

2001

Phonemic Awareness: One Approach To Individualized Instruction

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**Phonemic Awareness: One Approach
To Individualized Instruction**

BY

Kimberly M. Ochs

THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF

Specialist in School Psychology

IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY
CHARLESTON, ILLINOIS

2001
YEAR

I HEREBY RECOMMEND THIS THESIS BE ACCEPTED AS FULFILLING
THIS PART OF THE GRADUATE DEGREE CITED ABOVE

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Phonemic Awareness: One Approach
To Individualized Instruction

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Abstract

This study examined the effectiveness of a recently developed set of individualized lessons for kindergarten children at-risk for reading problems because of limited phonemic awareness skills. Four participants were selected via teacher referral and a score below the 25th percentile on the *Test of Phonological Awareness*. Sixteen lessons (focusing on six phonemes) and weekly assessments followed the selection of the participants. Each child was individually instructed in two 10-15 minute sessions each week for eight weeks and then given an assessment at the end of each week. Single case design was utilized to document the effectiveness of the lessons. Results indicated that the lessons were effective for three of the four children. Possible explanations are discussed as to why the fourth child did not progress as well as the other three children. Implications for the use of individualized instruction on phonemic awareness for phonologically at-risk children are discussed.

Acknowledgments

I would like to recognize and thank the following individuals who were involved in the completion of this thesis.

Christine E. McCormick, Thesis Chairman: Thank you for all the time, dedication, patience and hard work that you have put into this thesis. Your enthusiasm and passion for early reading skills were truly influential in the completion of this project.

James M. Havey and Assege HaileMariam, Committee Members:
Thanks you for all of your support, suggestions and time that made this thesis a success.

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Introduction

Phonological awareness skills, or skills in attending to the sound structure rather than meaning of speech, have received intense research and instructional attention for over two decades. An extensive number of investigations has examined the relationships among young children's phonological awareness skills and later reading skills. These investigations have shown phonological awareness skills to be an important positive influence on learning to read (Adams, Trieman & Pressley 1998; Ehri, et al., 2001).

Phonological awareness skills include the larger units of speech, such as the word and syllable, as well as the smallest unit of the phoneme, the individual sounds in spoken words. Research has shown it is the phoneme level of phonological awareness that is most directly related to learning to read (Adams, Trieman, et al., 1998). The awareness that spoken language is composed of those separable sounds is termed phonemic awareness. Phonemes are the units of sound that are represented by letters of the alphabet, and an awareness of phonemes in speech is the key to understanding the logic of the alphabetic principle, the systematic link of speech sounds to letters. An understanding of the alphabetic principle is needed for learning to decode or "sound out" words (Adams, Treiman, et al., 1998).

Attaining phonemic awareness requires direct instruction for many children and is very difficult for some (Torgesen & Mathes, 2000). The issue is that children may not learn to pay attention to the sounds of speech, because in everyday conversation children process the phonemes automatically, directing attention to the meaning of the words. The challenge is to find ways to get children to notice the phonemes and to discover their existence and separability (Adams, Foorman, Lundberg & Beeler, 1998a).

In the past several decades numerous studies have shown that group instruction on phonological (including phonemic) awareness skills prior to systematic instruction in learning to read in the first grade can significantly increase these skills and success with learning to read. At the same time, not all children show progress, especially on the phoneme level, and it is these children who are likely to encounter problems with learning to read (National Reading Panel, 2000).

Literature Review

The Causal Role of Phonemic Awareness in Learning to Read

Evidence for a causal role of phonemic awareness on beginning reading skills has been accumulating for the past twenty years and is now clear (National Reading Panel, 2000). The charge from the U.S. Congress to the National Reading Panel (NRP) was to examine the empirical evidence on phonological awareness instruction and learning to read. The NRP's subsequent meta-analysis in the report consisted of 52 experimental studies that included a phonemic awareness treatment and a control group in which reading was measured as an outcome of the treatment. The National Reading Panel investigated phonemic awareness instruction because of the many studies that have recognized the importance and effectiveness of this instruction. Some articles reviewed by the panel made several instructional comparisons. In each of these comparisons one group of children was provided with phonemic awareness (PA) instruction and a control group received regular classroom instruction. The results of the meta-analysis, which considered the adequacy and strength of the evidence collected, clearly indicated a causal impact of awareness of phonemes on learning to read.

The effect size statistic was used by the NRP in their analysis. This statistic measures how much the mean of the PA instructed group exceeded the mean of the control group in standard deviation units (Ehri, et al., 2001). The overall effect size of instruction on phonemic awareness outcomes was 0.86. The effect size of PA instruction on measures of the children's ability to read words was moderate, 0.53. Effect sizes were significant on measures of children's ability to read real words, psuedowords, and their reading comprehension. The NRP concluded that teaching children phonemic awareness skills is highly influential across decoding, spelling, and comprehension skills. Another point made was that effect sizes were greater for children who were beginning readers at risk for reading failure, for example, children with speech/language problems or a limited language and print experience. Likewise, children in preschool and kindergarten displayed larger effect sizes in acquiring phonemic awareness than children in first grade and above. The NRP concluded that teaching children to manipulate phonemes in words is highly effective across all the literacy domains and outcomes. The majority of the studies examined by the NRP noted phonemic awareness as the best predictor of how well children learn to read. In sum, the NRP concluded that multiple converging lines of research provide evidence for a casual role of phonemic awareness on beginning reading skills.

Two widely cited studies examining phonemic awareness and learning to read are Juel, Griffith, and Gough (1986) and Bradley and Bryant (1983). Juel et al., (1986) compared end-of-the-year phonemic awareness and word recognition (decoding) scores from a large sample of first grade students in a metropolitan area. The researchers found that, at the end of first grade, none of the students with average or above-average word-

recognition abilities had low phonemic awareness scores and all students with low phonemic awareness scores had below-average word-recognition abilities. They also found that phonemic awareness at the beginning of first grade predicted reading skills at the end of first grade and that reading skills at the end of first grade predicted reading skills at the end of fourth grade. Bradley and Bryant (1983) point out that those children who have difficulty with reading are often insensitive to rhyme and alliteration. Such children are unable to categorize words on the basis of common sounds; a skill needed for understanding the alphabetic principle. These researchers believed that the experiences a child has with rhyme and initial phonemes in words before he goes to school might have a profound effect on his future reading success. Bradley and Bryant (1983) used a longitudinal approach to measure 403 children's skills of sound categorization on the basis of rhyme and individual phonemes (beginning and ending sounds) before they had started to read, and then related these to their progress in reading over the next four years. The results showed that three years later a significant proportion of variance in reading and spelling was accounted for by the sound categorization skills in kindergarten. In a second and experimental approach, they trained one group of pre-readers on phonemic awareness, a second group on phonemic awareness and matching letters, and two additional groups served as controls. Both experimental groups outperformed the controls on standardized measures of reading and spelling. The second experimental group (phonemic awareness and letters) performed significantly better on these measures than the first group (phonemic awareness only). The two studies or methods were performed because the researchers realized that neither one on its own is a sufficient test of a causal hypothesis. Bradley and Bryant (1983) were the first

researchers of many to provide empirical evidence demonstrating the causal link between phonemic awareness beginning and reading skills. As well, their research indicated that matching phonemes to letters enhanced the positive impact on learning to read.

