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THE USE OF A PHONETIC APPROACH TO READING
WITH THREE AND FOUR-YEAR-OLD CHILDREN

by

F. Walda Hopkins

A thesis submitted in partial fulfillment
of the requirements for the degree

of

MASTER OF SCIENCE

in

Family and Child Development

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F. Walda Hopkins

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ABSTRACT

The Use of a Phonetic Approach to Reading
With Three and Four-Year-Old Children

by

F. Walda Hopkins, Master of Science

Utah State University, 1971

Major Professor: Dr. Carroll Lambert
Department: Family and Child Development

The purpose of this paper is to determine if girls of preschool ages find more success in learning letters of the alphabet, their sounds, and simple two and three letter words formed from these letters, than boys of similar ages; and in addition to compare the achievement of three-year-old children to that of four-year-old children.

The children were introduced to six letters of the alphabet and the sound associated with these letters. They were then introduced to sixteen two and three-letter words that could be formed from these letters. At the conclusion of the ten tasks, a post test was administered and the results were studied to compare the achievement of girls to boys and three-year-old children to four-year-old children.

It was found that there is no appreciable difference between the scores of girls and boys, nor is the difference between the scores of three-year-old children and four-year-old children meaningful.

(54 pages)

INTRODUCTION

Origin and nature of problem

The importance of reading should not be under-rated, because much of the future of each child depends on his success in learning to read. The question can be asked, "What is reading?" Beginning reading is primarily a decoding process, or learning to recognize what the printed words say and that they are made up of letters which represent sounds. Beginning reading is then basically decoding; mature reading stresses meaning (Chall, 1969). Every language has its own set of symbols; and letters from different languages stand for different sounds and combinations of sounds (Wann, Dorn, and Liddle, 1962). Therefore, reading in each language necessitates learning to decode their specific symbols.

Reading is not just one skill, but a series of inter-related skills (Reid, 1966). The child must become proficient with visual skills, left-right sequence, auditory discrimination skills, and eye-ear coordination skills. Thus, after learning to decode the symbols, he builds on these skills to obtain more mastery in reading.

One of the major concerns of educators is discovering how to prevent reading failure, since this seems the logical answer to the problem of helping children who do not learn to read. The failure to learn to read creates the same emotional distress in a child as a

father feels in failure to hold a job (Reid, 1966). Perhaps if it could be ascertained at what age children learn to read most readily, and what the most successful approaches to reading are, prevention could actually become a reality. Zike (1968) suggested that learning disabilities are difficult to correct because once a child experiences failure in school, he is likely to turn to all kinds of substitutive behavior to compensate. Zike (1968, p. 39) stated that "what is needed is a preventative approach to children's problems--not corrective procedures."

Research has been done to show that preschool children can be taught to read successfully (Durkin, 1961; Stevens, and Orem, 1968; Fowler, 1962a; Davidson, 1939). However, some authorities who have been particularly concerned with the development of the child have suggested that early reading may be detrimental (Hymes, 1968; Sheldon, Stinson, and Peebles, 1969; and Hefferman, 1966).

Since the advent of Head Start, the nation has become much more aware of the problems facing the disadvantaged child in coping with learning and competing with the middle class child. Some of our more prominent experimental psychologists (Piaget, 1942; Kagen, 1967; Bloom, 1964, and Hunt, 1961) have advocated that intellectual stimulation in the early years may be the answer to the problems facing the disadvantaged child. Following this premise, programs have been developed to teach reading to children at this early age and these experimenters (Moore and Anderson, 1968; Doman, 1964; Stevens and Orem, 1968) have suggested that children learn easier at this age than if they wait

until the age of five or six.

Statement of purpose

The purpose of this study was to determine if children of preschool ages (three and four years) can learn alphabet names and associate sounds with these symbols. Also, to determine if young children can transfer learning by using these letter's sounds to form simple two or three letter words such as man, mat, am, pat, and pan. In addition, the investigator wished to determine if there was a difference in the ability of boys and girls to recognize letter names, sounds, and words with greater proficiency.

Hypotheses

The following hypotheses were made:

- Ho₁: Girls will learn the six letter names and sounds and be able to recognize the words formed from them with more success than boys.
- Ho₂: Four-year-old children will find more success than three-year-old children in recognizing the six letter names, letter sounds, and simple two and three letter words formed from these letters of the alphabet.

REVIEW OF LITERATURE

Early reading

In recent years, there has been a trend to introduce reading to younger children. However, the question whether reading should be introduced to younger children is still under debate by a good many educators.

Those against early reading have doubted that it is advisable. They have suggested that older children will grasp concepts more readily and surpass the children who were introduced to reading early (Ilg and Ames, 1969). Many felt that by using the preschool years to provide rich experiences and language development, children learn reading skills more rapidly in first grade (Heilman, 1961). Hunt (1961) stressed the idea that with a sound foundation of early experiences it may be possible to raise the average level of I.Q. as much as thirty points.

White (1969) felt that children can be taught to read at an early age, but not without sacrificing other areas of development that are deemed to be far more important. She felt that it is more important to expose children to rich and varied experiences that will be a foundation and help make them "ready" for reading later. Since the years three to six are so important, White (1969) asserted that:

... the teacher should be present always and play an active role in fostering development. She should be helping the child work toward readiness--learning to listen; to interpret sentence meaning; to employ these meanings in learning to see and to hear likenesses and differences and being able to remember what has been seen and heard; also, learning to conceptualise. (White, 1969, p. 704)

Dapper (1969) advocated that early education should lay a foundation for learning to read through carefully planned, sequentially developed perceptual-motor activities, good self-image, an awareness of his own body parts, development of eye-hand coordination, practice in perceptual discrimination and many carefully selected sensory experiences which prepare the young child for later learning. Zike (1968) found that two out of every five kindergarten students start out as potential failures. He reported on two recent studies which show that 40 per cent of children begin formal schooling before they are ready--physically or emotionally. He felt that there are five areas of readiness to watch for: "Degree of development of visual perception, motor skills and oral adaptability, emotional control, and social adaptability" (Zike, 1968, p. 41). Ilg and Ames (1969, p. 247) have reminded us that "play is the preschool's work; let's not worry that he's wasting his time."

