

Jack and Jill

Hey Diddle Diddle

Hickory Dickory Dock

Little Miss Muffet

December 1997

Teacher observations, anecdotal records, and journal writing will continue.

The following sounds and corresponding letters will be introduced: Pp, Ii, Rr, Ss.

The following strategies will be developed: rhyming tasks, making words, sound blending (robot talk), deletion tasks, beginning sound tasks, and segmenting tasks.

The monthly theme for December will be “Christmas”.

The rhymes corresponding to this theme will be:

All Around the Countryside

Jingle Bells

Santa Claus is Coming to Town

## We Wish You a Merry Christmas

January 1998

Teacher observations, anecdotal records, and journal writing will continue.

The student interview and posttest, Phonemic Awareness Inventory will be administered.

The following sounds and corresponding letters will be introduced: Zz, Ll, Ww.

The following strategies will be developed: rhyming tasks, making words, sound blending (robot talk), deletion tasks, beginning sound tasks, and segmenting tasks.

The monthly themes for January will be “Winter” and “Counting Rhymes”.

The rhymes corresponding to these themes are:

Frosty the Snowman

The Chubby Little Snowman

I'm a Little Snowman

Five Enormous Dinosaurs

Five Little Monkeys

### Methods of Assessment

In order to assess the effectiveness of the intervention, the following tools and procedures will be followed:

1. Family Survey (see Appendix G).

Procedure: This instrument will be used in August and September and will be completed by the families during kindergarten conferences. This survey will give the researcher information regarding the amount of time that parents spend reading and talking to their child.

2. Student Interview (see Appendix I).

Procedure: This instrument will be used as a pretest and posttest and will be completed individually between the student and the researcher. This interview will give the researchers information regarding each child's feelings toward reading, being read to and what they like to read.

3. Phonemic Awareness Inventory (see Appendix J).

Procedure: This instrument will be used in September and January, as a pretest and posttest. This inventory will give the researchers information regarding each child's ability to complete phonological tasks.

4. Teacher Observations and Anecdotal Records (see Appendix K).

Procedure: These records will begin in September and continue through January.

5. PMI Journals (see Appendix L).

Procedure: This instrument will be completed by the researchers at the end of each week. The researchers will record student progress, or lack of progress, and how the intervention is effecting this progress.

6. Student Journals (see Appendix Q).

Procedure: The students in the targeted classrooms will begin journal writing in October. Their writing will correspond with the sounds and letters being taught. Journal writing will continue through the end of the year.

## CHAPTER 4

### PROJECT RESULTS

#### Historical Description of the Intervention

The objective of this project was to increase transfer of letter and sound recognition into the areas of reading readiness and language arts as measured by teacher observations, anecdotal records, results of phonemic tests and lessons, kindergarten screening and parent and child surveys. Phonemic awareness strategies were implemented during the period of September 1997 to January 1998. These strategies included rhyming tasks, making words, sound blending (robot talk), beginning sound tasks, segmenting tasks and deletion tasks (Appendix M). A balanced reading readiness program was implemented using whole language activities involving quality children's literature along with phonemic awareness strategies and activities.

The researchers used a balanced approach to reading readiness which included whole language strategies combined with phonemic awareness tasks. The researchers used a variety of materials including hand signals to introduce sounds, rhyming words, songs, poems, fingerplays and consonant-vowel-consonant books. Lessons were also taken from Phonemic Awareness Pocket Activities (1996) and Phonemic Awareness Playing with Sounds to Strengthen Beginning Reading Skills (1997), both by Creative Teaching Press.

Various strategies were implemented to introduce, develop, and strengthen the phonemic awareness of the kindergarten students in the targeted classrooms. At the onset of the action research project, the researchers were able to review the students' kindergarten screening folders, which included the Kindergarten Readiness Inventory

(Appendix A). This screening tool, which had been administered during the previous spring to incoming kindergarten students, provided the researcher with useful information about a child's level of phonemic awareness. Such information included; word recall, letter recognition, and the child's ability to write and recognize the letters in his own name. The researcher also reviewed a social and emotional checklist (Appendix B), a speech and language screening inventory (Appendix C), an assessment of the phonological process (Appendix D), health and dental information (Appendix E), and analyzed some very valuable parent-child observations (Appendix F). These were all elements needed in gathering the information relevant to the action research project. It was through this screening tool that a need was identified for the development and implementation of a phonemic awareness program in the targeted classrooms. These phonemic awareness strategies were used in balance with an already existing whole language approach to teaching reading readiness that included the use of quality literature, trade books, big books, monthly themes, and field trips. Throughout the year the researchers supported the balance of phonemic awareness strategies and a whole language foundation with the use of art projects, magnetic and felt board activities, and technology. The researchers also bridged the gap between home and school by sending notes to parents which included several activities that could be done with the child (Appendix O).

The researchers conducted a family survey (Appendix G) during kindergarten conferences which took place between August 28 and September 5. The child surveys (Appendix H) were administered individually to the targeted group. The results of the

survey did not give profitable information, and therefore, a different student interview (Appendix I) was constructed and administered during the last week of September.

The Phonemic Awareness Inventory (Appendix J) was administered and utilized as a pretest during the third week of September. Teacher observations and anecdotal records (Appendix K) were also a part of the pretests that began in September and continued through January.

Phonemic awareness strategies were developed and implemented into the daily curriculum along with whole language activities, which created a balanced reading program. The researchers reflected in weekly PMI journals (Appendix L) the advancements in the action research project.

An assortment of whole language and phonemic awareness activities were implemented throughout the day and integrated across the curriculum using a variety of themes. Twenty minutes of whole group and ten to fifteen minutes of small group instruction were dedicated for the phonemic awareness lessons. Phonemic awareness strategies that were implemented into the daily routine beginning in September included: sound blending (robot talk), making word tasks, rhyming tasks, deletion tasks, beginning sound tasks, and segmenting tasks (Appendix M). Individual and cooperative learning strategies were incorporated in order to practice these phonemic awareness skills.

Sample lessons can be found in Appendices V, W, X, Y and Z.

A different letter, sound, and hand signal (Appendix N) was introduced each week. Poems, rhymes, and stories were presented with each letter and sound. Through notes, newsletters and conferences, families became acquainted with activities to encourage the reinforcement of these concepts at home. The communication link between home and

school became a significant and powerful component for success in the action research project.

During the month of September, the letters and corresponding sounds of Bb, Ff, Dd, Gg, and Oo were introduced. The research implemented included the following phonemic awareness strategies: making word tasks, rhyming tasks, beginning sound tasks and during the last week, sound blending (robot talk) tasks (Appendix M). The monthly theme was “All About Me”. The rhymes used corresponding to this theme were: “Head and Shoulders”, “Open, Shut Them”, “If You’re Happy and You Know It”, “Here We Go Round the Mulberry Bush” and “I Have Two Eyes” (Appendix P). Clapping, one-to-one correspondence to accompany the rhyme “Head and Shoulders” was modeled and encouraged. A musical cadence song was introduced to bring about beginning sound recognition to accompany the rhyme “If You’re Happy and You Know It”.

At Site A, in correlation with the “All About Me” theme, each child created a book entitled, All About Me. On the first page of the book, the child wrote his name and underlined the first letter. He had to draw a picture of something that started with that letter. Each child dictated a sentence about what he drew and the researcher recorded it on his paper. On page two, the child had to draw a picture of his family and label who or what he drew. The researcher gave assistance when needed. Page three consisted of something he liked to do. Each child drew a picture and then dictated a sentence that the researcher recorded on his paper. When the books were finished, each child shared his book with his classmates.

At Site B, a “Me Mobile” was created and hung in the room. Each child drew his face on a paper plate. The child’s address, phone number, and birthday was written on the

shape of a house, phone and cake, which was decorated by the child. Each child needed to state his specific information orally in order to be able to take the mobile home.

At Site C, Class One, the researcher taught a getting to know you activity to help students become familiar with the letters in their names. Each child had a paper doll, which he had to decorate with something he liked that began with the beginning letter of his name. The teacher wrote a sentence on each doll, such as, "Derek likes doughnuts". These were hung around the classroom. This activity helped the children become familiar with other students' names.

At Site C, Class Two, the class participated in collaborative writing activities. The class brainstormed what they know about being a friend. Word webs were created on chart paper, describing the attributes of a friend. The webs were placed in the writing center so that the class could illustrate them if they chose.

During the month of October, the letters and corresponding sounds Hh, Jj, Aa, and Tt were introduced. The phonemic awareness strategy of segmenting, breaking down the whole word into its component parts, was added to the previously introduced strategies (Appendix M). The monthly theme was "Fall/Halloween." The rhymes used to correspond to this theme were: "Acorns Falling", "The Apple Tree", "Five Little Pumpkins", "The Bat Flies Here", "The Owl Says Who" and "Eensy Weensy Spider" (Appendix R). Journal writing (Appendix Q) was introduced, correlated with the letters of the month, and used throughout the remainder of the research period.

At Site A, the children in the classroom created a big book entitled, What Will You Be For Halloween? Each child made a page for the book by drawing what he was going to be for Halloween and then dictated a sentence that was recorded by the researcher. The

pages were put together in a big book that was read aloud to the class, with each child reading his page. The book was then placed on the bookshelf for the children to look at during their free time.

At Site B, the children used lummi sticks to tap out the beat for the words from “The Apple Tree”. A rhyming bingo game was created. The children had to recognize rhyming words to cover a square on their bingo card. A spider web was created by having the children say a word that began with the targeted letter of the month when the ball of yarn rolled to them. They consequently rolled the ball of yarn to someone else and gradually created a yarn web.

At Site C, Class One, the students made sound spiders. Each individual spider body had a letter/sound on it, which was targeted for this month. The student’s task was to brainstorm eight words that began with the letter sound on their spider’s body and to write them on each corresponding spider leg.

At Site C, Class Two, musical/rhythmic activities made a great connection for segmenting sounds using lummi sticks, clapping, tapping, and stomping. The class enjoyed the rhythm and the rhyme from “The Apple Tree”. This rhyme was taught to the children using sign language.

In November, the researchers attended a workshop entitled, “Phonics, Phonemic Awareness, and Word Recognition”, which was presented by Teacher Created Materials. At this workshop, the researchers received a copy of a software program, “Kid Phonics 1”, which was used to supplement the phonemic awareness classroom instruction.

The themes for November were “Harvest/Thanksgiving” and “Nursery Rhymes”. Due to a lack of time, the researchers decided not to include the nursery rhymes, but to focus

on the Thanksgiving theme. Nursery rhymes were added to the curriculum in March. The following rhymes were used in November: “Peanut, Peanut Butter”, “Over the River”, and “ A Hunting We Will Go” (Appendix S). The deletion task, the ability to omit beginning or ending sounds in a given word, was also introduced this month. The sounds and letters worked on were Nn, Ee, and Mm. In addition to these tasks the researcher also began using pocket chart poems. In these activities the students are instructed to match corresponding pictures to the words in each poem. The students clapped for each syllable while reading each poem.

In Site A, during this month the classroom took part in a discussion about “Being Thankful”. They created a class book titled We Are Thankful For... Each child created a page by drawing a picture of something or someone for which they were thankful. Each child dictated to the researcher about his illustration. The child copied his sentence for the book. The book was read to the whole class, allowing each child to read his own page. The book was placed on the classroom bookshelf.

In Site B, peanut butter playdough was made in class and used to make the letters for the month. The harvest theme came to life as the students made a fieldtrip to the local grocery store to purchase needed items to prepare a Thanksgiving feast. Grocery lists (pictures included) were read in order to select necessary purchases. Parents were invited into the classroom to help prepare and share the bounty. Words and symbols associated with the feast were written on homemade vests in English and Native American language. The “Secret Letter Detective” bag was introduced. Students were given a necklace with the letter of the week written on it. The chosen student was to bring something to school in the secret letter detective bag the following day that began with

that letter. The student gave the class a clue about what was in the bag. The class guessed what was in the bag. Three clues and three guesses for each clue were given until the correct object was stated. If the secret letter detective stumped the class, he was able to take the bag home again. A note was sent home to parents to explain the process.

At Site C, Class Two, each student created a Thanksgiving placemat, drew pictures, and wrote words for things for which they were thankful. Each child stood in front of the whole group and shared their pictures. The placemats were laminated, then taken home to enjoy with the family's Thanksgiving dinner.

At Site C, Class Two, the class made predictions about "The Gingerbread Man". The book was read to the class using hand puppets. The text of the story was placed in a pocket chart. The children were provided with a duplicate set of word cards. The children's task was to match their word cards to the words in the pocket chart. The children took turns reading the story to each other.

Throughout December the following sounds and corresponding letters were introduced: Pp, Ii, Rr, and Ss. The monthly theme was Christmas. The rhymes corresponding to this theme included: "All Around the Countryside", "Jingle Bells", "Santa Claus is Coming to Town", and "We Wish You a Merry Christmas" (Appendix T). The researchers continued making observations, recording data, and reflecting. Students continued writing in their journals.

Site A created another class book which was entitled Santa Claus is Coming to Town and He Sees... Each child drew a picture of what he thought Santa would see when he came to town. The researcher helped each child write his own sentence on a page. The book was read in small groups with each child sharing his page of the book.