Phonemic Awareness Instruction

A widely cited study demonstrating that phonological awareness skills can be taught to young children was conducted in Sweden (Lundberg, Frost, Peterson, 1988). These researchers developed numerous game like activities to encourage the growth of phonological awareness in preschool children. In this large longitudinal study in which 400 preschool children were followed through second grade, the preschool children in the experimental group were given a training program that consisted of daily sessions of 15-20 minutes on phonological awareness activities for eight months. The skills were taught in a developmental sequence beginning with identifying words in speech, identifying syllables, and working with rhyming and alliteration (phonemes). The results indicated that 5-6 year olds (preschoolers in Sweden) developed phonological awareness skills significantly more quickly than 5-6 year olds who did not participate in the intervention program. The positive effects of Lundberg's (1988) training persisted until the second grade for the experimental group. This study showed that phonological awareness can be taught in the classroom and that it facilitates subsequent reading acquisition. Lundberg's classroom curriculum has recently been adapted for American kindergartens by Adams, Foorman, Lundberg, and Beeler (1998b).

While phonemic awareness training studies have been conducted over the past two decades, only some have included the connection between the phonemes and letters (Adams & Trieman et al., 1998). For example, Ball and Blachman (1991) evaluated the

effects of training phoneme identification and the link to letter sounds on kindergarten children's reading skills. Ninety kindergarten students from an urban public school were randomly assigned to one of three groups. The first group received training in segmenting words into phonemes and the correspondence between phonemes and letters. The second group received only the training with letter names and letter sounds. The third group received no special instruction. The results showed that phoneme awareness instruction, combined with instruction connecting the phonemes to letters, significantly improved the early reading skills of the students in the first group only. Thus, Ball and Blachman (1991) demonstrated the importance of phoneme awareness and linking phonemes to letters. They found that teaching letter-sound knowledge by itself did not improve beginning reading skills but when phonemic awareness training was included gains were significant. In sum, the researchers found that when kindergarten students are taught to identify phonemes in words in combination with letter-name and letter-sound instruction, immediate facilitation of early reading skills emerges. Studies that had included a component with explicit instruction in sound-symbol association have consistently reported positive effects on reading (e.g., Fox & Routh, 1984; Vellutino & Scanlon, 1987).

Individual Differences

When children in a classroom are trained in phonemic awareness not all of the students catch on. Torgesen (2000) and Torgesen and Mates (2000) suggest that children scoring below the 25th percentile on standardized phonemic awareness measures can be considered phonologically at-risk for learning to read. The researchers concluded that the degree of explicitness and the nature of the instruction need to vary according to the

child's progress with class instruction. Individualized phonemic awareness may be a necessity for some children. And even after such instruction, Torgesen and Mathes (2000) suggest that about 5% of these at-risk children may continue to require supportive intervention in beginning reading instruction.

Torgesen, Wagner and Rashotte (1994) concluded that the training for at-risk children must be more specific and more intense than what is typically delivered in class instruction if it is to have a significant impact on the phonemic awareness of at-risk children. Similarly, Chard and Dickson (1999) recommended two tiers of instruction. The first tier is explicit class instruction in phonemic awareness. The second tier of instruction targets children who respond poorly to the group instruction of the first tier. Torgesen et al., (1992) stated that if instruction for children not developing phonemic awareness is not longer and more intensive than normal class instruction, such children will fall behind their peers in learning to read.

In sum, phonemic awareness and understanding the link of phonemes to letters is essential for success with learning to read. Some children do not show much progress through group instruction and can benefit from individualized instruction with greater intensity. The purpose of the study is to examine the effectiveness of a recently developed set of individualized lessons for children at-risk for reading problems because of limited phonemic awareness skills.

Method

Participants

Four children were selected as participants from four kindergarten classrooms in rural Midwestern schools on the basis of a score below the 25th percentile on the kindergarten

version of the *Test of Phonological Awareness* (TOPA) (Torgesen & Bryant, 1994). Originally the participants in this study were to be selected from a single classroom which emphasized phonemic awareness and beginning phonic skills in class instruction. However, following the administration of the TOPA to this class of 14 children, only one child scored below the 25th percentile. Thus, three other children were selected from another rural school within the same county. These three participants were identified through teacher referral, and when given the TOPA all scored below the 25th percentile. All four children were described by their teachers as candidates for retention because of limited progress with early reading skills. Parents granted permission to use data for research purposes (See Appendix A for a copy of the consent form).

Materials

Test of Phonological Awareness (TOPA). The TOPA is a measure of young children's ability to isolate individual phonemes in spoken words. Two forms of the TOPA are available: the TOPA-Kindergarten and the TOPA-Early Elementary. Each of the two forms is composed of 20 pictured items, 10 items which require the child to identify a sound different from the target sound and 10 items which require the child to identify the same sound as the target. The TOPA-Kindergarten (TOPA-K) examines awareness of beginning sounds in pictured words, and the TOPA-Early Elementary assesses awareness of ending sounds in pictured words. Scores are reported in standard scores and percentile ranks. The TOPA-K was standardized on 857 students residing in 10 states. The norms for it were gathered in the spring of the kindergarten year. The TOPA manual reports several types of reliability. The correlation between the first and second testing for 40

children was .84. Internal consistency was .90 for five-year-olds and .91 for six-year-olds. Both measures of reliability are adequate.

Invented Spelling. Invented spelling was a second measure of phonemic awareness (Scanlon & Vellutino, 1997). The participants were given this measure two times, as a pre-test and post-measure. The children were orally given six 3-letter words to spell on a sheet of paper. (See Appendix B.) A total of twelve points were possible on this assessment; only initial and final letters were scored. The following words were given: man, sit, fan, nap, pat and tip.

Lessons. Sixteen individualized lessons with scripted instructions were presented to each participant over the course of the study. The lessons were developed specifically for second semester kindergarten children showing minimal progress on phonemic awareness skills (McCormick, Throneburg & Smitley, in-press). The lessons develop awareness of six specific phonemes and their match to letters (m, s, n, p, t, and f). The lessons began with identifying phonemes at the beginning of spoken words and then the letter, which corresponded to that phoneme, was introduced. The lessons are highly interactive with the teacher and engaging for the student. The sequence of lessons follows:

1. Beginning Sounds /m/ and /s/
2. Beginning Sounds /f/ and /n/
3. Beginning Sounds /p/ and /t/
4. Review of Beginning Sounds
5. Letters m and s for Beginning Sounds
6. Letters f and n for Beginning Sounds
7. Letters p and t for Beginning Sounds
8. Letters m, s, and f for Beginning Sounds
9. Letters n, p, and t for Beginning Sounds
10. Review of Letters for Beginning Sounds
11. Letters for Ending Sounds /n/, /p/, /t/
12. Ending Sounds /n/, /p/, /t/
13. Ending Sounds /n/, /p/, /t/
14. Beginning Letters m, s, f and Ending Letters n, p, t
15. Beginning Letters n, p, t and Ending Letters n, p, t

16. Letters for Beginning and Ending Sounds

The 16 lessons were presented in sessions of about 15-20 minutes each, two times a week for 8 weeks. Each lesson had scripted directions and all necessary materials. (See Appendix C.)

Phonemic Awareness Assessments. Phonemic awareness assessments were developed to accompany the lessons as informal measures for the specific skills presented in the lessons. Four different versions of the phonemic awareness assessment were used in rotation. Each version assessed the same skills. Six items assessed first sounds in words, six items assessed last sounds in words, and six items assessed representing first and last sounds in three-phoneme words with letters.