Each child must set his own pace. The desire to learn blossoms--different children at different times. Forcing children to begin at the same time hurts many youngsters and spoils learning for many. (Hymes, 1968, p. 380)

Teaching children to read too early may not provide an opportunity for the active, creative, social, and multisensory activities they need to have for good learning now and later. LaConte (1967) felt that

parents are pushing many young children to read and pressuring schools to include reading in the kindergarten curriculum. She reported on a study in which kindergarten teachers expressed the opinion that most kindergarten children are not ready to read; but that the few who are, should be taught. These teachers felt that teaching reading to children in kindergarten will neither harm nor benefit most children. Durkin (1966a) found that children who learned to read spontaneously maintained their lead through at least sixth grade; children who were deliberately tutored were ahead of the control group by second grade, but not up with those who learned to read spontaneously. Also, those who were deliberately tutored did not maintain their lead over the control group beyond the third grade. Halliwell and Stein (1964) reported that children who entered school early were significantly poorer in achievement than were pupils who entered school later--age wise; older children achieve better.

Zigler (1971) stated:

... what we-re interested in is not the production of intelligence only; we-re interested in the production of social competence in every child. Study after study indicates that if you-re interested in the social competence of the child, you should be just as interested in that child's attitude about himself, about others, about his society, his sense of autonomy, his sense of purpose, his sense of industry; you must be just as concerned with developing his curiosity, developing the sense that this world is one in which he can achieve. (Zigler, 1971, p. 145)

Zigler (1970) also stated:

... the proper goal in education is not the production of intellectual paragons, but rather the production of

adjusted individuals representing a wide spectrum of individual ability, who actualize themselves as much as human beings given whatever intellectual potential they have. (Zigler, 1970, p. 410)

White (1969) suggested a middle of the road approach--remembering individual differences in interest, ability, and development. "We should enhance the growth of every child," (White, 1969, p. 704). Zigler (1970) agreed with White; he recognized the importance of intellectual development in preschool years, but also saw the importance of the whole child. He would like to see just as much concern and emphasis placed on emotional and social development.

... only by consciously directing our efforts to the development of both these aspects of human growth will we be producing the kinds of individuals our society so badly needs. (Zigler, 1970, p. 412)

Osborne (1966) was concerned as to why our nation is so concerned with early reading. He felt that many children are able to read, but socially are unable to get along with other children.

Mason and Prater (1966) concluded that:

- 1) When exposed to the same program, younger children make less progress than older children with similar levels of intelligence.
- 2) Reading readiness may be better described as early reading progress.
- 3) The best age for beginning reading is dependent on several other variables such as the instructional materials, class size and teachers expectancies.
- 4) The control of attention is apt to be difficult for younger children and attempts to force learning may lead to emotional reactions.
- 5) Unless we improve in gearing our instruction to the students ability to learn and to the amount of his previous learning, the answer to the question: 'Should reading be taught to pre-school and kindergarten children?' is NO! (Mason and Prater, 1966, p. 143)

It has been stated, however, that first grade children who were introduced to reading early (in kindergarten) were "book hungry." They had learned to read more readily, and in essence had a "head start" that could be maintained throughout their school years (Sutton, 1969). Pines (1966, p. 1) stated that the most important thing that could be done for culturally disadvantaged children would be to teach them to read before they enter school. She further stated, "Our severest educational problems could be largely solved if we started early enough."

Durkin (1966a) reported that the characteristics of early readers generally include the following: 1) early writers, 2) read to by parents, 3) copying words from packages, books, etc., 4) carrying on self-initiated projects, 5) had learned to read because they had a desire to know the contents of books or the written page--in essence, they were self-initiated.

Sutton (1969) reported on a study that showed that children who achieved a measure of success in reading early had a continuing and increasing reading advantage over their classmates throughout the primary grades. However, it must be admitted that most of these children would have been reading successfully by grade three regardless.

It is now being stressed that environment is the key to learning ability, and authorities see a great field for development of toys and games that teach. Kagen (1967) said that pushing the child to new experiences keeps him moving. The trick is to develop the environment for creative enjoyable learning in the preschool years without pushing

the new techniques so hard that they become a fad. Gates (1961) told us that there are factors which suggest that most children could learn to read in their fourth year. They learn to understand spoken language quite well by the end of the second year, and "psychologically there is no difference between learning, as it were to 'read' spoken words and learning to read printed words ..." (Gates, 1961, p. 432).

If as all evidence indicates, the very young child has an aptitude for language mastery, one which has begun to wane after five, could not this same aptitude or special talent be utilized in the learning of reading? If a child can learn to recognize and create the complex patterns of sounds we call speech, why could he not be taught to recognize the patterns of letters we call writing. (Stevens and Orem, 1968, p. 26)

Durrell (1964) reminded us that apparently we forget that large amounts of specific learning have taken place in the preschool years. Some children come to school able to read well in a primer; others cannot tell the capital letters apart. Some can write words from memory, using lower-case letters, while others cannot copy block capitals accurately. The rate of learning to read seems to relate more closely to background skill than mental age. The remedy for lack of reading readiness consists in giving the child specific backgrounds for reading rather than "waiting until he is ready."