Students in Site B sang the rhyme “All Around the Countryside” to the tune of “Pop Goes the Weasel”, and used leg tapping to correspond to the beat. The rhyme was divided among pairs of children so they could draw pictures to go along with different lines of the rhyme. They acted out the rhyme using the pictures for the other kindergarten classes. One of the activities for “We Wish You A Merry Christmas” was to keep the beat of the song by ringing jingle bells.

For the month of December, Site C, Class One, took a fieldtrip to a Christmas tree farm. After returning to school, the children wrote a class big book about their experiences in picking out a Christmas tree. The students took turns taking the book home to share with families.

At Site C, Class Two, the kindergartners sent e-mail to Santa using technology and writing abilities. An electronic fieldtrip was taken to visit the North Pole. The CD-ROM for the story Polar Express was introduced. The children retold the story using familiar words while creating three-dimensional illustrations.

In January, the letters and corresponding sounds of Zz, Ll, and Ww were introduced. The monthly themes were “Winter”, and “Counting Rhymes”. The rhymes used to correspond with the themes were: “Frosty the Snowman”, “The Chubby Little Snowman”, “I’m a Little Snowman”, “Five Enormous Dinosaurs”, and “Five Little Monkeys” (Appendix U). At the end of January, the researchers administered the Phonemic Awareness Inventory (Appendix J), and the student interview (Appendix I) as posttests.

At Site A, the children created individual books about snowmen. The books had to have at least three pages and contain the following information: the snowman’s name,

where he lives, and what he does for fun. These books were created in small groups in order for the researcher to give the appropriate amount of help to each child. When the books were finished the children shared them during show and tell.

At Site B, one of the activities to accompany the rhyme “Five Enormous Dinosaurs” was to have the students find and write five words that begin with Ff, five words that begin with Ee, and five words that begin with Dd to describe dinosaurs, with the help of their parents. A variety of other phonemic awareness activities and projects to correspond to the monthly themes and rhymes were also implemented. One such project was the use of junior high students as tutors for this classroom. Tutors were asked to play rhyming games, letter and word matching games, and picture/word association games.

At Site C, Class One, the students enjoyed singing while reading the corresponding big book containing the lyric to each song. These tapes and big books helped to make the singing/reading connection and are a part of a series distributed by “Fundamentals”.

At Site C, Class Two, the game “Hear the Sound for the Letter” was introduced using the phonemic awareness hand signals and alphabet picture cards. There was a song to accompany the game, during which the letters and sounds were emphasized.

Throughout the intervention period, the researchers also used sound boxes and sound jars in order to teach beginning, middle, and ending sounds. To help introduce each sound and letter the researchers used pocket chart stories taken from Phonemic Awareness Pocket Activities by Teacher Created Materials. Rhythm sticks, musical instruments, clapping and snapping, scavenger hunts, puppets, puzzles, and storybooks are some of the other materials used to teach reading readiness skills. The researchers

also used magnetic, felt, and dry-erase boards in order for the children to work on moving letters to create new words, retelling stories, and to practice their writing skills.

During the rest of the school year, the researchers continued to develop phonemic awareness lessons. Teacher observations, anecdotal records, and journal writing also continued. Individual and partner activities continued and increased as the children demonstrated their varying abilities. File folder games and technology were used to enhance individual growth in the area of reading readiness. While phonemic awareness strategies and activities were the focus of this research, whole language activities involving quality children's literature were also used to create a balanced reading readiness program.

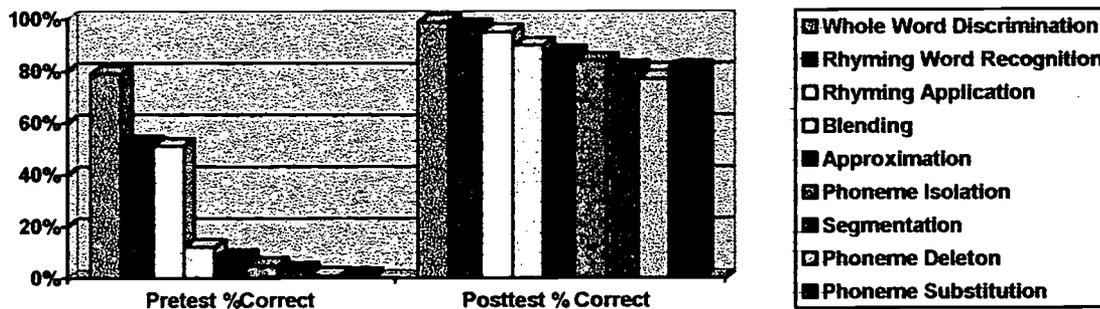
#### Presentation and Analysis of Results

In order to assess the effects of a balanced reading readiness program, which included the implementation of phonemic awareness and whole language strategies, the researchers collected data in several areas throughout the intervention. The methods of assessment included: family surveys, student interviews, the Phonemic Awareness Inventory, observations and anecdotal records, and researcher and student journals.

The intervention appears to have had a positive effect on all targeted areas. The results of the Phonemic Awareness Inventory are shown in Table/Graph 5.

Table/Graph 5

Phonological Tasks	Pretest %Correct	Posttest % Correct
Whole Word Discrimination	79%	99%
Rhyming Word Recognition	52%	97%
Rhyming Application	51%	95%
Blending	12%	90%
Approximation	8%	87%
Phoneme Isolation	5%	84%
Segmentation	3%	81%
Phoneme Deletion	1%	77%
Phoneme Substitution	1%	81%



Whole word discrimination, the ability to hear likenesses and differences of word pairs, was an area of strength for a majority of the targeted students even before the intervention was implemented. The 20% increase between the pretest and posttest indicates near perfection in their ability to discriminate between word pairs.

Rhyming word recognition, the ability to hear, identify, and match similar word patterns, was also an area where the students demonstrated some knowledge of the task

before the intervention. Although there was some knowledge exhibited in the pretest, the posttest indicated significant growth.

Rhyming word application, the ability to hear, identify, and produce similar word patterns, was another area of strength on the pretest. There was a 45% increase between the pretest and posttest.

Sound blending, the ability to hear sounds in sequence and put them together to make words, was an area where the students demonstrated little knowledge on the pretest. There was a remarkable gain exhibited between the pretest and posttest, which shows an increased understanding of the association between the isolated phonemes and the whole word.

Approximation, the ability to discriminate among the beginning, middle, and ending phonemes, suggests a lack of understanding in the pretest. The significant increase in the posttest was based on the students' newly acquired ability to recognize letter sounds.

Phoneme isolation, the ability to hear and identify the beginning, middle, and ending phonemes, insinuates little understanding of this task in the pretest. Due to a gain in the students' letter/sound acquisition, there was a notable improvement between the pretest and posttest.

Segmentation, the ability to break down the whole word into its component parts, implies little discernment of the individual sounds in words from the pretest. The dramatic increase of 78% between the pretest and posttest demonstrates high levels of understanding along with the students' ability to differentiate phonemes within the whole word.

Phoneme deletion, the ability to omit beginning or ending sounds in a given word, advocates little or no understanding of phonemes in words during the pretest. The symbolic gain of 76% implies a considerable amount of growth between the pretest and posttest. This growth relates to the students' knowledge and manipulation of phonemes.

Phoneme substitution, the ability to substitute the beginning, middle, and ending sounds of a word, in order to make a new word by adding the substituted phoneme, hints at little awareness of phoneme understanding and manipulation in the pretest. The 80% increase between the pretest and posttest, advocates a momentous ability of the students to delete and replace phonemes in the beginning, middle and ending positions of given words.

The table below shows the results of what the researchers believe to be the three most significant statements of the student interview (Appendix I), which was administered again in January.

Table 3

SITE	LIKES TO READ	LIKES BEING READ TO	FAMILY READS IN FREE TIME
A	8 out of 8	8 out of 8	8 out of 8
B	8 out of 8	8 out of 8	8 out of 8
C	16 out of 16	16 out of 16	16 out of 16

The table above shows an increase in all three areas most relevant to the intervention. In addition to the phonemic awareness tasks which were implemented during the action research project, trade books, poetry, big books, class created books, and quality children's literature were used in the classroom and sent to parents to bridge the

connection between home and school. The students' and families' attitudes toward reading became more positive due to the implementation of a balanced approach to reading readiness, which included phonemic awareness tasks and whole language activities.

### Conclusions and Recommendations

Beginning reading instruction presents educators with a challenge. Learning to read and write is a process that takes time to acquire and this needs to be constantly recognized. The researchers of this project saw the need for a balanced reading readiness program to be created and developed for their classrooms. Great literature that motivated children to learn and the strategies of whole language were already in place, however the need for students to develop their own logic of how to attend to speech sounds by using phonemes to guide reading readiness skills needed to be implemented. When assessments were completed, a great demand was strongly indicated to implement a shared reading readiness program. This program emphasized the importance of a functional understanding of the alphabetic principle supported by phonemic awareness. Based on the presentation and analysis of the data that was collected, the kindergarten students of the targeted group showed remarkable improvement in reading readiness skills.

One of the most important results of the reading process is that readers leave the printed page with a better perception than they brought to it. An effective balanced literacy program includes the following activities that are occurring at the same time: phonemic awareness, alphabet recognition, phonics, structured analysis, sight words, and context. Reading is a process of active communication where readers construct knowledge. Decoding is “learning to read” and comprehension is “reading to learn”.

The researchers found the surveys and inventories useful and easy to administer, however, the students were more comfortable answering the inventory questions in January compared to September. In September, some of the students were shy and apprehensive in their new school environment. The researchers felt that the parents may also have been apprehensive in filling out the family survey at the parent/teacher conference. Therefore, it is recommended that the family survey be sent home and completed, then returned to school. The hand signals that were presented in conjunction with each letter sound were confusing to some students and researchers. A lot of the hand signals were the same or very similar. The researchers recommend implementing the universal sign language hand signals in place of the hand signals in appendix N. The researchers feel the sign language hand signals will be more useful to the students throughout their education.

Prior to the implementation of the action research project, reading readiness skills were taught primarily through whole language activities with little emphasis on phonics. While whole language provided the students with many enriching experiences, it was evident that there was a need to provide them with a balanced environment where students are given authentic reasons to read and write and are systematically provided with instruction that allows them to do so. Students need to develop their own logic of how the code process works and have the desire and confidence to use the process whenever it is needed. The researchers modified the language arts curriculum to include phonemic awareness strategies and the motivation to use them.

The researchers concluded that the implementation of phonemic awareness was very instrumental in effecting students' reading readiness skills. The use of a balanced reading

readiness program, which included whole language and phonemic awareness activities, met the needs of the targeted students. The researchers intend to continue meeting as a group, reflecting on classroom progress and modifying the program to meet the needs of the students. The researchers' goal is to implement a staff development plan that introduces this balanced reading readiness program involving the use of phonemic awareness and whole language strategies.

## REFERENCES

- Adams, M. J. (1990). Beginning to Read: Thinking and Learning About Print. Cambridge, MA: MIT Press.
- Ball, E. W., and Blachman, B. A. (1991). "Does Phoneme Segmentation Training in Kindergarten Make a Difference in Early Word Recognition and Developmental Spelling?" Reading Research Quarterly (Vol. 26, pp.49-86).
- "Books in Our Future," (1996). A report by the Library of Congress.
- Carbo, M. (1995). "Whole Language vs. Phonics: The Great Debate." National Reading Styles Institute.
- Chall, J. S. (1967). Learning to Read: The Great Debate. New York: McGraw-Hill.
- Clay, M. (1991). Becoming Literate: The Construction of Inner Control. Portsmouth, NH: Heineman.
- Cunningham, P. M., and Allington, R. L. (1994). Classrooms That Work: They Can All Read and Write. New York, NY: HarperCollins College.
- Dahl, K., Purcell-Gates, V., and McIntyre, E. (1989). "An Investigation of the Ways Low-SES Learners Make Sense of Instruction in Reading and Writing in the Early Grades." Final Report to the U.S. Department of Education, Office of Educational Research and Information (Grant No. G008720229). Cincinnati, OH: University of Cincinnati.
- Dirksen Congressional Centennial Report. (1997).
- Durkin, D. (1989). Teaching Them to Read. Needham Heights, Mass: Allyn and Bacon.
- Flesch, R. (1991). "After the Reign of Dick and Jane." Teacher Magazine.
- Flesch, R. (1955). Why Johnny Can't Read. New York: Harper and Row.
- Fitzpatrick, J. (1997). Phonemic Awareness: Playing With Sounds to Strengthen Beginning Reading Skills. Cypress, CA: Creative Teaching Press.
- Goodman, K. (1980). "What is Whole Language?" Arizona Parents for Traditional Education.
- Haws, G. T. (1997). "The Reading Problem: Why We Have It? How to Solve It?" Pekin Public Schools. (1996-1997). District Directory. Pekin, IL.

Pekin Public Schools. (1997). District School Report Card. Pekin, IL.

Pekin Public Schools. (1997). School Brochure. Pekin, IL.

Pekin Public Schools. (1990). School District Data Book. Pekin, IL.

Pekin Public Schools. (1996). School Report Cards. Pekin, IL.