After each response given by the child the examiner recorded the response and scored 0 or 1 for the first and last sounds. Spelling was scored 0-2; only initial and final letters were counted in the scoring. A total of 24 points were possible on each assessment. (See Appendix B.)

Design

Single case design was implemented in this study. This type of design presents research in a clear format that directly address the academic problems faced in classrooms (Polaha and Allen, 1999). Single case design involves the study of an individual across repeated observations before, during, and following the introduction of an intervention. The data are then displayed in a graph that can be visually examined to assess the impact of the intervention (Polaha and Allen, 1999). Single case design is popular in school settings because the results highlight individual differences in children and can be evaluated without the use of complicated statistics.

Procedures

During the first week of the study (in late February) the examiner gave the entire original class the TOPA-K and the spelling assessment. The one student with a TOPA score below the 25th percentile was selected as a participant. Three more participants from the other classrooms were selected via teacher referral and were then given the TOPA-K and spelling individually. Each of these students was being considered for retention and obtained a score below the 20th percentile on the TOPA-K. During the next week of the study the first phonemic awareness assessment was given two times for baseline data. After the baseline was gathered the researcher conducted the 16 individual lessons with each child within the school setting. No introductory training was required for the researcher because of the explicitness of the directions. Two sessions were taught each week for eight weeks. Two to three sequential lessons (based on the child's ability or attention span) were given each week and a phonemic awareness assessment was completed after the second lesson for the week. At the conclusion of the lessons, the children were given the final phonemic awareness assessment, the TOPA-K and the invented spelling assessment.

Results

The average pre-test TOPA-Kindergarten standard score for the original class was 110.6; the standard scores for the participants ranged from 77-89, with percentile ranks between 6 and 23. The average pre-test spelling score for the class was 9.6 (12 possible). The scores for the four participants ranged from 0 to 4. At the conclusion of the intervention the participants' average standard score on the TOPA-K was 98 with a range of 80-109. The average score for the invented spelling was 10. Three of the four children obtained a score of 12. The post-test class average for invented spelling was 11.9 (12 possible). See Table 1 for pre- and post-test scores. Figures 1 through 4 display the assessment scores across the instructional intervention (lessons) for the participants.

Child 1. Before any individualized lessons were provided on the TOPA-K Child 1 obtained a standard score of 86 which is at the 18th percentile. Upon completion of the lessons Child 1 was administered the TOPA-K again and obtained a standard score of 108 which falls in the 70th percentile. Scores on the weekly phonemic awareness assessments are displayed in Figure 1. After the 6th week of instruction (Lesson 9: Beginning Letters n, p, t) Child 1 consistently received all 24 points on the weekly measure.

Child 2. Before any individualized lessons were provided on the TOPA-K Child 2 obtained a standard score of 89 which is in the 23rd percentile. Upon completion of the lessons she was administered the TOPA-K again and obtained a standard score of 105 which falls in the 63rd percentile. Her scores on the weekly phonemic awareness assessments are displayed in Figure 2. After the 6th week (Lesson 8: Beginning Letters m, s, f) she obtained the total points possible on the weekly measure.

Child 3. Before any individualized lessons were provided on the TOPA-K Child 3 obtained a standard score of 77 which is in the 6th percentile. Upon completion of the lessons he was administered the TOPA-K again and obtained a standard score of 102 which falls in the 55th percentile. His scores on the weekly phonemic awareness assessments are displayed in Figure 3. After the 6th week (Lesson 12: Ending Sounds /m/ /p/ /t/) he received 24 points on each weekly measure.

Child 4. Before any individualized lessons were provided on the TOPA-K Child 4 obtained a standard score of 83 which is in the 13th percentile. Upon completion of the lessons she was administered the TOPA-K again and obtained a standard score of 80 which falls in the 9th percentile. Her scores on the weekly phonemic awareness assessments are displayed in Figure 4. Child 4 reached her peak after lesson 12 and did not progress any further. It appeared that when beginning and ending sounds were presented in a single lesson she could not process it all at once.

Discussion

Three of the four participants demonstrated acquisition of the skills taught to them in the individualized lessons as can be seen in the consistent, high scores during the last weeks of instruction. Post-test scores on the invented spelling and TOPA-K for children 1, 2, and 3 improved immensely compared to their pre-test scores and were comparable to the pre-test class averages. For instance, Child 1's invented spelling scores improved from zero points to all twelve. This child was also given the TOPA-Early Elementary at the conclusion of the lessons. His score was 110; the class average was 103.5. Acquisition of phonemic awareness was indicated as the children progressed through the lessons.

Phonemic awareness skills for Children 1, 2 and 3 are now at a level likely to allow success with beginning reading instruction (Torgesen & Mathes, 2000). Week 6 seemed to be a benchmark for these three children. After the 6th week of lessons the children began to achieve the maximum score possible on the weekly measure. It was at this point they could recognize the phonemes at the beginnings and ends of words and match these phonemes to letters. The intervention demonstrated effectiveness and was enjoyable for these children.

Child 4 did not show maximum progress. She was still having difficulty with identifying phonemes at the beginning and end of words, and scored well below average on the TOPA-K at the conclusion of the lessons. Her performance on the TOPA-K did not improve and she may have special difficulty applying learned skills in a different format. She was found to be eligible for special education services shortly after the

lessons were concluded and will continue to need instructional support for learning to read.

The instructional approach in this study fits with the Chard and Dickson (1999) research-based recommendations for second tier instruction in phonological awareness: 1) The lessons focused on the phoneme level; 2) the lessons provided appropriate practice in identifying phonemes within words, and 3) the lessons included matching specific phonemes to specific letters. For children 1, 2, and 3 this individualized instruction appears to be sufficient preparation for beginning reading instruction. However, as Torgesen (2000) points out, some children (e.g., Child 4) may need continued intensive instructional support throughout the elementary years.

Chard and Dickson (1999) noted that often early phonological awareness activities are taught in the absence of print. However, they conclude that there is increasing evidence that early writing activities, including spelling words as they sound (invented or temporary spelling), appear to promote and reflect phonemic awareness skills. The results of the invented spelling assessment were consistent with this.

Torgesen and Mathes (2000) point out that assessment in phonemic awareness has two purposes: 1) to initially identify students who appear to be at risk for difficulty acquiring beginning reading skills and 2) to monitor the progress of children who are receiving instruction in phonemic awareness. This dual approach of assessing phonemic awareness was applied in this study and proved to work well.

Just as most children benefit from instruction in phonemic awareness, sometimes there are children who respond poorly to the phonemic awareness training and will need continued support. For example, Child 4 required a slower pace throughout this study.

She did not master the initial sounds on any assessment. She demonstrated inconsistencies in naming the beginning and ending sounds especially when both were presented in a single lesson. She did not appear to process the phonemes and sounds when more than two phonemes were included in a single session. Overall, she did not demonstrate adequate progress in phonemic awareness for success with learning to read.

The results of this study support the value of individualized instruction in classrooms for children who show minimal awareness of phonemes with class instruction. In turn, this may reduce the number of special education referrals if the phonologically at risk receives intensive instruction before first grade. The effectiveness of individualized instruction in phonemic awareness was demonstrated for three of the four students in this study. The fourth student likely requires an even more intensive and slower pace than provided in these lessons.