When is a child ready to read? Stevens (1968) suggested that the answer is clear. Whenever the child's brain responds to language through any one of the major sensory systems, it is ready to respond through all of them. To conclude anything else, he felt, would be to

imply the existence of a "language center" in the ear drum or some such impossible notion. There is no reading readiness in a child, only language readiness. This language readiness begins to function some-time in the first year of life.

Bloom (1964) believed that early environment is of the utmost importance because it is during these early years that the environment shapes the characteristics of the child during these most rapid periods of formation. Deutsch (1964, p. 256) expressed that "experience missed at one developmental level cannot be adequately retrieved at another level; later development must be stimulated by experiences that are constant with the individuals status at the later time."

Montessori's experiences with young children convinced her that given the opportunity, children will reveal unforeseen learning capacities. Her studies indicated that the child, in process of development, passes through a series of what she termed "sensitive periods," a time of special receptability to certain learning. She stressed the importance of allowing a child to utilize his sensitive periods, for they are transitory in nature and once gone, cannot be recaptured (Montessori, 1949). Hunt (1961) called these sensitive periods "the problem of the match," which he explained as matching the proper moment during these periods with the proper stimulation. He felt that by matching properly, one stimulates the child and need not worry about pushing him.

Stevens and Orem (1968) quoted Montessori stating that,

... if in education one takes into due consideration these sensitive periods, one may sometimes arrive at results which are surprising and above all, contradictory to our prejudices concerning the uniform progression of the intellect and our ideas with regard to fatigue in learning. (Stevens and Orem, 1968, p. 80)

Montessori realized that every child needs responsive, orderly surroundings in which he can discover the materials necessary for his self-development. The child needs freedom, but he also needs the organization of work which a prepared environment offers. The child makes himself out of the elements of his environment. Since the child can only develop fully by means of what she termed "experiences on the environment," it is vitally important that we prepare the environment in a definite manner offering the child the external environment directly necessary for him to learn.

Durkin (1962) discovered that children learn to read not because of parental pressure on high intelligence, but largely because these children are raised in an environment where the adults are very interested in reading and the child is given extensive opportunities to learn to read. Hughes (1956, p. 464) reported that "... children from homes where there are books and people who read them, and who had been read to and handled books themselves, make more rapid adaptation to reading" Barbe (1958) found that an amazing thing about developing an interest in reading is that the more interest the teacher and the parents have in reading, the more easily interest is developed in the child. There are many teachers who actually never do any formal teaching of reading and yet many of their children learn to read.

Students of language have known for some time that language is most readily acquired at an early age. Children who have had restricted language experience in childhood are likely as adults to be limited in speech and even intelligence (Stevens and Orem, 1968). If the majority of children do not learn to read the "natural way," the way they learn to talk, it can only be that they are not being allowed to learn to read naturally. They are not being exposed to the graphic symbols of reading as they are to the auditory symbols of speech (Durkin, 1966b).

The fact that normal children recognize signs and television slogans proves that they can read words when given an opportunity. The success of past and present reading programs for very young children provides additional evidence of the child's capacity for early reading. If adults would label some of the child's world with appropriate visual symbols as they do with aural symbols, and if adults would make large lettered words easily accessible and relate them to objects in the child's environment, then children would begin to read just as naturally as they begin to talk. By delaying the child's exposure to printed language we are in effect helping to create the millions of reading problems that now plague our schools (Stevens and Orem, 1968). Strang, McCulloch, and Traxler (1964, p. 213) felt that learning occurs when there is a need to know--a problem to be solved. They stated that "alert attention is a prerequisite to learning, the desire to know motivates learning."

Gates (1961) stressed that if children are to learn to read at an earlier age, then methods and materials different from those used

commonly today in the first grade will necessarily need to be used. With the modern facilities that are now available in the field of printing, it is now feasible to provide an abundance of materials which should enable a child, with guidance, to learn to read by himself. Materials that have been developed and tried out include: ITA in England; and adaptation of Montessori and O. K. Moore's "talking typewriter."

Krippner (1968) reminded us that Montessori prepared the environment and stimulated curiosity and discovery. She encouraged attention and sequential development in children and their mental process. She also stressed Piaget's doctrine of stages. Krippner also reported that Montessori felt that mastery of basic skills is essential to creativity.

Davidson (1939) concluded that word learning is possible at a mental age of less than two years. Individual differences in temperament, training and environment determine for each individual child the age at which formal reading instruction should begin. The most effective method which can be emphasized is the method which best suits the needs and capacity of the child involved. Kasdon (1958) reported that early readers were often taught by members of their families. They just wanted to learn to read and were curious about the contents of books. Davidson (1939) suggested that the ability to read appears to involve three things: the ability to a) associate a word name and its printed symbol, b) to discriminate between printed symbols, and c) to

derive meaning from printed symbols.

A phonetic approach to reading

Since the advent of Head Start in the early 1960's, much research has been done and many programs have been developed to aid in teaching young children to read, including O. K. Morre and his "talking typewriter" and Carl Bereiter and Siegfried Engleman with their language and reading programs. Also enjoying a good deal of success and influence on preschool children is a revival of the Montessori method of providing opportunities to learn to recognize letters and form words (Pines, 1966).

Sabroff (1970, p. 526) felt that a linguistic approach to reading is most appropriate with young children. The material is presented in such a way, that the child must discover the structure in words. Thus he is helped to "discover" the characteristic sounds of consonants and vowels as they appear in words. Sabroff stated, "Isn't it time to let the children in on the 'secrets' of our written language?"