Pekin Public Schools. (1995-1997). School Strategic Plans. Pekin, IL.

Peoria Journal Star Market Report. (1994).

Phonemic Awareness: Playing With Sounds to Strengthen Beginning Reading Skills. (1997). Cypress, CA: Creative Teaching Press.

Phonemic Awareness Pocket Activities. (1996). Cypress, CA: Creative Teaching Press.

Renner, C. H. (1997). Executive Chamber of Commerce, Personal Communications.

Share, D., and Stanovich, K. (1995). "Cognitive Processes in Early Reading Development: Accommodating Individual Differences into a Mode of Acquisition." Issues in Education: Contributions from Educational Psychology. (Vol. 1, pp. 1-57).

Strickland, D. S., and Morrow, L. M. (1989). "Emerging Literacy: Young Children Learn to Read and Write." Newark, DE: International Reading Association.

Tovey, D. R. (1976). "Children's Perceptions of Reading." The Reading Teacher, (Vol. 29, pp. 536-540).

Uhry, J. K., and Shepherd, M. J. (1993). "Segmentation/Spelling Instruction as Part of a First Grade Reading Program: Effects on Several Measures of Reading." Reading Research Quarterly. (Vol. 28, pp. 218-233).

United States Congress (S. J. Res. 102), (1985). National Commission on Literacy.

Yopp, H. (1992). "Developing Phonemic Awareness in Young Children." The Reading Teacher. (Vol. 45, pp.696-703).

## Appendices

## Appendix A

KINDERGARTEN REGISTRATION.....READINESS INVENTORY

Child's Name \_\_\_\_\_ Date \_\_\_\_\_ School \_\_\_\_\_

Ask the child the following questions and record the child's answers and comments. Please complete the following observation sheet.

1. What is your name? \_\_\_\_\_

(1 point for first name &amp; 1 point for last name.)

How old are you? \_\_\_\_\_

(No points for showing fingers) (1 point if child answers)

Total \_\_\_\_\_

3 points

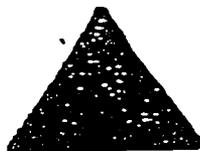
2. Let's see if you can count how many squares are here:



Total \_\_\_\_\_

2 points

3. This is a circle. What is the name of this shape? (2 points if child names triangle)



Total \_\_\_\_\_

2 points

4. This is the #7. I'd like you to tell me the #'s as I point to them.

7 3 5 2 4 1

2 points for each #

Total \_\_\_\_\_

10 points

5. I am going to print a name here and you tell me the name.

\_\_\_\_\_ print the child's name here

Total \_\_\_\_\_

4 points

(If child recognizes name)

I'd like you to tell me the letters in your name as I point to each letter.

Total \_\_\_\_\_

2 pts. (If knows 1/2 of letter)

4 pts. (If knows all of the letters)

6. Let's see if you can tell me these colors as I point to them.

red \_\_\_\_\_ yellow \_\_\_\_\_ blue \_\_\_\_\_ green \_\_\_\_\_  
 black \_\_\_\_\_ orange \_\_\_\_\_ brown \_\_\_\_\_

1 point for each color

Total \_\_\_\_\_  
7 points

7. I am going to say some numbers and then words. Listen carefully to them and when I am finished, you say them to me.

3      8      2  
 7      9      4      1  
 dog    ball    tree  
 box    table    book    cow

2 points \_\_\_\_\_

3 points \_\_\_\_\_

2 points \_\_\_\_\_

3 points \_\_\_\_\_

TOTAL \_\_\_\_\_

10 points

8. I would like to hear how far you can count. \_\_\_\_\_

Counts      1 to 5 = 1 point  
                  6 to 10 = 2 points  
                  11 to 15 = 4 points  
                  16 to 20 = 9 points  
                  21 to 30 = 14 points

TOTAL \_\_\_\_\_  
14 points

9. Paper folding. \*I am going to show you how to fold a square piece of paper into a triangle and then a smaller triangle. Watch me carefully because then I'd like you to do the same thing.

**DEMONSTRATE. PUT YOURS AWAY.**

Hand the child a square piece of paper and say, "It's now your turn."

2 points = making an effort to fold

2 points = making the first triangle

4 points = making 2 triangles correctly.

Total \_\_\_\_\_  
8 points

10. Building a bridge. I am now going to build a bridge with 3 blocks. When I am finished with mine, I'd like you to build one.

**DEMONSTRATE. GIVE CHILD YOUR 3 BLOCKS.**

1 point = attempted

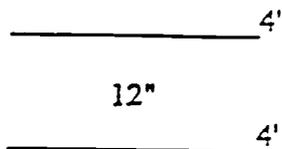
2 points = base blocks touching

3 points = correct bridge

Total \_\_\_\_\_  
3 points

11. Gross Motor Skills

Masking tape should be taped on the floor at 4' lengths with 12" between the two tapes.

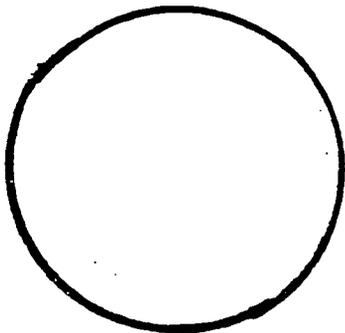


Examiner will demonstrate the following:

- |   |  |
|---|--|
| a. Ask child to stand on one foot.<br>(You count to 5 slowly)             | 2 points _____                                 |
| b. Hop on 1 foot 5 times.   | 2 points _____                                 |
| c. Walk on line.  | 2 points _____                                 |
| d. (Stand at the end of the tape while child stands at                    | 2 points _____                                 |
| e. other end. Give easy tosses. Child must throw<br>and catch 3 out of 5) | for catching<br>2 points _____<br>for throwing |
| f. Jump across the tape on the floor.                                     | 2 points _____                                 |
|   | Total _____                                    |
|   | 12 points                                      |

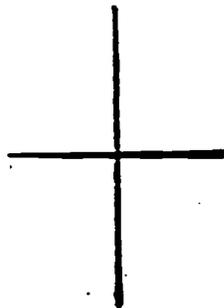
12. Have the child copy the following. You point to the shape and show the child where you want them to copy the shape.

1.



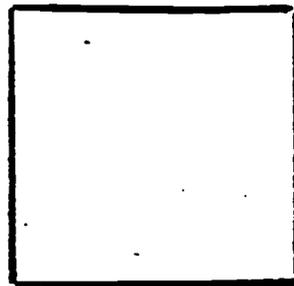
2 points for making a circular shape.

2.



1 point if an X.  
2 points for making a cross.+

3.



1 point if rounded corners. 2 points for square or rectangle shape.

1.

2.

3.

4. You print child's name here:

\_\_\_\_\_

Then have child print name here:

\_\_\_\_\_

1 point for effort and letters somewhat formed \_\_\_\_\_  
3 points if name is legible \_\_\_\_\_

Circle 1. \_\_\_\_\_ Cross 2. \_\_\_\_\_  
Shape 3. \_\_\_\_\_ Name 4. \_\_\_\_\_

Total \_\_\_\_\_  
9 points

Self concept/Attitude — Just for ideas to learn about child.

Using a friendly, conversational tone, ask the child the following questions:

1. Are you excited about Kindergarten? Tell me why or why not.
2. Who do you like to play with? Can you name some of your friends for me?
3. Would you like a pet? Do you have any pets? If so, what are their names?

Draw a person. No Points.

Observe pencil grip/ right or left hand.

BEST COPY AVAILABLE



**THIS IS IMPORTANT !! PLEASE FILL OUT !!**

**SOCIAL/EMOTIONAL  
KINDERGARTEN/PRESCHOOL  
SCREENING OBSERVATION FORM**

CHILD'S NAME \_\_\_\_\_ BIRTHDATE \_\_\_\_\_

- \_\_\_\_\_ Demonstrates self-control
- \_\_\_\_\_ Had difficulty with staying on task
- \_\_\_\_\_ Cooperative/friendly
- \_\_\_\_\_ Had to have items repeated
- \_\_\_\_\_ Had difficulty cooperating
- \_\_\_\_\_ Very shy
- \_\_\_\_\_ Responsive
- \_\_\_\_\_ Easily separates from parent/guardian
- \_\_\_\_\_ Aggressive
- \_\_\_\_\_ Passive
- \_\_\_\_\_ Listened eagerly
- \_\_\_\_\_ Uses complete sentences
- \_\_\_\_\_ Will this child be one of the oldest in their class? (3 months)
- \_\_\_\_\_ Will this child be one of the youngest in their class? (3 months)

**\*\* SCREENER COMPLETE BELOW**

\_\_\_\_\_  
Name \_\_\_\_\_

Parent present during screening? YES \_\_\_\_\_ NO \_\_\_\_\_

Screeners comments and please include any concerns:



PRESCHOOL SPEECH AND LANGUAGE SCREENING INVENTORY

NAME \_\_\_\_\_ BIRTH DATE \_\_\_\_\_ CA \_\_\_\_\_

EXAMINER \_\_\_\_\_ SEX: M F DATE \_\_\_\_\_

COMPREHENSION/EXPRESSION

COMMENTS:

3-year-olds - 1 correct in each of A through G

4-year-olds - 3 correct in each letter

5-year-olds - all correct

A. (3-0) What is your name? \_\_\_\_\_ (3-0) How old are you? \_\_\_\_\_

(3-0) Are you a boy or girl? \_\_\_\_\_

B. What do you do when you're:

(3-0) thirsty? \_\_\_\_\_

(4-0) hands are dirty? \_\_\_\_\_

(3-0) cold? \_\_\_\_\_

(4-0) sick? \_\_\_\_\_

C. What do you do with a: (3-0)

towel? \_\_\_\_\_

scissors? \_\_\_\_\_

food? \_\_\_\_\_

clothes? \_\_\_\_\_

D. Why do we have:

(3-0) beds? \_\_\_\_\_

(4-0) books? \_\_\_\_\_

(3-0) toys? \_\_\_\_\_

(4-0) chairs? \_\_\_\_\_

E. What do you: (3-0)

see with? \_\_\_\_\_

hear with? \_\_\_\_\_

smell with? \_\_\_\_\_

talk with? \_\_\_\_\_

F. What is (s)he doing? (3-0)

eating? \_\_\_\_\_ jumping? \_\_\_\_\_ sleeping? \_\_\_\_\_

G. Answers "wh" questions about a picture. (3-0)

H. Name something that: (4-0 to 5-0)

flies. \_\_\_\_\_

walks. \_\_\_\_\_

swims. \_\_\_\_\_

opens. \_\_\_\_\_

**I. Analogies: (4-0)**

An apple is red, but a banana is \_\_\_\_\_.

Ice is cold, but fire is \_\_\_\_\_.

An elephant is big, but a mouse is \_\_\_\_\_.

A rock is hard, but a pillow is \_\_\_\_\_.

**CONCEPTS (RECEPTIVE/EXPRESSIVE)**

3 Correct (3-0)

5 Correct (4-0)

7 Correct (5-0)

A. Prepositions: (receptive) use box with lid and one block  
in out on under over beside (next to) behind (in back of) top bottom

B. Body Parts: (expressive) Names 8 parts (3-0) Names 15 parts (4-0) Names 20 parts (5-0)  
head hair ears eyes nose teeth chin neck shoulder back  
stomach arm elbow hand fingers thumb leg knee foot toes

C. Opposites: (expressive) 1 Correct (4-0) 2 Correct (5-0)  
Example: The opposite of up is down. (Be expressive, use gestures.)  
stop/go hot/cold wet/dry

**EXPRESSIVE LANGUAGE**

**1. SYNTAX/MORPHOLOGY/ARTICULATION**

Sentence Imitation

1. I don't like bedtime.
2. She cooked her food.
3. Five cats are running.
4. Dad's coat is dirty.
5. Where is the car?

**2. CATEGORIZATION SKILLS**

Name 3 animals. \_\_\_\_\_

Name 3 things we ride on. \_\_\_\_\_

**3. ASSOCIATION SKILLS**

What goes with a toothbrush? \_\_\_\_\_

What goes with a sock? \_\_\_\_\_

What goes with a table? \_\_\_\_\_

FLUENCY Normal \_\_\_\_\_

Recheck \_\_\_\_\_

VOICE Normal \_\_\_\_\_

Quality \_\_\_\_\_

Recheck \_\_\_\_\_

**ADDITIONAL COMMENTS:**

THE ASSESSMENT OF PHONOLOGICAL PROCESSES

Barbara Williams Hodson

PHONOLOGICAL SCREENING—PRESCHOOL

Name \_\_\_\_\_ Date \_\_\_\_\_ Examiner \_\_\_\_\_

STIMULI	TRANSCRIPTIONS	CONSONANT OMISSIONS		CLASS DEFICIENCIES			OTHER ERROR PATTERNS
		SINGLETONS	SEQUENCES	STRIDENTS	VELARS	LIQUIDS	
1. boats	b o u t s						
2. fork	f o r k						
3. glasses	g l a s i z						
4. gum	g a m						
5. leaf	l i f						
6. nose	n o u z						
7. rock	r a k						
8. soap	s o u p						
9. spoon	s p u n						
10. star	s t a r						
11. watch	w a t f						
12. zipper	z i p r						
TOTALS							

- Were there three (or more) occurrences of consonant singleton omissions? \_\_\_\_\_
- Were there two (or more) occurrences of consonant sequence reductions? \_\_\_\_\_
- Were strident phonemes lacking five (or more) times? \_\_\_\_\_
- Were velar phonemes lacking two (or more) times? \_\_\_\_\_
- Were liquid phonemes lacking three (or more) times? \_\_\_\_\_
- Were anterior phonemes backed three (or more) times? \_\_\_\_\_

If the answer to two (or more) of the above questions is yes, administer the full phonological assessment instrument.