Limitations and Future Directions

Although this study showed the lessons to be effective for three of the four children, a number of limitations are apparent. First, while the skills taught were those noted in the research as likely to be sufficient preparation for learning to read, the progress of the children needs to be followed through first and second grade in order to confirm this. Secondly, unless an experimental approach is used to investigate the impact of these lessons we can not be sure that the intervention was the causal influence on the children's progress. Thirdly, while the skills in identifying the six phonemes in the lessons appeared to generalize to other phonemes, as noted in the children's post intervention TOPA scores, this needs to be investigated further. Future research on the effectiveness of this intervention should also include investigations of whether the individualized

instruction can be stopped once the child achieves a perfect score on the assessment and whether slowing the pacing of the lessons is effective for a child not readily mastering the skills.

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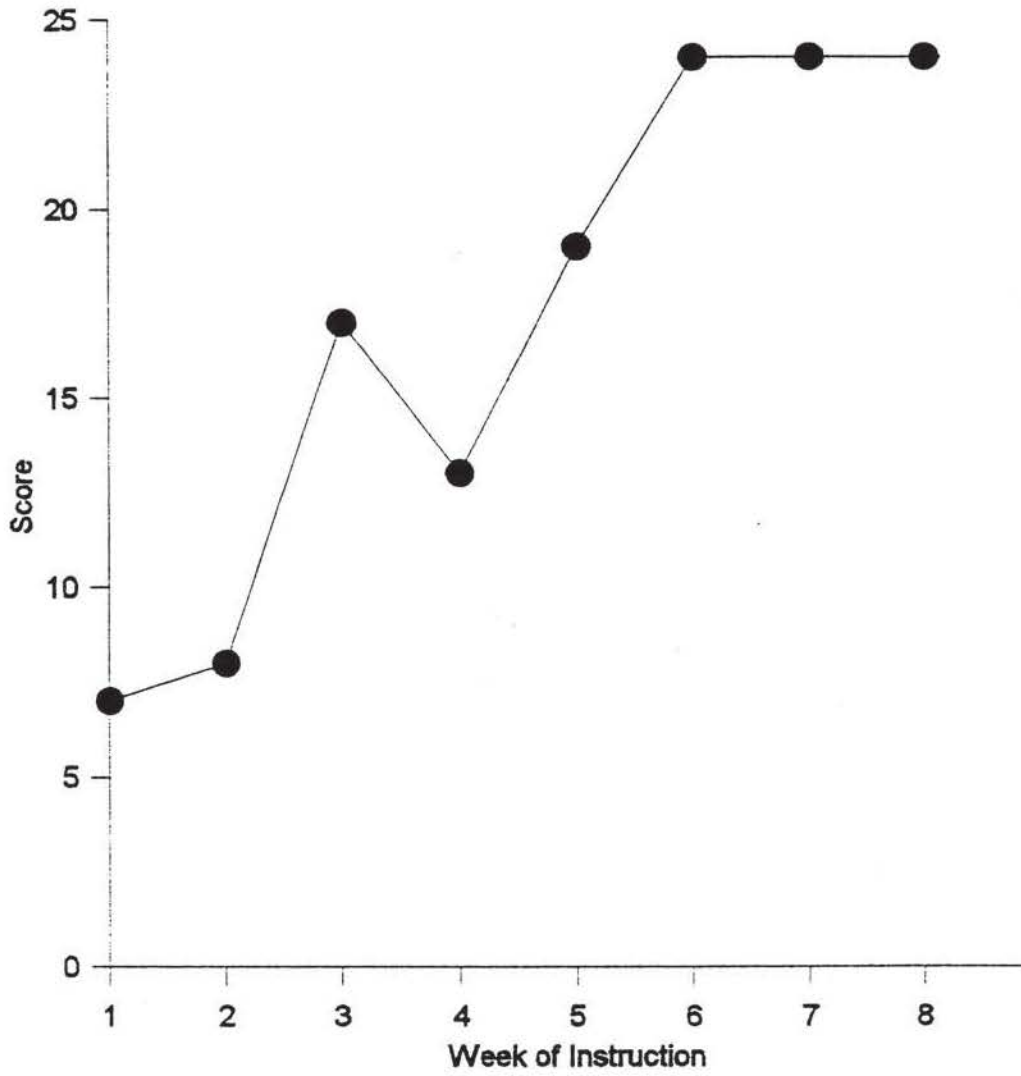