Schneyer (1969) felt that neither a linguistic or basal reading approach is more successful in all instances. Children are individuals and care should be taken to find the most appropriate program for each child and his personal abilities. Chall (1969, p. 93) stated that "irrespective of the beginning method used, studies indicate that children who 'know their letters' learn to read better."

Strang reported that many researchers have attempted to find out which of the many methods of teaching reading are most effective.

One study will show that intensive phonetic training in letter sounds and names appears to have a favorable effect on reading achievement. Another will show that the phonetic approach has no advantage over a combination of methods, even in teaching a phonetically regular language.

Sheldon, Stinson, and Peebles (1969) made a comparative study of basal reading programs, a linguistic method and a modified linguistic approach. At the end of two years, it was reported that each method was equally effective in teaching reading. No one method is superior for teaching all children. Schneyer (1969) reported on a study which showed neither approach more successful. By the end of the third grade, the linguistic approach readers were superior in oral reading and decoding new words. The basal reading readers were superior at word study skills on tests.

Seymour (1970) reported that first grade teachers who want children to learn to read always devote time to what is called "auditory perception" or "auditory discrimination." They feel that children must learn to attune their ears to the sounds of language. The teacher's ultimate aim is to get the children to associate one particular sound with one particular letter. The association of language sounds with language symbols depends intricately on the child's understanding of the concept of a language sound. This is why first grade teachers work so hard to help children "hear" the "first sound." Children have to be taught an awareness of sounds of their speech. The first hurdle for a

school child is to learn to relate shapes to sounds and so learn to read and write.

Sabrroff (1970) told us that the linguistic approach starts with familiar words that are phonetically regular, e.g. pan, man, tan, etc. Programs which are systematic in learning of new material always draw on prior learning. The material is presented in such a way, that the child must discover the characteristic sounds of consonants and vowels as they appear in certain positions in words.

Sex differences in early reading

To say that boys and girls are different is trite, reported Blum and Adock (1968), but as far as their attention span is concerned, as well as in other areas, it is true. He reported on data of infants gathered from ages six and thirteen months, which pointed out that girls show more sustained attention to visual stimulation than boys. Gates (1961) reported that the usual explanation for the fact that girls will generally score significantly higher than boys on tests in grades one and two, is that they mature earlier. He felt that this explanation is unlikely because girls not only score higher in reading in the lower grades, but this carried on into the upper grades as well. He suggested that more boys than girls find little or no early need for learning to read. They fall behind in the beginning and remain behind, never catching up.

Over the years, a great deal of research has been done pertaining to early reading and the literature is extensive. Much of the research

that has been done shows completely conflicting results.

Both sides, those for and those against, agree that three and four-year-old children can be taught to read. Both those for and those against are concerned about the results of pushing children to read early and the damages it may cause. However, they disagree about the cause of the damages. Both sides are concerned about the total development of the child and research undoubtedly will continue until the answers to all of their questions are found.

PROCEDURES

Sample

Five boys and five girls who were three years of age and five boys and five girls who were four years of age were selected from the Child Development Laboratory School at Utah State University, Logan, Utah. The children in the laboratory school are primarily from middle class Caucasian families who are interested in education, and the subjects were representative of the laboratory children. The subjects were selected from the class lists of children in the laboratory school who met the criteria of sex, age, and were new to the preschool program, because those children who had been in the school the previous quarter may have been exposed to the Letter Form Board and other research. The first four children on the list in three of the groups, and the first eight children in one of the groups were chosen. In analyzing the data, the investigator had scores on only nineteen children; one boy, age three, moved during the study.

Setting

The study was conducted in the Child Development Laboratory at Utah State University, Logan, Utah. The laboratory operates in two classrooms, with two groups of children in each room per day. The rooms are large open rooms, with moveable equipment. They are designed

and equipped to provide areas for dramatic play, large and small muscle development, music experiences, concept development, language, and sensory activities. The equipment is unattached and moveable to provide opportunities for the teachers to rearrange the rooms and experiment creatively with the placement of equipment, furniture, and toys.

Both laboratory rooms share the library and kitchen facilities, as well as the closets in which small toys, sensory equipment, etc. are stored.

Both classrooms open onto an outdoor play area which is shared. The outdoor area contains some permanently placed large muscle development equipment, as well as additional equipment which is stored in an adjoining storage area.

Each session of the laboratory operates for two and one-half hours per day, four days a week, with one faculty member hired by the University, and four student teachers. Each quarter the faculty member serves as "head teacher" for one week and demonstrates a well planned unit including at least one of each of the following experiences: science, music, food, art, flannel board story, an excursion, and a visitor. Each student teacher then has two weeks to serve as "head teacher" and carry out two lesson plan units, one each week.

Instrument

The instrument used in this study was adapted from Sullivan's Programmed Reading (McGraw Hill Book Co.) Stage 1, Reading Readiness.

Six white cards, four inches by six inches with one and one-half inch lower case letters printed in the center were used for introduction of the alphabet letters (Figure 1). The letters used were m, n, t, a, p, and i.