Copyright © 1988 by The Interscience Publishers & Publishers, Inc.

Additional copies of this form available in packs of 48 each from The Interscience Publishers & Publishers, Inc., Denver, Illinois 61834-0030.

Revised No. 2835



BEST COPY AVAILABLE

**PLEASE COMPLETE AND BRING WITH YOU TO SCREENING**

**HEALTH/DENTAL INFORMATION**

Child's Name \_\_\_\_\_ Birthdate \_\_\_\_\_ Does this

child have medical insurance? Yes No

Do you receive assistance for your child? Yes No

Is your child on a Medicaid card? Yes No

Please provide child's ID# \_\_\_\_\_

**Pregnancy/birth history:**

Please explain *Yes* answers:

Did the mother have problems during the pregnancy or delivery? Yes No

Was the child born more than 3 weeks early or late? Yes No How late or  
early? \_\_\_\_\_ Child's weight \_\_\_\_\_ and length \_\_\_\_\_ at birth.

Was there anything physically wrong with the child at birth? Yes No

Please explain: \_\_\_\_\_

**Health History**

Child's doctor's name and address:

\_\_\_\_\_ and phone number \_\_\_\_\_

Date of last exam? \_\_\_\_\_

Does this child wear (or had them prescribed) glasses? Yes No

Name of eye doctor \_\_\_\_\_ Date of last exam \_\_\_\_\_

Does this child have tubes in ears? Yes No Date child received \_\_\_\_\_

Name of Ear/Nose/Throat specialist \_\_\_\_\_

Date of last exam \_\_\_\_\_

Has this child been hospitalized? Yes No When? \_\_\_\_\_ Please explain why \_\_\_\_\_

Does this child have a history of: \_\_\_\_\_ Please explain *Yes* answers: \_\_\_\_\_

Yes No Frequent sore throats \_\_\_\_\_

Yes No Asthma \_\_\_\_\_

Yes No Seizures, convulsions \_\_\_\_\_

Yes No Epilepsy \_\_\_\_\_

Yes No Heart Disease \_\_\_\_\_

Yes No Urinary problems \_\_\_\_\_

Yes No Frequent stomach pain \_\_\_\_\_

Yes No Frequent vomiting \_\_\_\_\_

Yes No Frequent diarrhea \_\_\_\_\_

Yes No Frequent constipation \_\_\_\_\_

Yes No Bleeding tendencies \_\_\_\_\_

Yes No Ear infections \_\_\_\_\_

Yes No Eye infections \_\_\_\_\_

Yes No Diabetes \_\_\_\_\_

Has the child had any of the following:

Yes	No	Eczema	Yes	No	Whooping Cough	62
Yes	No	Hives	Yes	No	Chicken Pox	
Yes	No	Rheumatic Fever	Yes	No	German Measles	
Yes	No	Scarlet Fever	Yes	No	Measles	
Yes	No	Pneumonia	Yes	No	Mumps	
Yes	No	RSV (Respiratory Syncytial Virus)				

**Medication:**

Does child take a prescription medicine daily? Yes No

Name of medicine \_\_\_\_\_ Dosage \_\_\_\_\_

Name of doctor who prescribed medicine \_\_\_\_\_

Please list allergies:

Medicine	_____
Food	_____
Insect	_____
Other	_____

Describe any health conditions not listed above: \_\_\_\_\_

**Dental Health**

Has the child ever been seen by a dentist? Yes No

Name of dentist: \_\_\_\_\_ Date of last exam \_\_\_\_\_

Does child have any medical problem that may complicate dental treatment? Yes No

Circle any of the following that applies:

Allergies	Diabetes	Respiratory Difficulty	History of Rheumatic Fever
Infectious Diseases	Heart Problems		

Does the child have any trouble with teeth, gums, or mouth that the parent knows about?

Yes No Explain: \_\_\_\_\_

Do you feel that there is an urgent need for the child to be seen by a dentist? Yes No

Explain: \_\_\_\_\_

Does the child regularly brush his/her teeth? Yes No

Has the child ever had a tooth pulled? Yes No

Explain: \_\_\_\_\_

Has the child ever had an accident involving the mouth that required medical treatment?

Yes No Explain: \_\_\_\_\_

The water supply where child lives is: Please circle one.

Well water	City Water	Unknown
------------	------------	---------

Fluoride is received through: Please circle one.

Water Supply	Toothpaste	Mouth Rinse
--------------	------------	-------------

Does the child have any of the following habits?

Thumb Sucking	Yes	No	Lip biting	Yes	No
Nail biting	Yes	No	Lip Sucking	Yes	No
Takes a bottle at night	Yes	No	Takes a bottle during the day	Yes	No

Parent's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Reviewed by: \_\_\_\_\_

Recommendations: \_\_\_\_\_



Appendix F

PARENT OBSERVATION FORM

\*Child's name \_\_\_\_\_ Sex: M F  
 Birthdate \_\_\_\_\_ Child's social security# \_\_\_\_\_

\*Who does this child live with? \_\_\_\_\_

\*What language is spoken in the home? \_\_\_\_\_

\*Please fill in the space/spaces you can answer:

Mother's name \_\_\_\_\_ age \_\_\_\_\_  
 Address \_\_\_\_\_ phone \_\_\_\_\_  
 Employer \_\_\_\_\_ phone \_\_\_\_\_  
 Education: \_\_\_\_\_  
 (put last year attended or GED)

Father's name \_\_\_\_\_ age \_\_\_\_\_  
 Address \_\_\_\_\_ phone \_\_\_\_\_  
 Employer \_\_\_\_\_ phone \_\_\_\_\_  
 Education: \_\_\_\_\_  
 (put last year attended or GED)

Legal Guardian \_\_\_\_\_ age \_\_\_\_\_  
 Address \_\_\_\_\_ phone \_\_\_\_\_  
 Employer \_\_\_\_\_ phone \_\_\_\_\_  
 Education: \_\_\_\_\_  
 (put last year attended or GED)

\*Who is living in the home:

NAME	AGE	SEX	RELATIONSHIP TO CHILD
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

\*If one parent is not living in the home, how often does this child see that parent? \_\_\_\_\_

\*This child has attended:

Nursery school \_\_\_\_\_ Head start \_\_\_\_\_  
 Day care \_\_\_\_\_ Other preschool \_\_\_\_\_

Where? \_\_\_\_\_

Did the teacher have any concerns? Yes or No Tell us about those concerns:

\_\_\_\_\_  
 \_\_\_\_\_

\*When did this child learn to walk?    early    average    late

\*When did this child learn to talk?    early    average    late

\*Does this child talk a lot?    Yes    No

Does this child speak so family can understand?    Yes    No

So outsiders can understand?    Yes    No

\*What kind of games does this child like to play? \_\_\_\_\_  
\_\_\_\_\_

\*What does this child like to watch on TV? \_\_\_\_\_  
\_\_\_\_\_

\*Circle the ones that describe this child:

shy	cheerful/happy	aggressive
outgoing	impulsive	drowsy/lacks pep
caring/loving	nervous	orderly/organized
day dreamer	cooperative	clumsy
active	temper tantrums	responsible
controlling	independent	calm
show off	sad/depressed	feelings hurt easily

\*How do you discipline this child?

scolding                      spanking                      send to room                      time out

or \_\_\_\_\_

take away privileges, what? \_\_\_\_\_

\*What do you like best about this child? \_\_\_\_\_  
\_\_\_\_\_

\*Do you have any concerns about this child? \_\_\_\_\_  
\_\_\_\_\_

\* Does this child have regular sleeping habits? \_\_\_\_\_

If not, what appears to be the problem? \_\_\_\_\_  
\_\_\_\_\_

\* How do you feel we can help this child? \_\_\_\_\_  
\_\_\_\_\_

## Appendix G

## FAMILY SURVEY

Please circle the best answer for your child.

1. Does your child look at or read books on his/her own?  

Always	Sometimes	Never
--------	-----------	-------
  
2. Do you read to your child?  

Always	Sometimes	Never
--------	-----------	-------
  
3. Do you visit the library with your child?  

Always	Sometimes	Never
--------	-----------	-------
  
4. When traveling in a car, do you and your child engage in conversation?  

Always	Sometimes	Never
--------	-----------	-------
  
5. Does your child recognize any common signs (stop sign, Wal-Mart, McDonald's, etc.)?  

Always	Sometimes	Never
--------	-----------	-------
  
6. Do you have family discussions during mealtime?  

Always	Sometimes	Never
--------	-----------	-------
  
7. Does your child ask questions about T.V. programs that you watch together?  

Always	Sometimes	Never
--------	-----------	-------
  
8. Does your child speak in complete sentences?  

Always	Sometimes	Never
--------	-----------	-------
  
9. Can other adults understand your child's speech?  

Always	Sometimes	Never
--------	-----------	-------
  
10. Does your child recognize the letters in his/her name?  

Always	Sometimes	Never
--------	-----------	-------

\*Have your child tell you why they are excited about kindergarten. Please write your child's answer below.



## Appendix I Student Interview

Name \_\_\_\_\_

- |   |      |         |
|---|------|---------|
| 1. Do (would) you like to read?                               | yes  | no      |
| 2. Do your parents read to you?                               | yes  | no      |
| 3. Do you like being read to?                                 | yes  | no      |
| 4. What is your favorite book? _____                          |      |         |
| 5. What kinds of books do you like? _____                     |      |         |
| 6. Do you like books with or without pictures?                | with | without |
| 7. Do you read (look at) anything besides books?              | yes  | no      |
| If yes, what? _____   |      |         |
| 8. Do you think reading is important?                         | yes  | no      |
| Why or why not? _____   |      |         |
| 9. What can you learn from reading? _____                     |      |         |
| 10. Do you like to have your teacher read to you?             | yes  | no      |
| If yes, what do you like to hear? _____                       |      |         |
| 11. When you have free time, what do you like to do?<br>_____ |      |         |
| 12. Do your mom and dad read in their free time?              | yes  | no      |
| If yes, what? _____   |      |         |
| 13. Do you go to the public library?                          | yes  | no      |
| 14. Reading is fun for most people?                           | yes  | no      |
| 15. There are many books that I would like to read.           | yes  | no      |

## Appendix J

# Phonemic-Awareness Inventory

Student Name \_\_\_\_\_ Date \_\_\_\_\_

Directions: Give this inventory orally to each student.

## Whole Word Discrimination

*Are these words the same?* (Circle words child identifies correctly.)

fat-bat

red-rid

slip-slit

dip-hip

nut-nut

grip-grip

man-man

mat-map

flit-flip

## Rhyming Words—Recognition

*Do these words rhyme?* (Circle words child identifies correctly.)

happy-sappy

boy-toy

sun-fun

sad-mad

girl-boy

play-game

## Rhyming Words—Application

*What word rhymes with . . . ?* (Write child's responses on the lines.)

man \_\_\_\_\_

old \_\_\_\_\_

try \_\_\_\_\_

sun \_\_\_\_\_

play \_\_\_\_\_

skip \_\_\_\_\_

eat \_\_\_\_\_

book \_\_\_\_\_

scale \_\_\_\_\_

BEST COPY AVAILABLE

### Oral Synthesis—Blending Speech Sounds

Listen and tell me the word I said. (Say each sound slowly. Circle words child identifies correctly.)

n-o

r-u-n

t-e-n

w-a-s

c-a-k-e

s-ay

f-a-t

c-u-t

h-a-ve

w-e-n-t

m-e

s-i-t

m-o-p

s-ai-d

st-o-r-y

### Approximation

Do you hear the /b/ sound at the beginning, middle, or end of \_\_\_\_\_? (Circle words child identifies correctly.)

big

robot

banana

tab

cabbage

crib

### Phoneme Isolation

What sound do you hear \_\_\_\_\_? (Circle words child identifies correctly.)

FirstLastMiddle

sun

water

feet

foot

buff

tub

yes

candy

lake

red

ten

pan

BEST COPY AVAILABLE

### Segmentation

Repeat each word slowly so I can hear each separate sound, like c-a-t. (Say a word and have child repeat it slowly, separating each phoneme.)

me	you	book
so	play	skip
man	old	scale

### Phoneme Deletion

Say the word \_\_\_\_\_, but leave off the \_\_\_\_\_. (Repeat, asking child to delete beginning or ending sounds.)

pop	dip	not	cub	fin
can	ten	tab	mop	set

### Phoneme Substitution

Replace the first sound in \_\_\_\_\_ with \_\_\_\_\_. What is the new word? (Repeat, asking child to substitute middle and ending sounds.)

pail	log	get
cat	tub	pop
pig	dice	jump

BEST COPY AVAILABLE

## Appendix K

## Phonemic Awareness

## Teacher Observations and Anecdotal Records

Name \_\_\_\_\_

Date \_\_\_\_\_

Appendix L

Actions Taken:

Reflection:

PLUSES (+)	MINUSES (-)	INTERESTING (?)