Figure 1: Assessment Scores for Child 1

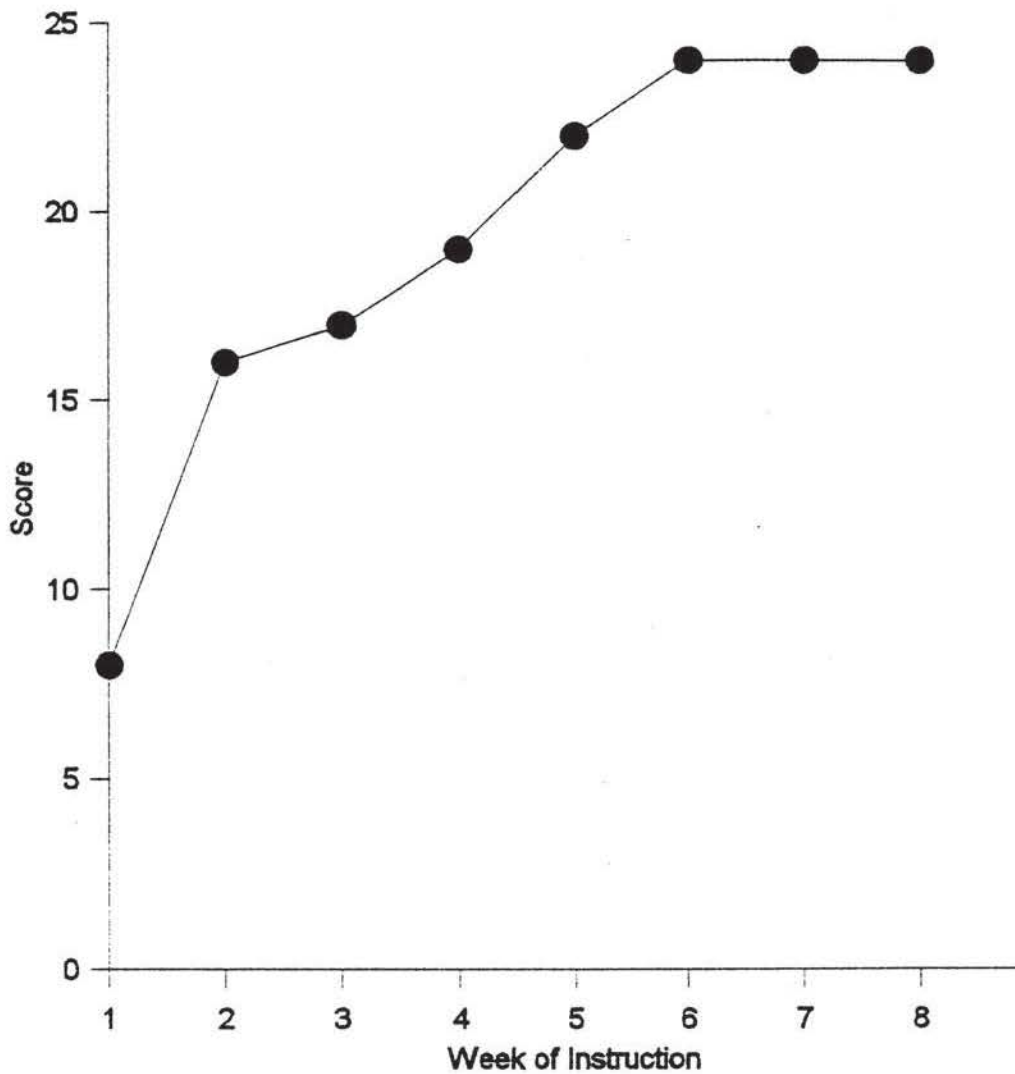


Figure 2: Assessment Scores for Child 2

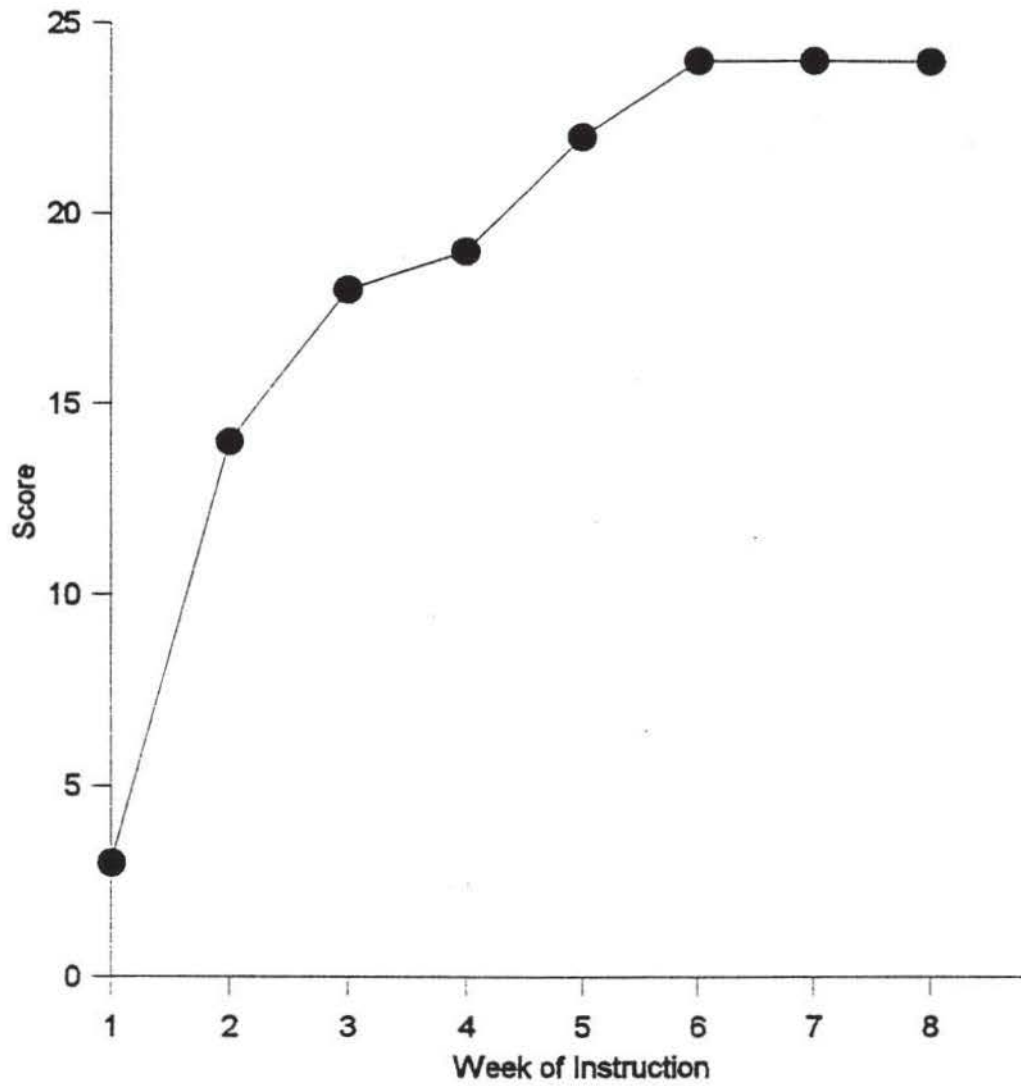


Figure 3: Assessment Scores for Child 3

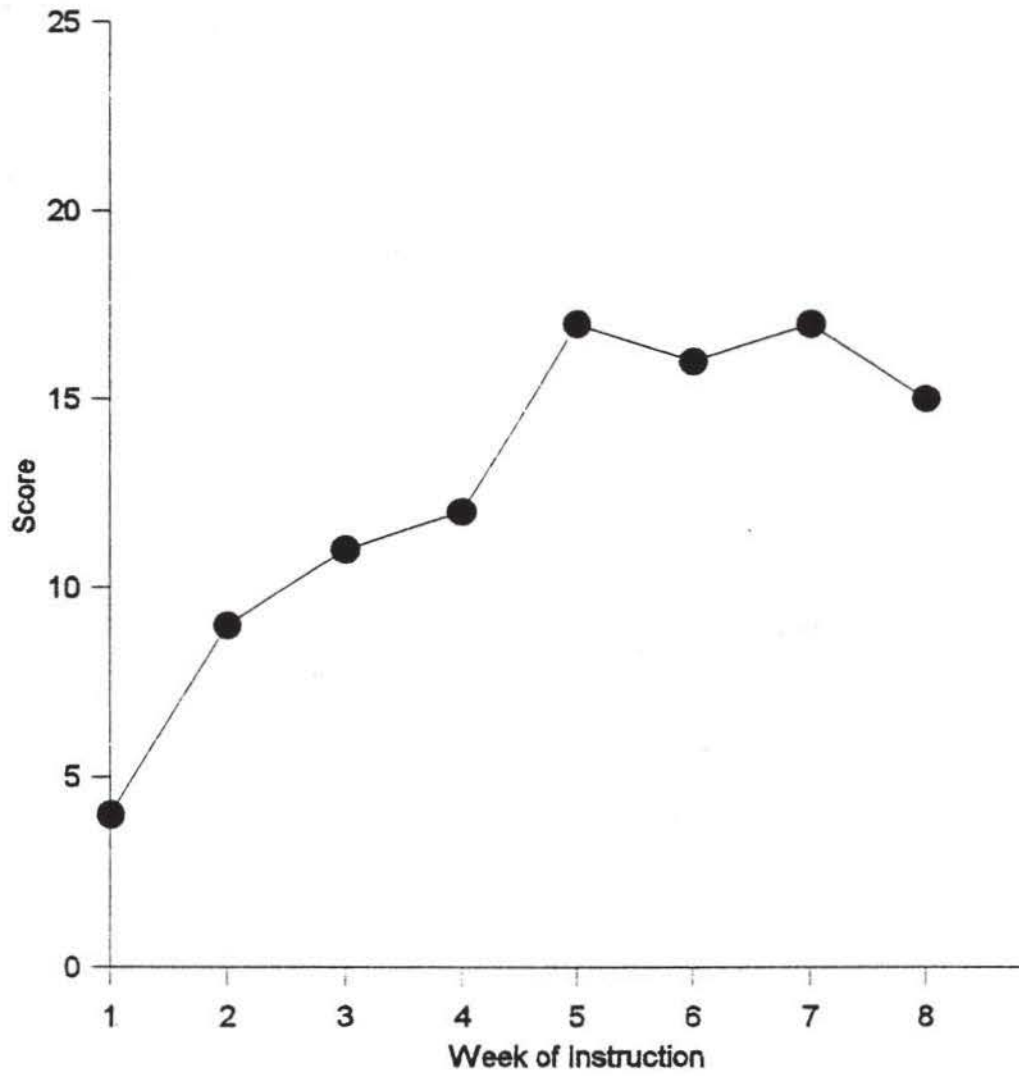


Figure 4: Assessment Scores for Child 4

Table 1
Pretest and Posttest Scores

	TOPA (standard score)	Spelling (12 possible)
<u>Pretest</u>		
Class average	110.6	9.6
Child 1	86	0
Child 2	89	4
Child 3	77	3
Child 4	83	1
<u>Posttest</u>		
Class average		11.9
Child 1	108	12
Child 2	105	12
Child 3	102	12
Child 4	80	5