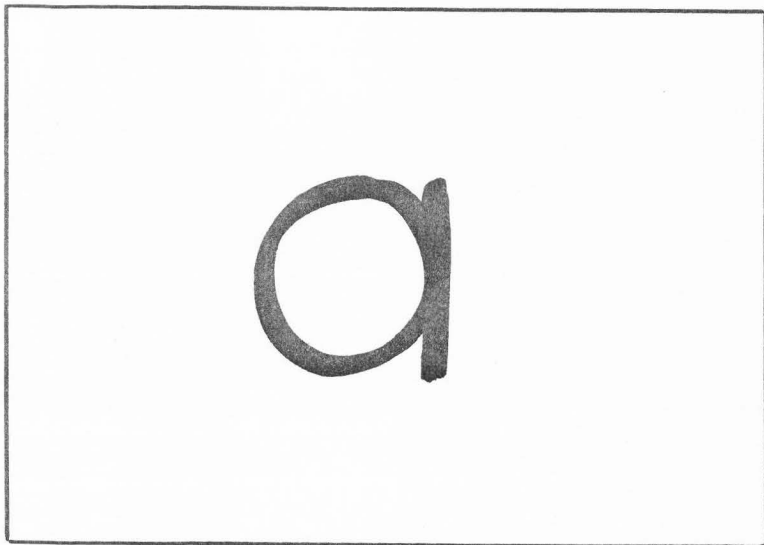


Figure 1. Letter card.

Buff cards, three inches by eight inches, with words printed in black in the center were used to introduce words (Figure 2). The following words were used: an, pan, in, pin, nip, nap, it, at, pat, ant, tan, tin, am, man, mat, and map. (See Figure 2)

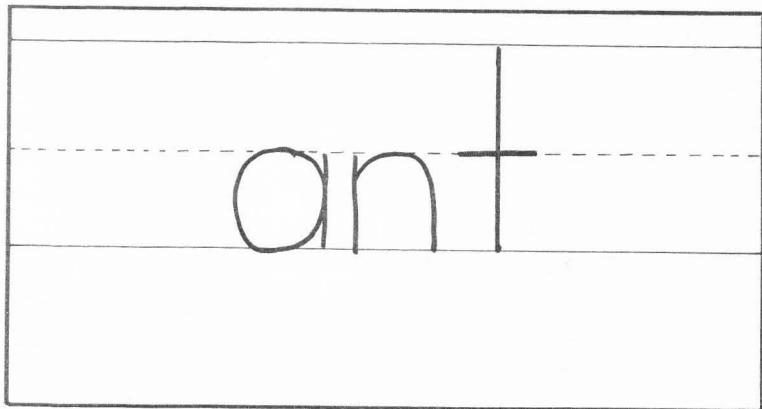


Figure 2. Word card.

An alphabet chart showing all letters of the alphabet was used to show the relationship of one letter to another. Alphabet sound symbol cards, nine inches by twelve inches, showing the letter and a picture of an object representing the sound of the letter were used in introducing sounds associated with the letters (Figure 3).

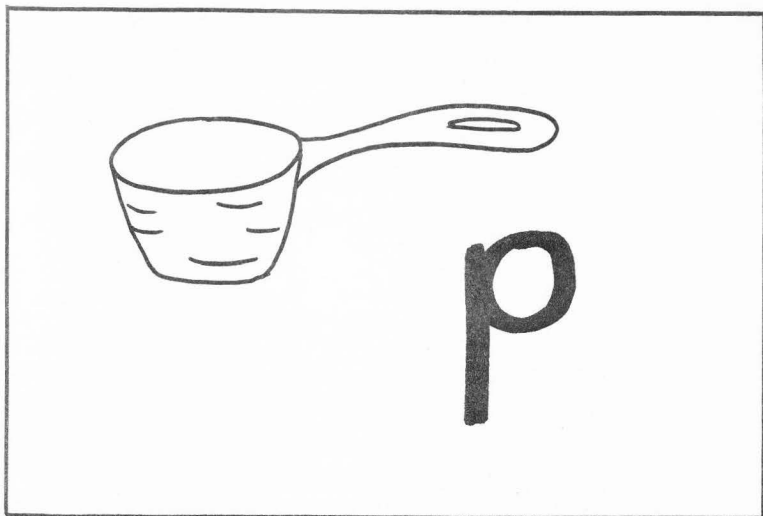


Figure 3. Sound-symbol card.

Administration and collection of data

A pre-test was conducted with each child individually using six lower case letters of the alphabet--a, i, p, n, t, and m. Children in the sample who knew any of the words or most of the letters were eliminated and replaced by other children in the laboratory who did not know any of the words or most of the letters. (It was expected that several children may know one or two of the letters of the alphabet that were found in their names. However, only two children knew one letter found in their name.)

The results of the pre-test were used as a comparison in analyzing the data gathered at the conclusion of the study. The investigator said to each child, individually; "I want to play a game with you. I am going to show you some letters of the alphabet and I want you to tell me the name of each letter you know." (Each of the six letters were shown individually to the child and he was asked to respond.) Following this, the investigator said, "Now I am going to show you some words. If you know what the words say, I want you to tell me."

The tasks were conducted with groups of four children, two boys and two girls, from the same group. The children were taken out of the laboratory school for one ten-minute session per day.

Task I

The investigator introduced the letter "a" by holding up an alphabet card for "a" and saying: "This is the letter 'a'. Who can tell me what color it is? Is it black or red? This letter is made by making a circle and a straight line (demonstrated on chalk board). What is the name of this letter? Good. This is an 'a'. Can all of you say it together. 'a' Good. Again. 'a'."

"The letter 'a' belongs to a family just like you do. The family it belongs to has a name and the name is called the alphabet. Can you all say that word with me? Alphabet." (A chart of the twenty-six letters of the alphabet was shown and it was pointed out that 'a' is just one letter of the alphabet.)

"Your family has a name too. Everyone in one family has the same name, 'Johnson'; and Bobby, you are just one part of your family. This is the way it is with the letter 'a', it is just one part of the alphabet family."

"Do you look just like all of your brothers and sisters? No. Do all of the letters of the alphabet look the same? No. You are doing so well. See if you can remember what this letter's name is." (The letter card for "a" was shown.) "Yes, this is an 'a'. Good."