Comments, Notes (Continued on back, as needed):

## Appendix M

### Phonological Task Definitions

**Whole Word Discrimination:** The ability to hear likenesses and differences of word pairs.

**Rhyming:** The ability to hear, identify, and match similar word patterns. The use of both auditory and visual learning devices (e.g., chants, songs, and pictures cards) help children focus on and compare sound patterns. The goal is to help children develop stronger auditory discrimination and awareness.

**Rhyming Word Application:** The ability to hear, identify, and produce similar word patterns. The goal is for the child to be able to create new words from a consonant-vowel-consonant (C-V-C) word.

**Sound Blending:** The ability to hear sounds in sequence and blend them together to make words (robot talk) The goal is for a child to be able to recognize and identify the whole word when given the sounds in isolation.

**Approximation:** The ability to discriminate the beginning, middle, and ending phonemes. The goal is for the child to be able to identify where a given sound is heard in a word.

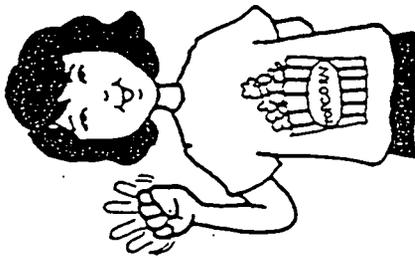
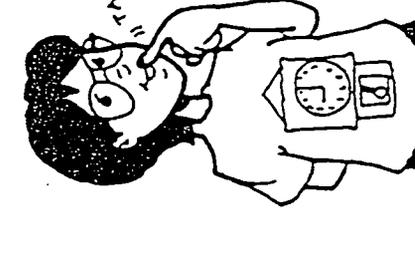
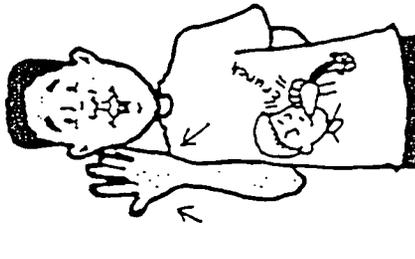
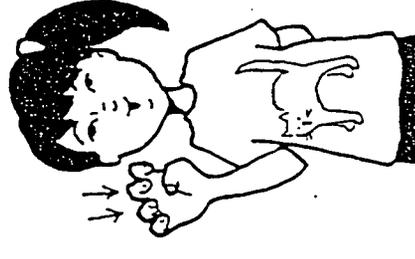
**Phoneme Isolation:** The ability to hear and identify beginning, middle, and ending phonemes in a word. The goal is for the child to be able to produce an isolated sound in a given position in a within a word.

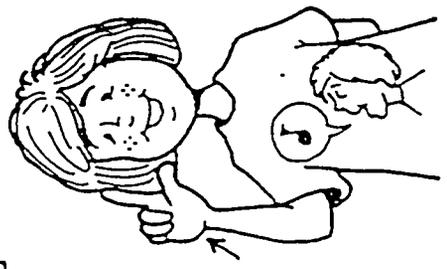
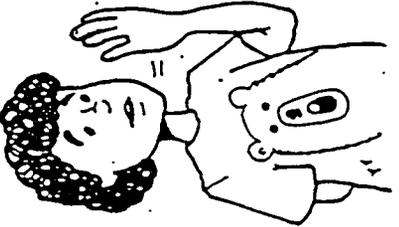
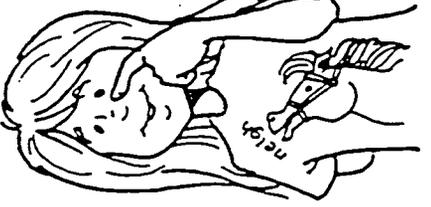
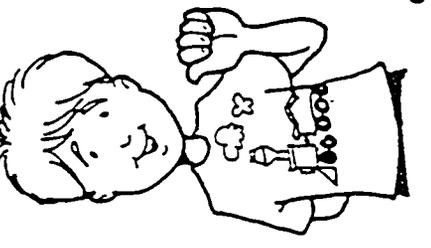
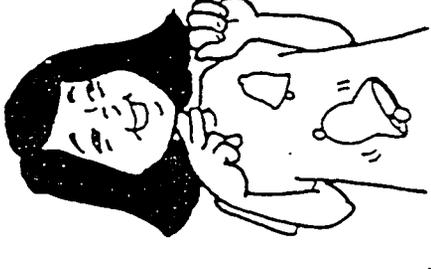
**Segmenting:** The ability to break down the whole word into it's component parts. The goal is for the student to be able to identify the individual sounds within a word.

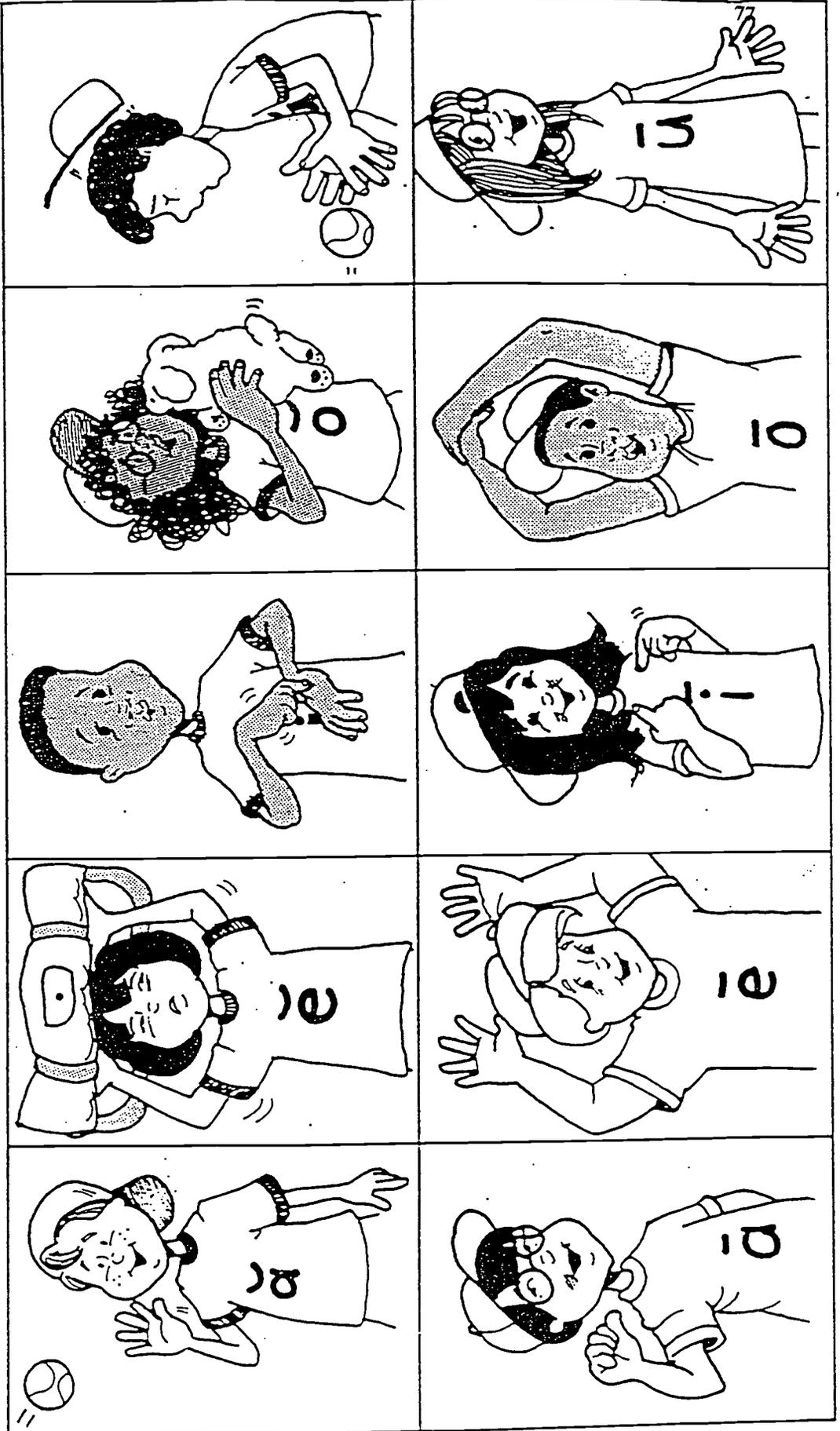
**Phoneme Deletion:** The ability to omit beginning or ending sounds of a word. The goal is for the child to be able to delete specific sounds as directed.

**Phoneme Substitution:** The ability to substitute beginning, middle, and ending sounds of a word. The goal is for the child to be able to make a new word by adding the substituted phoneme.

hand signals Appendix N

<p><b>P</b></p>  <p><b>p</b></p>	<p><b>B</b></p>  <p><b>b</b></p>	<p><b>M</b></p>  <p><b>m</b></p>	<p><b>T</b></p>  <p><b>t</b></p>	<p><b>D</b></p>  <p><b>d</b></p>
<p><b>K</b></p>  <p><b>k</b></p>	<p><b>G</b></p>  <p><b>g</b></p>	<p><b>F</b></p>  <p><b>f</b></p>	<p><b>V</b></p>  <p><b>v</b></p>	<p><b>H</b></p>  <p><b>h</b></p>

<p>L</p> 	<p>R</p> 	<p>N</p> 	<p>Sh</p> 	<p>Ch</p> 	<p>J</p> 	<p>S</p> 	<p>Z</p> 	<p>W</p> 	<p>Y</p> 
--	--	---	---	---	--	--	---	--	--



## Appendix O

Dear Parents,

Did you know that children develop reading skills long before being introduced to written language? Playing with and practicing oral language helps children become better readers. In fact, phonemic awareness - the ability to differentiate and manipulate letter sounds - is critical to beginning reading development. Help your child become a better reader by practicing phonemic awareness activities at home.

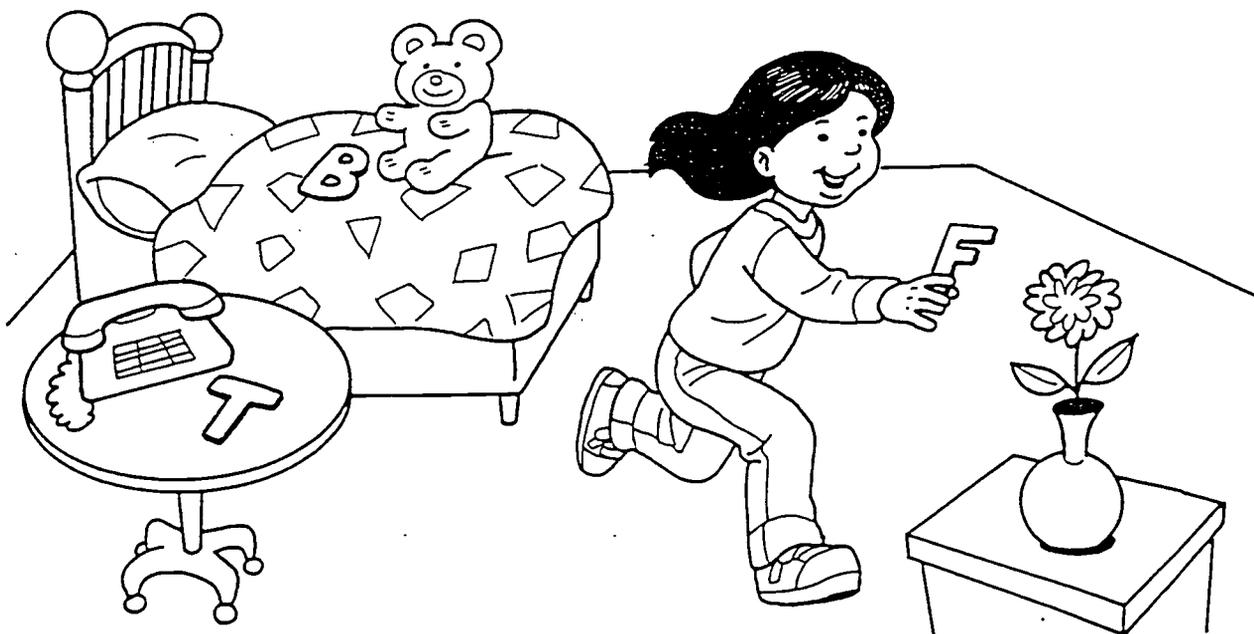
- o Draw your child's attention to the sounds of his or her language with silly songs and poems. Include favorites such as: *Down by the Bay* by Raffi, *It You're Happy and You Know It* by Nicki Weiss, *Sing Hey Diddle Diddle: 66 Nursery Rhymes with Their Traditional Tunes* by Beatrice Harrop, and *Six Sick Sheep: 101 Tongue Twisters* by Joanne Cole.
- o Read and reread stories that play with language. Some excellent books include: *There's a Wocket in My Pocket*, by Dr. Seuss, *Silly Sally* by Audrey Wood, and *More Spaghetti, I Say!* by Rita Gelman.
- o Have your child listen to and chant along with stories on tape. Make your own tape of songs and stories for your child to enjoy.
- o Substitute and delete letters from common words to create your own silly sayings. For example, substitute *T* for *N* to change *Tommy eats tuna* to *Nommy eats mina*. Celebrate Silly Word Day by speaking in rhyme or by greeting family members, replacing the first letter of their names with the letter of the day, such as *Faula* for *Paula*.