February 20, 2001

Dear Parent,

Your child has been selected by Mrs. Stark to participate in a series of individualized lessons (of about 15 minutes each) on early reading skills to be taught on Mondays and Fridays during March and April. These activities will help your child to identify first and last sounds in words and matching these sounds to the corresponding letters. They will help your child with learning to read in first grade.

I am a graduate student in School Psychology at Eastern Illinois University and working with my professor Dr. McCormick. She teaches child development and preschool assessment courses in the Psychology Dept. at EIU and has a longstanding interest in developing materials to help children in the very early stages of learning to read. She has recently written and developed a set of enjoyable activities (such as sorting pictures that begin with the same sound) for individualized lessons on early reading skills. I ask for your permission to work with your child on these skill-building activities. As part of the lessons I will be asking your child to tell me which letters and letter sounds he/she already knows so that I can build on this knowledge.

Please complete the bottom part of this page and return it to Mrs. Stark as soon as possible in the enclosed envelope. I believe that your kindergartner will enjoy the individualized activities; I know that I am looking forward to interacting with the children. If you have any questions, please call Dr. McCormick at her home (345-9773) or office (581-6410) and she will be happy to talk with you at any time. At the conclusion of the lessons Dr. McCormick will call you regarding the skills your child has learned.

Sincerely,

Kim Ochs.
Graduate Student

I give my permission for my child, _____, to participate in the individualized lessons for developing the prereading skills of identifying sounds in words and their corresponding letters.

Parent's signature: _____ Phone _____

Date: _____ Child's birth date: _____

Invented Spelling

Directions:

1. Give each child a page of blank paper and ask them to put their name on it.
2. "I am going to say some words and I want you to use letters to make that word as best you can. Try even if you're not sure how to do it."
3. "The first word is man. Write the letters for the word man as best you can. Start at the top of your sheet of paper."
4. "Next write the letters for the word sit. Make the word sit as best you can."
5. Continue with fan
 nap
 pat
 tip
6. "Check to make sure your name is on the paper." Then collect; Kim will give to me for scoring.

Lesson 1: Beginning Sounds /m/ and /s/

Preparation: 1) Copy and cut the 2 pages of teacher's pictures for Lesson 1.
2) Copy and cut the page of child's pictures for Lesson 1 for each child.
3) Copy Activity Page 1 for each child.

Procedure:

Introduction: Begin the lessons by saying to the child, "I am going to help you during these lessons to learn more about sounds and letters. This will help you when you learn to read."

1. With the stack of /m/ pictures in hand, say "The words for these pictures begin with /m-m/. Listen. /M-m/onkey," and lay down the monkey picture. Name each picture emphasizing /m-m/ as you lay in it in a column beneath the monkey picture.

2. With the stack of /s/ pictures in hand, say, "The words for these pictures begin with /s-s/. Listen. /S-s/nake," and lay the snake picture down well to the right of the monkey picture. Name each picture emphasizing the /s-s/ as you lay it in a column under snake.

3. Say, "Now you say the word for each picture that begins with /m/." Point to each picture and have the child say the word. If the initial sound is not clear, model saying the word while the child watches your mouth, and ask the child to say the word again.

4. Say, "Now you say the word for each picture that begins with /s/." Point to each picture and have the child say the word. If the initial sound is not clear, model saying the word while the child watches your mouth, and ask the child to say the word again.

5. Pick up the pictures under the monkey and snake and mix them. Give the stack of pictures to the child and say, "Now it's your turn to say the word for each picture and put it under the monkey if it begins with /m/ or under the snake if it begins with /s/."

If the child has difficulty, model the correct response by saying the word while emphasizing the initial sound and place it in the correct column. If a child does not readily name the picture or labels it as something else, remove that picture from the lessons for that child.

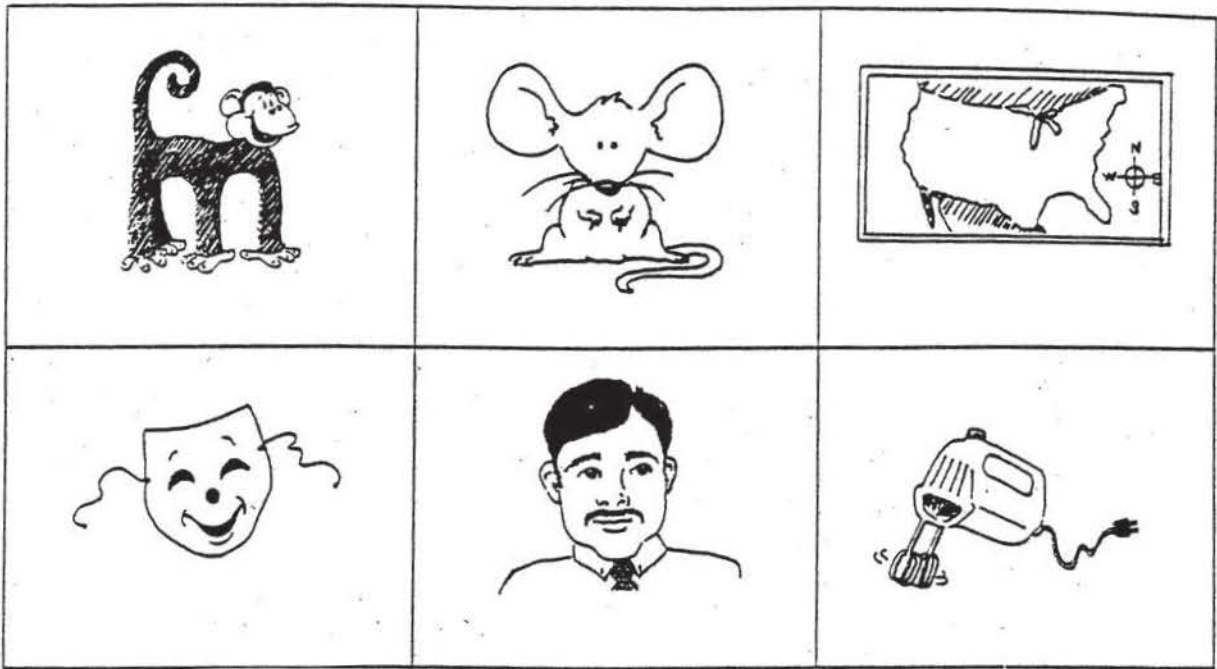
6. Give the child Activity Page 1 with the monkey and snake on the top. Mix the child's 6 pictures for this activity and give them one at a time to the child. Say, "Tell me the word for this picture and then tape/glue it under the monkey if that picture begins with /m/ or under the snake if it begins with /s/." If the child begins to place a picture incorrectly, ask him to repeat the name of the picture and help him to correctly place it.