"Now I want to show you another letter. This is the letter 'i'. What is this letter? ('i') Good. Now what is this letter? ('a') Good, I can't fool you, can I?"

"Mary, can you show me the letter 'a'?" (If she could, she was permitted to keep the card of the letter "a".) The investigator continued with this process, having the children pick the correct card or give the name of the letter until each child had two cards, "a" and "i" to take home with him.

Task II

The investigator introduced the letters "n" and "p" as in Task I. The letters "a" and "i" were also reviewed by having the children distinguish between "a" and "i" and then add "n" and "p". Cards were available for "n" and "p" for the children to take home after Task II.

Task III

In this session, the letters "a", "i", "n", and "p" were reviewed

by having the children name or pick the letters. The group of children also spelled words using the letters "a", "i", "n", and "p".

The investigator said: "I am going to write some letters on the blackboard. What is this letter? ('i') Good. This is an 'i'. Now what is this letter?" (The letter "n" was printed next to the "i" making it say "in".) "Good, this is an 'n'. When I put these two letters, 'i' and 'n', together, they spell 'in.' Spell the word with me. 'i...n..' Again, 'i..n..'"

The investigator repeated this process with "a" and "n" to spell "an."

Task IV

During this session, the letter names of "a," "i," "p," and "n" were reviewed. The investigator also reviewed the spelling of the words: "in" and "an," and introduced the spelling of "pin," "pan," "pan," "nip," and "nap" in the same manner as in Task III.

Task V

The investigator taught the sounds for "a" and "i" by saying, "We know that these letters have a name. They also have a sound. Each letter has its own sound, just as when Jimmy and Susan talk, they sound different, these letters sound different also. What is the name of this letter? ('a') Good. This is an 'a'. The sound of the 'a' is /æ/. " The sound symbol card with the letter "a" and a picture of an ant was shown.) "The picture on this card is an ant. The word ant

starts with an 'a'. Listen to the /ae/ sound at the beginning of the word ant. 'ant' 'ant' What sound does the letter 'a' have?" (/ae/) "Can all of you say it with me. /ae/ Again. /ae/"

The investigator repeated the process with the letter "i," /i/ (like "i" in it). The investigator also reviewed the names of "p," "n," "a," and "i."

Task VI

The investigator reviewed the sounds for the letters "a" and "i," and introduced the sounds for "n" and "p" in the same manner as in Task V. The following words were also sounded out: in, an, pin, and pan.

Task VII

The investigator reviewed the names and sounds of the letters "a," "i," "p," and "n." The following words were also sounded out; in, pin, an, pan, nip, and nap.

Task VIII

Task VII was reviewed and the letter "t" and its name and sound were introduced. The names and sounds of "a," "i," "p," and "n" were reviewed and the following words with the letter "t" were spelled: it, at, pat, tin, tan, and ant.

Task IX

The letter "m" and its name and sound were introduced. The

following words using the letter "m" were spelled and sounded out: am, man, mat, and map. Task VIII was also reviewed.

Task X

The investigator reviewed reading and spelling with "a," "i," "n," "t," "p," and "m" words. The words used were: an, in, pan, pin, nip, nap, it, at, pat, tin, tan, ant, am, man, mat, and map.

Pilot study

A pilot study was conducted using children who met the specified criteria, but were not among the subjects for the study, to determine the workability and value of the instrument. The investigator took four children (two boys and two girls) who met the criteria, into the Child Development Library. The children were seated across the table from the investigator during the instruction time. The author proceeded through Task VI in testing the instrument. It was found that the children responded to the visual aids and language of the instrument and that the ten minutes allocated for each session seemed to be adequate. The children appeared to enjoy the "game" of learning the letters and sounds, as well as the words.

Post-test

A post-test (the same as the pre-test) was conducted to ascertain the retention of letter names, sounds, and simple words formed from the letters. Each individual child was shown the individual letter

and asked to provide the name and sound for each letter. He was then shown the words and asked to read the words for the investigator. The scores and responses were compared to those of the pre-test, as well as each other, in analyzing the data.

FINDINGS

Neither of the two hypotheses (H_{01}) that girls will learn the six letter names and sounds and be able to recognize the words formed from them with more success than boys, and (H_{02}) that four-year-old children will find more success than three-year-old children in recognizing the six letter names, letter sounds, and simple two and three letter words formed from these letters of the alphabet were confirmed by the findings of this study.

The scores were analyzed statistically using a chi square and a t test. As there were no significant differences, the scores will not be described in a statistical manner.

The hypothesis (H_{01}) that girls will learn the six letter names and sounds and be able to recognize the words formed from them with more success than boys was not confirmed. The girls achieved an average of 3.6 letter names out of six, as compared to 3.4 for the boys. This indicates that as a total group, the girls learned .2 more letter names than the boys. The three-year-old girls achieved an average of 2.4 letter names learned as compared to a score of 3.5 for the three-year-old boys. The four-year-old girls achieved an average of 4.8 as compared to 3.4 for the four-year-old boys (Table 1, Figures 4, 5, and 6). None of these differences are enough to be meaningful.

Table 1. Average number of letters, sounds, and words learned

Group	Letters	Sounds	Words
Three-year-old boys	3.5	3.2	1.6
Three-year-old girls	2.4	2.8	2.6
Four-year-old boys	3.4	3.6	2.6
Four-year-old girls	4.8*	4.6*	5.6*
Total boys	3.4	3.4	2.2
Total girls	3.6	3.7	4.3
Total three-year-old children	3.1	3.0	2.2
Total four-year-old children	4.7*	4.1*	4.1*
Total Group	3.6	3.3	3.2

*Figure skewed by one four-year-old girl's score.