Dear Parents,

Before your child can learn to read, he or she needs to understand the connection between sounds and letters. Teaching your child to say and write the ABC's is not enough. Children need to hear and practice letter sounds as they see and write the symbols. Use the following activities to help your child associate sounds to written language.

- o Have your child trace letters on multi-sensory surfaces such as cloth or sand. Ask him or her to say the corresponding sound as each letter is written.
- o Construct letters using various materials such as macaroni, clay, or pipe cleaners. Have your child say the corresponding sounds as he or she feels each letter.
- o Place magnetic letters on the refrigerator for your child to practice letter names and sounds, form words, and/or create messages.
- o Have your child match letters to objects in and around the house. For example, place a plastic letter *B* on a bed, *T* on a table, and *F* by a flower.
- o Draw your child's attention to letters and words in his or her environment, such as signs, cereal boxes, toy boxes, and menus.



Dear Parents,

As your child enters the wonderful world of reading, share in the enthusiasm and excitement by reading to him or her regularly. Your child will treasure these special times together, and you will be helping him or her become familiar with the sounds of the English language. Use the following tips as you read aloud and share favorite stories with your child.

- o Select stories both you and your child will enjoy, such as those pertaining to a favorite hobby or sport. Include silly rhymes, chants, and tongue twisters for extra fun.
- o Encourage your child to predict what comes next by looking at pictures or listening to word clues. For example, *Jack and Jill went up the \_\_\_\_\_*.
- o Point out letter sounds in words as you read. Highlight words that have a specific phonetic sound, such as those that contain the /b/ sound. Have your child identify rhyming words aloud as you point to them in the story.
- o Look for words with similar letter patterns (c-at, f-at). Have your child think of additional words with the same sound patterns.
- o Dramatize your voice as you read. Your child will delight in hearing words "come to life." Take turns reading different parts, or invite your child to act out each role as you share stories aloud.



## Appendix P

Head and Shoulders

Rhyming Task: (Find names of parts of your body to rhyme with these words.)

1. bed
2. egg
3. bows
4. farm
5. boulders

Sound Blending Task: (If you think you know this word, shout it out.)

1. shoul - ders
2. h - ead
3. t - oe - s
4. ar - m
5. l - eg

Beginning Sound Task: (We know words that start with / /.)

1. /h/ (head)
2. /t/ (toes)
3. /l/ (leg)
4. /ar/ (arm)
5. /sh/ (shoulder)

## Open, Shut Them

Rhyming Task: (Make lists of words to rhyme with these body parts.)

- |          |          |
|----------|----------|
| 1. chin  | 6. hair  |
| 2. eye   | 7. ear   |
| 3. cheek | 8. lap   |
| 4. toes  | 9. head  |
| 5. hand  | 10. knee |

Beginning Sound Task: (We know words that start with //.)

1. /o/ (open)
2. /m/ (mouth)
3. /l/ (little, lay, lap)
4. /sh/ (shut)
5. /ch/ (chin)

Making Word Task: (Form these word combinations from the word "hands.")

an  
and  
as  
had  
sad

## If You're Happy and You Know It

Beginning Sound Task: (We know words that start with / /.)

- |                               |                  |
|-------------------------------|------------------|
| 1. /h/ (happy, hands, hooray) | 6. /f/ (face)    |
| 2. /y/ (you, you're)          | 7. /d/ (do)      |
| 3. /n/ (know)                 | 8. /w/ (will)    |
| 4. /c/ (clap)                 | 9. /i/ (it)      |
| 5. /sh/ (shout, show)         | 10. /th/ (three) |

Sound Blending Task: (If you think you know this word, shout it out.)

- |              |                 |
|--------------|-----------------|
| 1. hap - py  | 6. f - ace      |
| 2. hoo - ray | 7. d - o        |
| 3. sh - out  | 8. kn - ow      |
| 4. c - lap   | 9. sh - ou - t  |
| 5. h - ands  | 10. th - r - ee |

## Here We Go Round the Mulberry Bush

Sound Blending Task: (If you think you know this word, shout it out.)

- |                |                 |
|----------------|-----------------|
| 1. mul – berry | 6. h – air      |
| 2. mor – ning  | 7. w – ay       |
| 3. ear – ly    | 8. f – a – ce   |
| 4. sh – oes    | 9. br – u – sh  |
| 5. s – chool   | 10. t – ee – th |

Beginning Sound Task: (We know words that start with / /.)

- |                        |                      |
|------------------------|----------------------|
| 1. /m/ (mulberry)      | 6. /r/ (round)       |
| 2. /h/ (here, hair)    | 7. /b/ (bush, brush) |
| 3. /s/ (so, school)    | 8. /t/ (teeth)       |
| 4. /w/ (we, wash, way) | 9. /f/ (face, food)  |
| 5. /c/ (comb)          | 10. /g/ (go)         |

## I Have Two Eyes

Rhyming Task: (Make lists of words that rhyme with these actions.)

- |         |          |
|---------|----------|
| 1. see  | 6. run   |
| 2. kiss | 7. sing  |
| 3. hear | 8. hop   |
| 4. eat  | 9. say   |
| 5. clap | 10. wave |

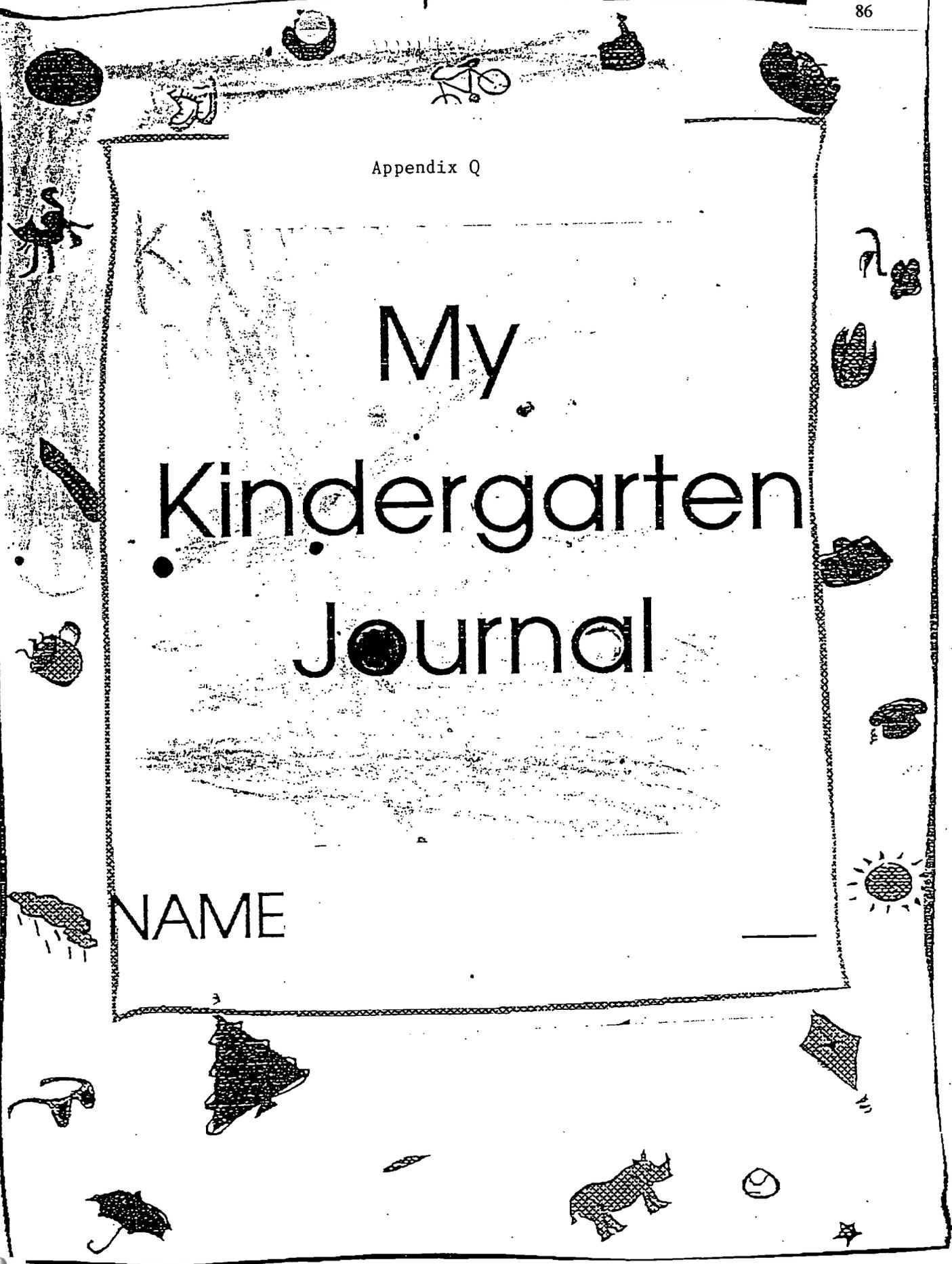
Making Words Task: (Form these word combinations from the word "hands.")

had	sand
has	sad
as	an
Dan	ad

Appendix Q

# My Kindergarten Journal

NAME \_\_\_\_\_

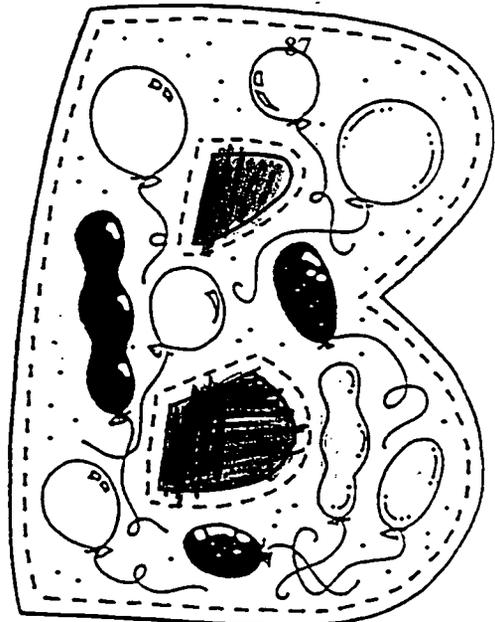


SEP 16 1997

Bb b b t

bed bag

by e b a  
b o p



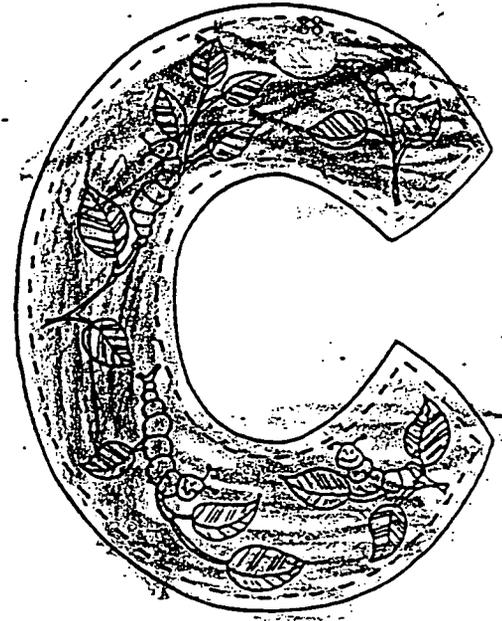
bee

by s

BEST COPY AVAILABLE

CAT  
CATTIE  
cat  
cotton  
crow  
corn

JAN 13 1998



CANDY  
CARROT  
COREY  
CHELSEA

CHERRY  
CHRIS  
CAITIE  
CHEEK  
COP  
HOW  
ONNIE

BEST COPY AVAILABLE

## Appendix R

Acorns Falling

Making Word Task: (Form these word combinations from the word “acorns.”)

can  
ran  
an

corn  
car  
scar

Sound Blending Task: (If you think you know this word, shout it out.)

- |               |               |
|---------------|---------------|
| 1. a – corns  | 6. o – n      |
| 2. fal – ling | 7. a – ll     |
| 3. t – ree    | 8. p – I – ck |
| 4. g – round  | 9. th – e     |

Beginning Sound Task: (We know words that start with //. Think of theme words.)

- |                          |                       |
|--------------------------|-----------------------|
| 1. /f/ (fall, from)      | 6. /n/ (nuts)         |
| 2. /s/ (squirrel, save)  | 7. /h/ (hiding, hole) |
| 3. /l/ (leaves, looking) | 8. /b/ (brown)        |
| 4. /a/ (acorns)          | 9. /p/ (pick up)      |
| 5. /g/ (ground, gather)  | 10. /t/ (tree, tan)   |

Segmenting Task: (Tap out these words.)

- |            |                   |
|------------|-------------------|
| 1. acorns  | 5. ground         |
| 2. tree    | 6. acorns falling |
| 3. falling | 7. from the tree  |
| 4. pick up | 8. on the ground  |

## The Apple Tree

Rhyming Task: (Make lists of words that rhyme with these words.)