7. After the 6 pictures are correctly in place ask the child to name each of the pictures that begin with /m/ and then with /s/. Say, "You can take this page home and tell your family (or mom or dad) that you know some words that start with /m/ and /s/."

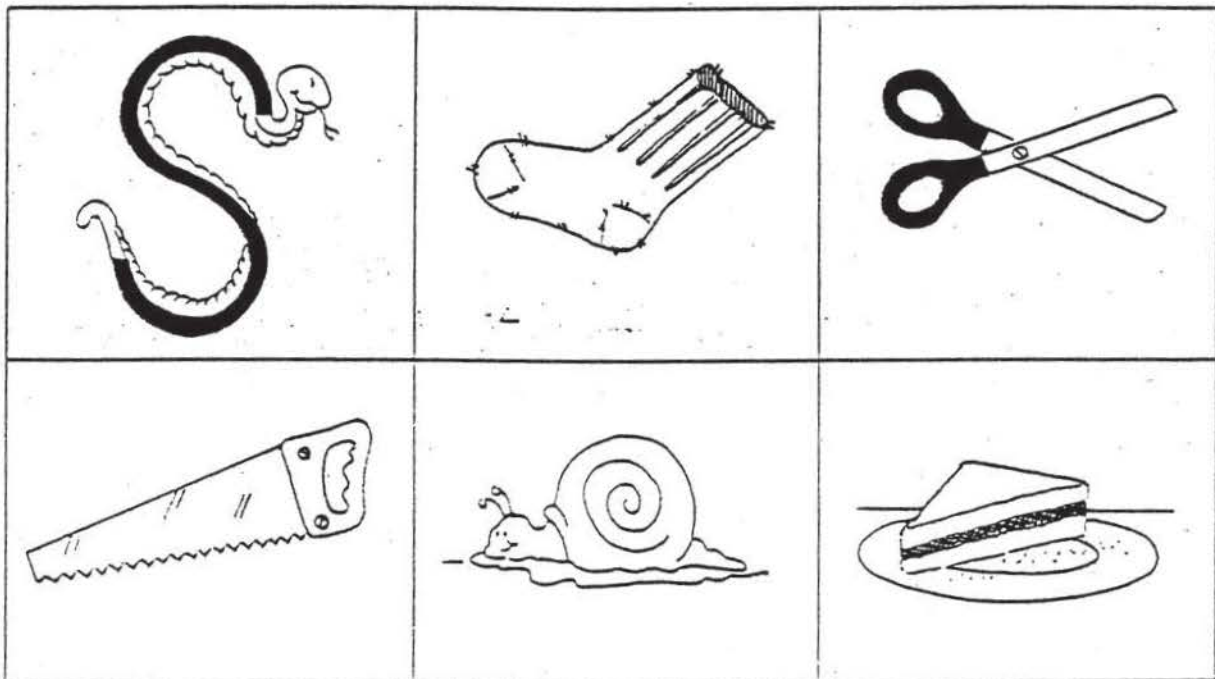
8. At the completion of the lesson, allow the child to choose a sticker from several choices and check the progress chart for Lesson 1.

Lesson 1: Beginning Sounds /m/ and /s/

Teacher's Pictures for /m/

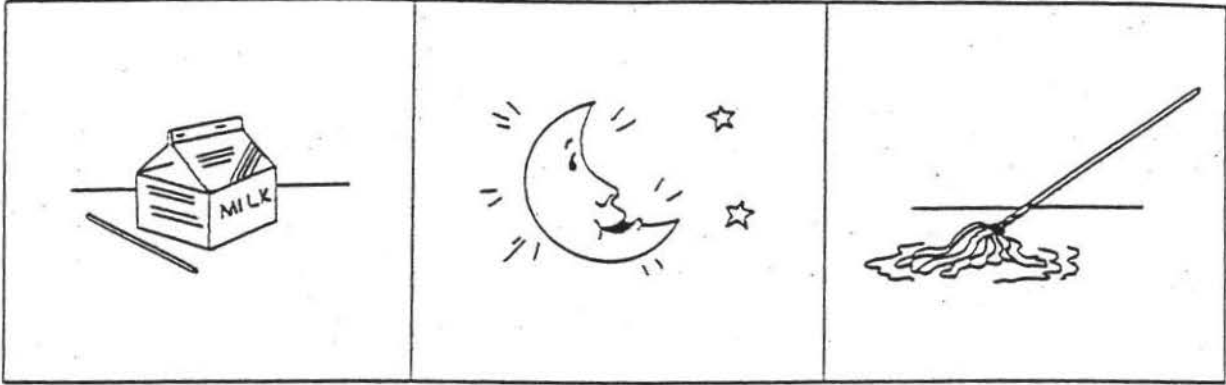


Teacher's Pictures for /s/

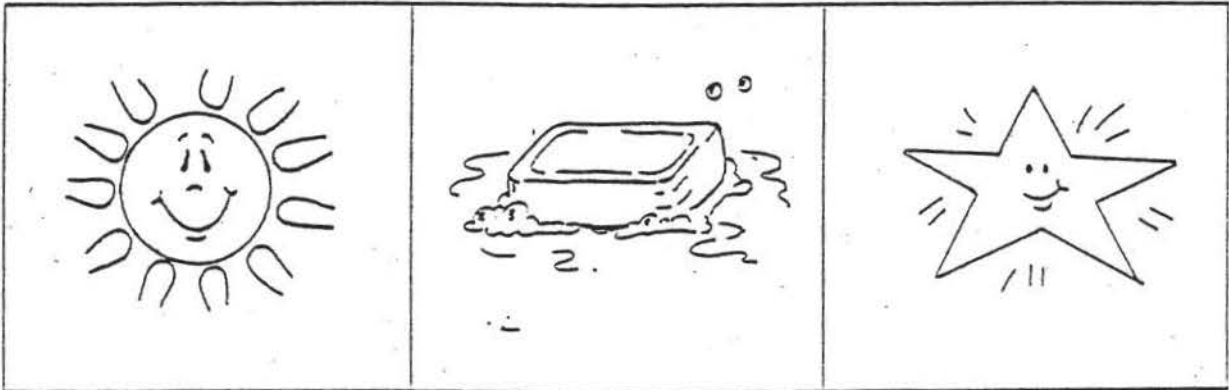


Lesson 1: Beginning Sounds /m/ and /s/

Child's Activity Page Pictures for /m/




Child's Activity Page Pictures for /s/




Activity Page 1

Name _____

Beginning Sound /m/



Beginning Sound /s/



Appendix E: Example of Weekly Assessment 1

Assessment 1

Name _____

Date _____

Directions: "I am going to say a word and I want you to say the first sound in that word. Let me show you. If I say mouse, you would say /m-m/. /M-m/ is the first sound in mouse. Now here's one for you. Move. Say the first sound in move." If child does not say /m-m/, say "/M-m/ is the first sound in move. Listen. M-move. Now you tell me the first sound in each word I say."

Score 0/1		Child's Response
1. _____	"mud"	_____
2. _____	"sand"	_____
3. _____	"farm"	_____
4. _____	"nice"	_____
5. _____	"pet"	_____
6. _____	"tub"	_____

Scoring: One point for each first sound produced in isolation.