The average number of sounds learned by the girls was 3.7 as compared to 3.4 for the boys. This indicates that the girls learned .3 more letter sounds than the boys. The four-year-old girls learned 4.6 letter sounds as compared to an average of 3.6 for the four-year-old boys. The three-year-old girls learned 2.8 letter sounds as compared to 3.2 letter sounds learned by the three-year-old boys (Table 1, Figures 4, 5, and 6). The difference on these scores is not large enough to be of importance; however, it is interesting that the three-year-old boys scored higher than the three-year-old girls (Figure 5).

The average number of words learned by the girls was 4.3 as compared to an average of 2.2 for the boys. This indicates that the

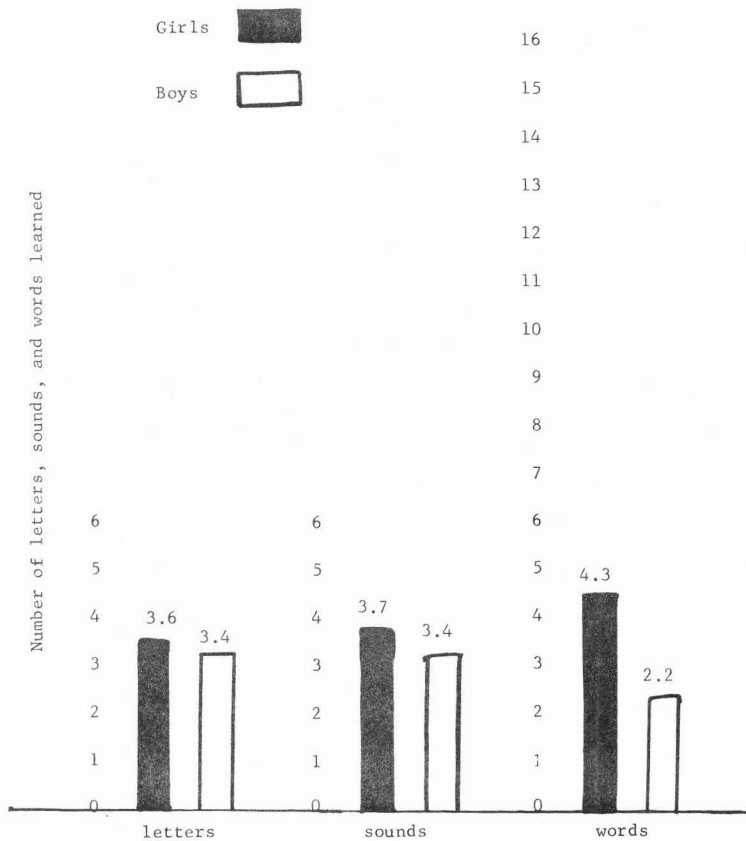


Figure 4. Correct responses of girls compared to boys.

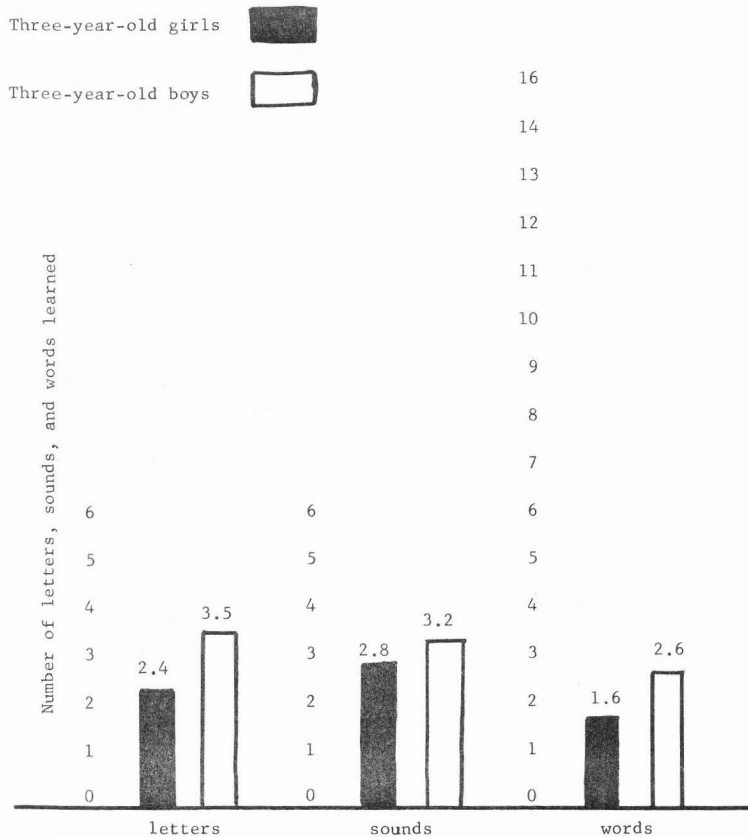


Figure 5. Performance of three-year-old girls compared to three-year-old boys.