- |         |           |
|---------|-----------|
| 1. tree | 6. up     |
| 2. way  | 7. at     |
| 3. two  | 8. down   |
| 4. high | 9. came   |
| 5. good | 10. shook |

Sound Blending Task: (If you think you know this word, shout it out.)

- |              |                           |
|--------------|---------------------------|
| 1. u - p     | 6. h - a - r - d          |
| 2. lit - tle | 7. d - ow - n             |
| 3. ap - ples | 8. g - oo - d             |
| 4. h - igh   | 9. sh - oo - k            |
| 5. t - ree   | 10. s - m - i - l - e - d |

Segmenting Task: (Tap out these words.)

- |                      |                       |
|----------------------|-----------------------|
| 1. apples            | 5. smiled at me       |
| 2. tree              | 6. in the apple tree  |
| 3. way up high       | 7. I shook that tree  |
| 4. two little apples | 8. as hard as I could |

## Five Little Pumpkins

Rhyming Task: (Make lists of words that rhyme with these words.)

- |          |           |
|----------|-----------|
| 1. gate  | 6. first  |
| 2. sit   | 7. five   |
| 3. air   | 8. out    |
| 4. run   | 9. witch  |
| 5. light | 10. third |

Segmenting Task: (Tap out these words.)

1. five little pumpkins
2. sitting on the gate
3. oh my it's getting late
4. there are witches in the air
5. but we don't care
6. let's run and run and run
7. I'm ready for some fun
8. ooh went the wind
9. and out went the light
10. the five little pumpkins rolled out of sight

## The Bat Flies Here

Rhyming Task: (Make lists of words that rhyme with these words.)

- |         |           |
|---------|-----------|
| 1. up   | 6. slow   |
| 2. out  | 7. fast   |
| 3. in   | 8. high   |
| 4. low  | 9. here   |
| 5. down | 10. there |

Beginning Sound Task: (We know words that start with / /.)

- |                     |                       |
|---------------------|-----------------------|
| 1. /b/ (bat, bye)   | 6. /th/ (there, the)  |
| 2. /s/ (says, slow) | 7. /ch/ (chin)        |
| 3. /d/ (down)       | 8. /l/ (low)          |
| 4. /t/ (time)       | 9. /g/ (go, good-bye) |
| 5. /h/ (here, high) | 10. /f/ (flies, fast) |

Making Words Task: (Form these word combinations from the word “tricks.”)

- |     |      |
|-----|------|
| it  | is   |
| sit | sick |
| kit | tick |

## The Owl Says Who!

Beginning Sound Task: (We know words that start with / /.)

- |                             |                          |
|-----------------------------|--------------------------|
| 1. /p/ (pumpkins, pirates)  | 5. /t/ (tricks, treats)  |
| 2. /c/ (cat, costume)       | 6. /w/ (witch, werewolf) |
| 3. /b/ (boo!, bones)        | 7. /m/ (mask, monsters)  |
| 4. /h/ (Halloween, haunted) | 8. /g/ (ghost, goblin)   |

Sound Blending Task: (If you think you know this word, shout it out.)

- |                    |                  |
|--------------------|------------------|
| 1. pump – kin      | 5. gh – ost      |
| 2. Hal – lo – ween | 6. w – itch      |
| 3. cos – tume      | 7. scare – crow  |
| 4. c – a – t       | 8. m – a – s – k |

Making Words Task: (Form these word combinations from the word “tricks.”)

it  
sit  
kit

is  
sick  
tick

## Eensy Weensy Spider

Beginning Sound Task: (We know words that start with / /.)

- |                                |                      |
|--------------------------------|----------------------|
| 1. /s/ (spider, spout, sun)    | 5. /r/ (rain)        |
| 2. /w/ (water, weensy, washed) | 6. /u/ (up)          |
| 3. /ee/ (eensy)                | 7. /k/ (came)        |
| 4. /sp/ (spider, spout)        | 8. /d/ (down, dried) |

Sound Blending Task: (If you think you know this word, shout it out.)

- |              |                           |
|--------------|---------------------------|
| 1. wa – ter  | 6. s – pout               |
| 2. u – p     | 7. r – ai – n             |
| 3. spi – der | 8. een – sy               |
| 4. s – u – n | 9. w – a – sh – ed        |
| 5. s – pider | 10. s – p – i – d – e – r |

Segmenting Task: (Tap out these words.)

- |                            |                              |
|----------------------------|------------------------------|
| 1. eensy                   | 6. down came the rain        |
| 2. spider                  | 7. and washed the spider out |
| 3. eensy weensy            | 8. out came the sun          |
| 4. the eensy weensy spider | 9. and dried up all the rain |
| 5. went up the water spout | 10. went up the spout again  |

## Appendix S

### Peanut. Peanut Butter

Beginning Sound Task: (We know words that start with //.)

- |                   |                   |
|-------------------|-------------------|
| 1. /p/ (peanut)   | 5. /g/ (grapes)   |
| 2. /j/ (jelly)    | 6. /n/ (nuts)     |
| 3. /b/ (bread)    | 7. /sm/ (smash)   |
| 4. /s/ (sandwich) | 8. /spr/ (spread) |

Sound Blending Task: (If you think you know this word, shout it out.)

- |                |               |
|----------------|---------------|
| 1. pea – nut   | 5. ea – t     |
| 2. but – ter   | 6. b – read   |
| 3. jel – ly    | 7. s – mash   |
| 4. sand – wich | 8. t – a – ke |

Segmentation: (Tap out these words.)

- |                                 |                               |
|---------------------------------|-------------------------------|
| 1. peanut                       | 6. and you squeeze them       |
| 2. peanut, peanut butter, jelly | 7. then you take some bread   |
| 3. first you take the peanuts   | 8. and you spread it          |
| 4. and you smash them           | 9. then you take the sandwich |
| 5. then you take the grapes     | 10. and you eat it            |

Deletion Task: (What would “peanut butter” be without “peanut”?)

1. peanut butter without (peanut)
2. bread without (b)
3. jelly without (j)
4. peanut without (pea)
5. sandwich without (sand)

Making Words Task: (Form these word combinations from the word “sandwich”)

Sad had win sin chin wind can hand sand and in an

## Over the River

Rhyming Words Task: (Make lists of words that rhyme with these words.)

- |           |            |
|-----------|------------|
| 1. go     | 6. cap     |
| 2. spy    | 7. knows   |
| 3. done   | 8. river   |
| 4. sleigh | 9. through |
| 5. house  | 10. wood   |

Segmentation: (Tap out these words.)

- |                                |                                       |
|--------------------------------|---------------------------------------|
| 1. over the river              | 6. through the white and drifted snow |
| 2. and through the woods       | 7. now grandmother's cap I spy        |
| 3. to grandmothers house we go | 8. hurrah for the fun                 |
| 4. the horse knows the way     | 9. is the pudding done                |
| 5. to carry the sleigh         | 10. hurrah for the pumpkin pie        |

Deletion Task: (What would "grandmother" be without "grand"?)

1. grandmother without (grand)
2. snow without (s)
3. pie without (p)
4. house without (h)
5. river without (ri)

Making Words Task: (Form these word combinations from the word "grandma".)

mad man ran and grand ad am an ram

## A Hunting We Will Go

Rhyming Task: (Make lists of words that rhyme with these animals.)

- |          |             |
|----------|-------------|
| 1. mouse | 6. sheep    |
| 2. frog  | 7. cat      |
| 3. bug   | 8. bee      |
| 4. bear  | 9. seal     |
| 5. goat  | 10. raccoon |

Sound Blending Task: (If you think you know this word, shout it out.)

- |                |                |
|----------------|----------------|
| 1. kanga - roo | 6. f - i - sh  |
| 2. f - ox      | 7. wh - a - le |
| 3. hun - ting  | 8. h - I - m   |
| 4. b - ox      | 9. p - ai - l  |
| 5. w - e       | 10. d - i - sh |

Segmentation Task: (Tap out these words.)

- |               |                          |
|---------------|--------------------------|
| 1. kangaroo   | 6. put him in a zoo      |
| 2. hunting    | 7. a hunting we will go  |
| 3. in a box   | 8. we'll catch a fox     |
| 4. let him go | 9. and put him in a box  |
| 5. never      | 10. and never let him go |

## Appendix T

### All Around the Countryside

Sound Blending Task: (If you think you know this word, shout it out.)

- |                   |               |
|-------------------|---------------|
| 1. country – side | 6. m – e      |
| 2. every – one    | 7. c – ow     |
| 3. far – mer      | 8. ch – ased  |
| 4. chil – dren    | 9. m – a – n  |
| 5. f – ox         | 10. r – a – n |

Segmentation Task: (Tap out these words.)

1. countryside
2. everyone
3. all around the countryside
4. the children chased the cookie
5. the cookie ran past everyone
6. run, you can't catch me
7. past the woman and the man
8. the farmer the cow the bunny
9. the he ran up to the fox
10. gulp, in his tummy

## Jingle Bells

Beginning Sound Task: (We know words that start with / /. Think of winter words.)

- |                         |                          |
|-------------------------|--------------------------|
| 1. /s/ (sleigh, snow)   | 6. /c/ (cold, coat)      |
| 2. /w/ (white, winter)  | 7. /b/ (boots, bells)    |
| 3. /j/ (jingle, jacket) | 8. /h/ (horse, hat)      |
| 4. /m/ (mittens, muff)  | 9. /sl/ (sled, slippery) |
| 5. /f/ (freezing, fun)  | 10. /sk/ (skate, ski)    |

Sound Blending Task: (If you think you know this word, shout it out.)

- |                  |                |
|------------------|----------------|
| 1. open – sleigh | 5. r – ide     |
| 2. jin – gle     | 6. f – u – n   |
| 3. b – ells      | 7. h – or – se |
| 4. o – pen       | 8. w – ay      |

Segmentation Task: (Tap out these words.)

- |                          |                                     |
|--------------------------|-------------------------------------|
| 1. jingle                | 6. to ride                          |
| 2. open sleigh           | 7. jingle bells, jingle bells       |
| 3. oh what fun           | 8. jingle all the way               |
| 4. all the way           | 9. oh what fun it is to ride        |
| 5. one horse open sleigh | 10. in a one horse open sleigh, hey |

Deletion Task: (What would “open sleigh” be without “open”?)

1. open sleigh without (open)
2. open without (o)
3. jingle without (jing)
4. sleigh without (s)
5. horse without (h)
6. ride without (r)
7. fun without (f)
8. bells without (b)

## Santa Claus is Coming to Town

Rhyming Task: (Make list of words that rhyme with these words.)

- |          |             |
|----------|-------------|
| 1. watch | 6. better   |
| 2. out   | 7. cry      |
| 3. pout  | 8. town     |
| 4. Santa | 9. sleeping |
| 5. bad   | 10. good    |

Beginning Sound Task: (We know words that start with //.)

- |                               |                                |
|-------------------------------|--------------------------------|
| 1. /b/ (better, be, been)     | 5. /s/ (Santa, sleeping, sees) |
| 2. /w/ (watch, when, why)     | 6. /c/ (cry, coming)           |
| 3. /n/ (not, naughty, nice)   | 7. /p/ (pout)                  |
| 4. /t/ (town, telling, twice) | 8. /g/ (good, goodness)        |

Sound Blending Task: (If you think you know this word, shout it out.)

- |                |                |
|----------------|----------------|
| 1. San – ta    | 5. cr – y      |
| 2. good – ness | 6. p – ou – t  |
| 3. g – oo – d  | 7. t – ow – n  |
| 4. n – i – ce  | 8. sleep – ing |

Deletion Task: (What would “Santa Claus” be without “Santa”?)

1. Santa Claus without (Santa)
2. Santa without (s)
3. cry without (cr)
4. sleeping without (ing)
5. goodness without (good)
6. town without (t)
7. nice without (n)
8. better without (er)

## We Wish You a Merry Christmas

Sound Blending Task: (If you think you know this word, shout it out.)

- |                  |                |
|------------------|----------------|
| 1. Christ – mas  | 6. m – erry    |
| 2. dan – cing    | 7. w – i – sh  |
| 3. clap – ping   | 8. y – ear     |
| 4. hap – py      | 9. ch – ee – r |
| 5. stre – tching | 10. s – i – ng |

Beginning Sound Task: (We know words that start with / /.)

- |                    |                        |
|--------------------|------------------------|
| 1. /m/ (merry)     | 6. /d/ (dancing, do)   |
| 2. /c/ (Christmas) | 7. /l/ (let's, little) |
| 3. /n/ (new)       | 8. /h/ (happy)         |
| 4. /w/ (wish, we)  | 9. /a/ (a, all)        |
| 5. /y/ (you, year) | 10. /s/ (stretching)   |

Deletion Task: (What would “new year” be without “new”?)

1. new year without (new)
2. Christmas without (Chris)
3. wish without (w)
4. merry without (m)
5. happy without (h)
6. dancing without (dan)
7. clapping without (clap)
8. we without (w)
9. little without (lit)
10. cheer without (ch)

## Appendix U

### Frosty the Snowman

Beginning Sound Task: (We know words that start with / /.)