Directions: "Now I am going to say a word and I want you so say the last sound in that word. Let me show you. If I say cat, you would say /t/. /T/ is the last sound in cat. Now you do this one. Night. Say the last sound in night." If child does not say /t/, say "The last sound in night is /t/. Listen, nigh/t/, /t/. Now you tell me the last sound in each word I say."

Score 0/1		Child's Response
7. _____	"home"	_____
8. _____	"goose"	_____
9. _____	"win"	_____
10. _____	"leaf"	_____
11. _____	"lap"	_____
12. _____	"shirt"	_____

Scoring: One point for each last sound produced in isolation.

Directions: After you place the letters (m, s, f, n, p, t, a, i) on the table, say "You choose from these letters to make each word that I say. Make the word as best you can. Put the letters for each word right here." Replace the letters above the child's work space after each response.

Score 0-2		Child's Response
13. _____	"mit"	_____
14. _____	"sip"	_____
15. _____	"fit"	_____
16. _____	"nip"	_____
17. _____	"pat"	_____
18. _____	"tan"	_____

Scoring: One point for each correct first and/or last letter; ignore any extra letters between the first and last letters.

_____ total score

Appendix E: Example of Weekly Assessment 2

Assessment 2

Name _____

38

Date _____

Directions: "I am going to say a word and I want you to say the first sound in that word. Let me show you. If I say mouse, you would say /m-m/. /M-m/ is the first sound in mouse. Now here's one for you. Move. Say the first sound in move." If child does not say /m-m/, say "/M-m/ is the first sound in move. Listen. M-move. Now you tell me the first sound in each word I say."

Score 0/1 Child's Response

- 1. _____ "soup" _____
- 2. _____ "fix" _____
- 3. _____ "name" _____
- 4. _____ "peach" _____
- 5. _____ "tag" _____
- 6. _____ "mail" _____

Scoring: One point for each first sound produced in isolation.

Directions: "Now I am going to say a word and I want you so say the last sound in that word. Let me show you. If I say cat, you would say /t/. /T/ is the last sound in cat. Now you do this one. Night. Say the last sound in night." If child does not say /t/, say "The last sound in night is /t/. Listen, nigh/t/, /t/. Now you tell me the last sound in each word I say."

Score 0/1 Child's Response

- 7. _____ "bus" _____
- 8. _____ "run" _____
- 9. _____ "scarf" _____
- 10. _____ "shop" _____
- 11. _____ "hot" _____
- 12. _____ "game" _____

Scoring: One point for each last sound produced in isolation.

Directions: After you place the letters (m, s, f, n, p, t, a, i) on the table, say "You choose from these letters to make each word that I say. Make the word as best you can. Put the letters for each word right here." Replace the letters above the child's work space after each response.

Score 0-2 Child's Response

- 13. _____ "mit" _____
- 14. _____ "sip" _____
- 15. _____ "fit" _____
- 16. _____ "nip" _____
- 17. _____ "pat" _____
- 18. _____ "tan" _____

Scoring: One point for each correct first and/or last letter; ignore any extra letters between the first and last letters.

_____ total score

Appendix E: Example of Weekly Assessment 3

Assessment 3

Name _____ 39

Date _____

Directions: "I am going to say a word and I want you to say the first sound in that word. Let me show you. If I say mouse, you would say /m-m/. /M-m/ is the first sound in mouse. Now here's one for you. Move. Say the first sound in move." If child does not say /m-m/, say "/M-m/ is the first sound in move. Listen. M-move. Now you tell me the first sound in each word I say."

Score 0/1		Child's Response
1. _____	"find"	_____
2. _____	"night"	_____
3. _____	"park"	_____
4. _____	"tail"	_____
5. _____	"mush"	_____
6. _____	"seal"	_____

Scoring: One point for each first sound produced in isolation.

Directions: "Now I am going to say a word and I want you so say the last sound in that word. Let me show you. If I say cat, you would say /t/. /T/ is the last sound in cat. Now you do this one. Night. Say the last sound in night." If child does not say /t/, say "The last sound in night is /t/. Listen, nigh/t/, /t/. Now you tell me the last sound in each word I say."

Score 0/1		Child's Response
7. _____	"rain"	_____
8. _____	"beef"	_____
9. _____	"skip"	_____
10. _____	"cat"	_____
11. _____	"home"	_____
12. _____	"mouse"	_____

Scoring: One point for each last sound produced in isolation.

Directions: After you place the letters (m, s, f, n, p, t, a, i) in random order on the table, say "You choose from these letters to make each word that I say. Make the word as best you can. Put the letters for each word right here." Mix and replace the letters above the child's work space after each response.

Score 0-2		Child's Response
13. _____	"mit"	_____
14. _____	"sip"	_____
15. _____	"fit"	_____
16. _____	"nip"	_____
17. _____	"pat"	_____
18. _____	"tan"	_____

Scoring: One point for each correct first and/or last letter; ignore any extra letters between the first and last letters.

_____ total score

Appendix E: Example of Weekly Assessment 4

Assessment 4

Name _____

40

Date _____

Directions: "I am going to say a word and I want you to say the first sound in that word. Let me show you. If I say mouse, you would say /m-m/. /M-m/ is the first sound in mouse. Now here's one for you. Move. Say the first sound in move." If child does not say /m-m/, say "/M-m/ is the first sound in move. Listen. M-move. Now you tell me the first sound in each word I say."

Score 0/1 Child's Response

- 1. _____ "mommy" _____
- 2. _____ "supper" _____
- 3. _____ "funny" _____
- 4. _____ "nickel" _____
- 5. _____ "puddle" _____
- 6. _____ "tiny" _____

Scoring: One point for each first sound produced in isolation.

Directions: "Now I am going to say a word and I want you so say the last sound in that word. Let me show you. If I say cat, you would say /t/. /T/ is the last sound in cat. Now you do this one. Night. Say the last sound in night." If child does not say /t/, say "The last sound in night is /t/. Listen, nigh/t/, /t/. Now you tell me the last sound in each word I say."

Score 0/1 Child's Response

- 7. _____ "drum" _____
- 8. _____ "grass" _____
- 9. _____ "train" _____
- 10. _____ "scarf" _____
- 11. _____ "slip" _____
- 12. _____ "write" _____

Scoring: One point for each last sound produced in isolation.

Directions: After you place the letters (m, s, f, n, p, t, a, i) in random order on the table, say "You choose from these letters to make each word that I say. Make the word as best you can. Put the letters for each word right here." Mix and replace the letters above the child's work space after each response.

Score 0-2 Child's Response

- 13. _____ "mit" _____
- 14. _____ "sip" _____
- 15. _____ "fit" _____
- 16. _____ "nip" _____
- 17. _____ "pat" _____
- 18. _____ "tan" _____

Scoring: One point for each correct first and/or last letter; ignore any extra letters between the first and last letters.

_____ total score

April , 2001

Dear Parent,

Your child has now finished the individual lessons on practice with sounds and letters. We hope that perhaps you have noticed in your conversations with (child's name) at home an increasing awareness of sounds and letters. Dr. McCormick will be calling you soon to specifically describe the skills (child's name) has been practicing in the lessons and will be happy to answer any questions you might have. We hope that (child's name) enjoyed the lessons. The skills practiced will help with learning to read in first grade.

Sincerely,

Kim Ochs,
Graduate Student

Christine McCormick, Ph.D.
Professor

office phone: (217) 581-6410