- |                              |                           |
|------------------------------|---------------------------|
| 1. /f/ (Frosty, found)       | 6. /h/ (happy, hat, head) |
| 2. /s/ (snowman, snow, soul) | 7. /c/ (corn, cob, coal)  |
| 3. /d/ (day, dance)          | 8. /p/ (pipe, play)       |
| 4. /b/ (button, black)       | 9. /n/ (nose, know)       |
| 5. /t/ (two, tale)           | 10. /m/ (magic, me)       |

Sound Blending Task: (If you think you know this word, shout it out.)

1. snow – man
2. Fros – ty
3. jol – ly
4. s – now
5. chil – dren
6. h – a – t
7. m – a – gic
8. p – I – pe
9. b – l – a – ck
10. c – or – n

## I'm a Little Snowman

Rhyming Task: (Make list of words that rhyme with these things related to snowmen.)

- |          |          |
|----------|----------|
| 1. snow  | 6. hat   |
| 2. fat   | 7. ball  |
| 3. white | 8. cold  |
| 4. round | 9. melt  |
| 5. stick | 10. Coal |

Sound Blending Task: (If you think you know this word, shout it out.)

- |               |                   |
|---------------|-------------------|
| 1. snow – man | 5. h – a – t      |
| 2. lit – tle  | 6. c – a – n      |
| 3. p – lay    | 7. r – ou – n – d |
| 4. s – un     | 8. s – carf       |

Segmentation Task: (Tap out these words.)

- |                         |                              |
|-------------------------|------------------------------|
| 1. snowman              | 6. here is my scarf          |
| 2. little               | 7. here is my hat            |
| 3. my scarf             | 8. when the sun comes out    |
| 4. I'm a little snowman | 9. I melt away               |
| 5. round and fat        | 10. now I can no longer play |

Deletion Task: (What would “snowman” be without “snow”?)

1. snowman without (snow)
2. little without (lit)
3. fat without (f)
4. hat without (h)
5. sun without (s)
6. away without (a)
7. snowman without (s)
8. play without (p)

## The Chubby Little Snowman

Beginning Sound Task: (We know words that start with / /.)

- |                                 |                       |
|---------------------------------|-----------------------|
| 1. /b/ (bunny)                  | 6. /ch/ (chubby)      |
| 2. /s/ (snowman, suppose)       | 7. /n/ (nose, nibble) |
| 3. /l/ (little, lunch, looking) | 8. /d/ (do)           |
| 4. /h/ (hungry, had)            | 9. /th/ (that, the)   |
| 5. /c/ (carrot, crunch)         | 10. /w/ (what)        |

Sound Blending Task: (If you think you know this word, shout it out.)

- |               |               |
|---------------|---------------|
| 1. snow – man | 5. y – ou     |
| 2. car – rot  | 6. l – unch   |
| 3. n – ose    | 7. l – oo – k |
| 4. chub – by  | 8. n – o – se |

Segmentation Task: (Tap out these words.)

- |                              |                                   |
|------------------------------|-----------------------------------|
| 1. snowman                   | 6. and what do you suppose        |
| 2. chubby                    | 7. that hungry little bunny       |
| 3. the chubby little snowman | 8. looking for his lunch          |
| 4. had a carrot nose         | 9. ate that snowman's carrot nose |
| 5. along came a bunny        | 10. nibble, nibble, crunch        |

Making Words Task: (Form these word combinations from the word "snowing".)

in on win sin won son now sow snow song sing wing swing

## Five Enormous Dinosaurs

Rhyming Task: (Make lists of words that rhyme with these numbers.)

- |          |          |
|----------|----------|
| 1. nine  | 6. four  |
| 2. eight | 7. three |
| 3. seven | 8. two   |
| 4. six   | 9. one   |
| 5. five  | 10. None |

Making Words Task: (Form these word combinations from the word "extinct".)

in tin ten tent cent tint text next

### Five Little Monkeys

Rhyming Task: (Find words to rhyme with these body parts.)

- |         |          |
|---------|----------|
| 1. knee | 6. hand  |
| 2. eye  | 7. ear   |
| 3. toe  | 8. nose  |
| 4. hair | 9. back  |
| 5. side | 10. neck |

Sound Blending Task: (If you think you know this word, shout it out.)

- |               |               |
|---------------|---------------|
| 1. mo – ther  | 5. h – ead    |
| 2. f – ive    | 6. b – e – d  |
| 3. f – our    | 7. doc – tor  |
| 4. mon – keys | 8. s – ai – d |

Segmentation Task: (Tap out these words.)

- |                             |                        |
|-----------------------------|------------------------|
| 1. five little monkeys      | 6. and the doctor said |
| 2. jumping on the bed       | 7. no more monkeys     |
| 3. one fell off             | 8. jumping on the bed  |
| 4. and bumped his head      | 9. get those monkeys   |
| 5. mother called the doctor | 10. back in bed        |

Deletion Task: (What would “monkeys” be without “mon”?)

1. monkeys without (mon)
2. mother without (mo)
3. head without (h)
4. doctor without (doc)
5. bed without (bed)
6. said without (s)
7. five without (f)
8. four without (f)

## Appendix V

### Rhyme Rattle

Task: sound matching

#### Materials

nursery rhymes  
noise makers

#### Directions

1. Review and discuss rhyming words.  
Say three words, two of which rhyme, and have children identify the rhyming pair.
2. Tell children the number of rhyming pairs in a nursery rhyme (e.g., Jill, hill), and challenge them to listen for and find them as you read it aloud.
3. Distribute noisemakers. Read the nursery rhyme again, and invite children to use their noisemakers each time they hear the second half of a rhyming pair.

### Sing a Song of Sounds

Task: sound matching

#### Material

picture cards (any cards from previous activities)

#### Directions

1. Have children sing the following song to the tune of "If You're Happy and You Know It."  

*If your name begins with /m/, stand up,  
If your name begins with /m/, stand up,  
If your name begins with /m/, stand up and take a bow,  
If your name begins with /m/, stand up.*
2. Repeat with different phonemes and movements such as clapping your hands, turning around, touching your toes, or jumping up and down.
3. As a variation, have children use picture cards with the song. For example, *If your picture begins with /s/, stand up.*

## Appendix W

### Name Chant

Task: phoneme blending

Materials  
class list

Directions

1. Say the following chant to children:  
*It begins with /t/,  
 And it ends with /im/,  
 Put them together,  
 And they say \_\_\_\_\_. (Tim)*
2. Have children blend the sounds together and chorus the correct answer.
3. Repeat the chant using each student's name. Invite children to stand and bow when their names are spoken.

### Mystery Box

Task: phoneme blending

Materials  
storage box  
permanent marker  
self-adhesive paper  
art or cooking supplies

Directions

1. Wrap a box with self-adhesive paper and label it *Mystery Box*.
2. Place all ingredients or supplies for an art or cooking project into the box.
3. Have children guess the identity of each hidden object using phoneme clues. For example, when making applesauce say, *Today we will be making applesauce. One item we will need is /a/ /p/ /l/ /s/.* When students chorus the correct answer, pull apples from the box to show they are correct.
4. Save the Mystery Box to introduce future cooking, art, and science projects.

## Appendix X

### What Big Ears You Have!

Task: phoneme isolation

#### Materials

Mickey Mouse hat or paper elephant ears

#### Directions

1. Use Mickey Mouse ears to emphasize the importance of listening to sounds. Say the following verse with children. Choose a child to wear the Mickey Mouse ears and identify the sound (/d/).
 

Children: *Listen, listen, loud and clear*  
*What's the first sound that you hear?*

Teacher: *Doggie, dolly, dark, and daddy*  
 Children: *Tell me, tell me, what you hear.*
2. Repeat with new word patterns. Modify the verse to identify middle and ending sounds (e.g., *What's the last sound that you hear?*).

### All Aboard the Sound Train

Task: phoneme segmentation, phoneme isolation

#### Materials

train pattern (engine, car, and caboose)

picture cards

overhead projector, transparency, and marker

counters

#### Directions

1. Use a transparency to guide children through this activity. Give each child a train and five counters. Ask students to place a counter below each engine, car or caboose.
2. Have children pronounce picture names aloud, one at a time, either to you, or a partner. Ask them to slide a counter into a car with each sound they hear. (For example, for the cat picture, they would slide counters into three cars, one for each phoneme in the word.) Have more advanced learners write corresponding letters instead of using counters.

## Appendix Y

### Sound Switch

Task: phoneme substitution, phoneme blending, matching sounds to letters

#### Materials

large alphabet cards (two sets)  
pocket chart

#### Directions

1. Place letters in a pocket chart to form a simple one-syllable word (e.g., *cat*).  
Distribute other letters to students.
2. Point to each letter in the pocket chart and have the class say the sound.  
Ask children to blend the sounds together to form the word.
3. Invite volunteers to create new words by placing their letters over those in the pocket chart, such as placing the letter *m* over *c* to form the word *mat*. Have children blend the new sounds together and decide whether or not the new word makes sense.
4. Place new one-syllable words in the pocket chart and repeat the process.

### Alphabet House

Tasks: phoneme substitution, phoneme deletion, phoneme isolation, phoneme blending, matching sounds to letters

#### Materials

items to make alphabet house (construction paper, scissors, tape, metal cookie sheet)  
magnetic letters

#### Directions

1. In advance, cut out a construction paper house.  
Cut three adjacent windows below the roof. Tape the house to a cookie sheet.
2. Display magnetic letters on the rooftop. Bring down three letters, placing one in each window to spell a word. Have children isolate and blend the phonemes together to say the word. Show children how to substitute and delete phonemes to create new words (e.g., *bat* to *cat* or *at*).

## Appendix Z

### Rhyming Zig-Zag

Task: phoneme substitution, phoneme blending, matching sounds to letters

#### Materials

rhyming picture cards (reproduced from any pattern book)

#### Directions

1. Place students in two lines facing each other. Give each person a picture card.
2. Choose one student at the end of a line to start the activity. Have him or her show his or her picture card (e.g., boat), then give a "replacement" letter for the beginning sound (e.g., c).
3. Ask the student standing directly across in the opposite line to say the new word made by changing the first letter (*coat*). He or she then continues the process by showing his or her picture card to the next person and giving a replacement letter.
4. Have students continue the zig-zag process until everyone has a turn. As an extra challenge, time students and invite them to "beat the clock."

### Head, Waist, Toes

Task: phoneme segmentation, phoneme isolation

#### Materials

words from current classroom literature

#### Directions

1. Have children stand as they listen to you say a three-phoneme word.
2. Say each phoneme of the word separately and ask children to place their hands on their heads, waists, or toes to indicate whether the sound is at the beginning, middle, or end of the word. Have students repeat the sounds as they take positions.
3. Repeat with additional three-phoneme words. For variation, say phonemes faster and faster as the game progresses. Extend the activity to four-phoneme words using head, waist, knees, and toes as the four body positions.
4. Send word lists home and invite children to play the game with their parents.



U.S. Department of Education  
Office of Educational Research and Improvement (OERI)  
Educational Resources Information Center (ERIC)



# REPRODUCTION RELEASE

(Specific Document)

## I. DOCUMENT IDENTIFICATION:

Title: <i>Improving Reading Readiness and Language Arts Skills Through Phonemic Awareness</i>	
Author(s): <i>Carr, Teri A.; Davis, Debra S.; Durr, Rita A.; Hagen, Teri A.</i>	
Corporate Source:	Publication Date: ASAP

## II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic/optical media, and sold through the ERIC Document Reproduction Service (EDRS) or other ERIC vendors. Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following two options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents

The sample sticker shown below will be affixed to all Level 2 documents



Check here  
**For Level 1 Release:**  
Permitting reproduction in microfiche (4" x 6" film) or other ERIC archival media (e.g., electronic or optical) and paper copy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

\_\_\_\_\_ *Sample* \_\_\_\_\_

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Level 1



Check here  
**For Level 2 Release:**  
Permitting reproduction in microfiche (4" x 6" film) or other ERIC archival media (e.g., electronic or optical), but *not* in paper copy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN OTHER THAN PAPER COPY HAS BEEN GRANTED BY

\_\_\_\_\_ *Sample* \_\_\_\_\_

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Level 2

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but neither box is checked, documents will be processed at Level 1.

"I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic/optical media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries."

Sign here → please

Signature: <i>Teri A. Carr</i>	Printed Name/Position/Title: <i>Teri A. Carr</i> Student/FBMP	
Organization/Address: Saint Xavier University 3700 W. 103rd Street Chicago, IL 60655 Attn: Lynn Bush	Telephone: 773-298-3159	FAX: 773-779-3851
	E-Mail Address: <i>#carr@pekin.net</i>	Date: <i>April 14, 1998</i>

### III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:
Address:
Price:

### IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:
Address:

### V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:
---

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

**ERIC Processing and Reference Facility**  
1100 West Street, 2d Floor  
Laurel, Maryland 20707-3598

Telephone: 301-497-4080  
Toll Free: 800-799-3742  
FAX: 301-953-0263  
e-mail: [ericfac@inet.ed.gov](mailto:ericfac@inet.ed.gov)  
WWW: <http://ericfac.piccard.csc.com>

(Rev. 6/96)