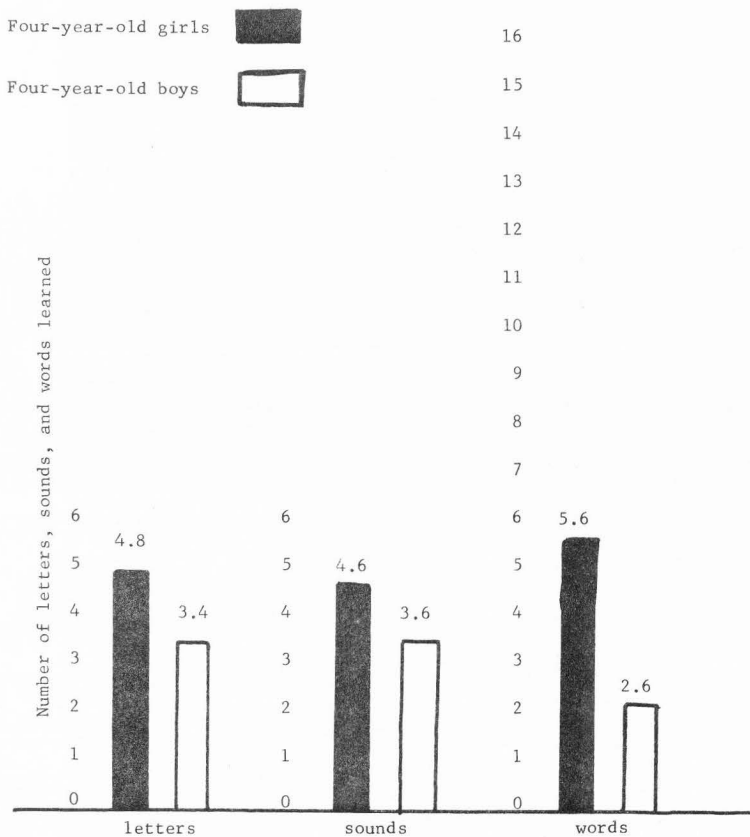


Figure 6. Performance of four-year-old girls compared to four-year-old boys.

girls learned an average of 2.1 more words than the boys. The three-year-old girls learned an average of 2.6 words as compared to the three-year-old boys' score of 1.6. The four-year-old girls learned 5.6 words and the four-year-old boys 2.6 (Table 1, Figures 4, 5, and 6). It is to be remembered that the score achieved by the four-year-old girls is skewed, due to the high score gained by one four-year-old girl (Table 2).

Table 2. Number of correct responses to words

Group	Number of words																					
	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0					
Three-year-old boys																1	2	1				
Four-year-old boys																1	1	1	2			
Three-year-old girls																		1	1	1	1	1
Four-year-old girls	1																	1	1	1	1	

In comparing the frequency of correct responses of letter names learned, the letters "n" and "t" appeared to present the most difficulty. The letter "p" seemed to be the easiest recognized, slightly ahead of "i," "a," and "m." However, the difference was not enough to be important (Figure 7). There was no meaningful difference in the number of correct responses to letter sounds (Figure 8). The letter "n" appeared to present the most problems, while the /ae/ sound of "a" was most readily recalled.

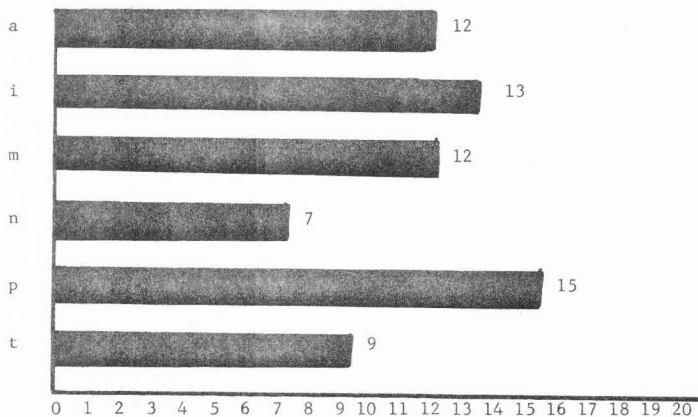


Figure 7. Frequency of correct responses to letter names.

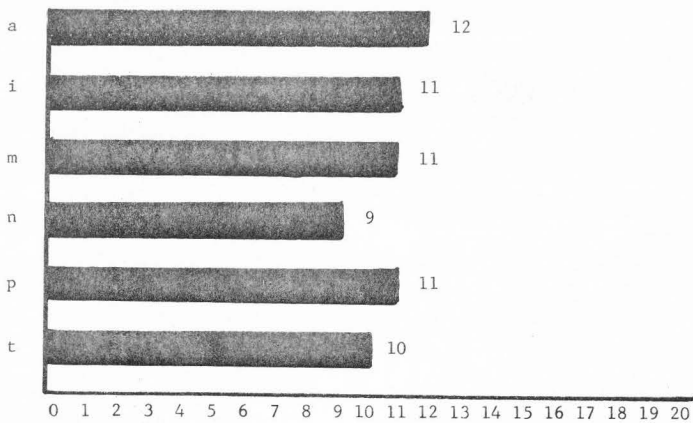


Figure 8. Frequency of correct responses to letter sounds.

The word "man" was recognized correctly the greatest number of times, followed by ant, pan, pin, and an. The remaining words presented more difficulty ranging from one to four correct responses (Figure 9).

The hypothesis (H_{02}) that four-year-old children will find more success than three-year-old children in recognizing the six letter names, letter sounds, and simple two and three letter words formed from these letters of the alphabet was not confirmed by this study. The difference in the number of letters, sounds and words learned was so small, that it did not show more ability in one age group than in another.

The average number of letter names learned by the total group was 3.6 letter names out of six letters. The four-year-old children achieved an average of 4.7 letter names learned out of six, and the three-year-old children achieved an average of 3.1. This indicated that the four-year-old children learned an average of 1.6 more letter names (Table 1, 3, and 4, Figure 10).

The data presented in Table 4 would suggest that most four-year-old girls demonstrate an interest in and desire to learn the letter names and sounds and find a good deal of success in this endeavor, as is shown by the high scores achieved by the majority of these girls.

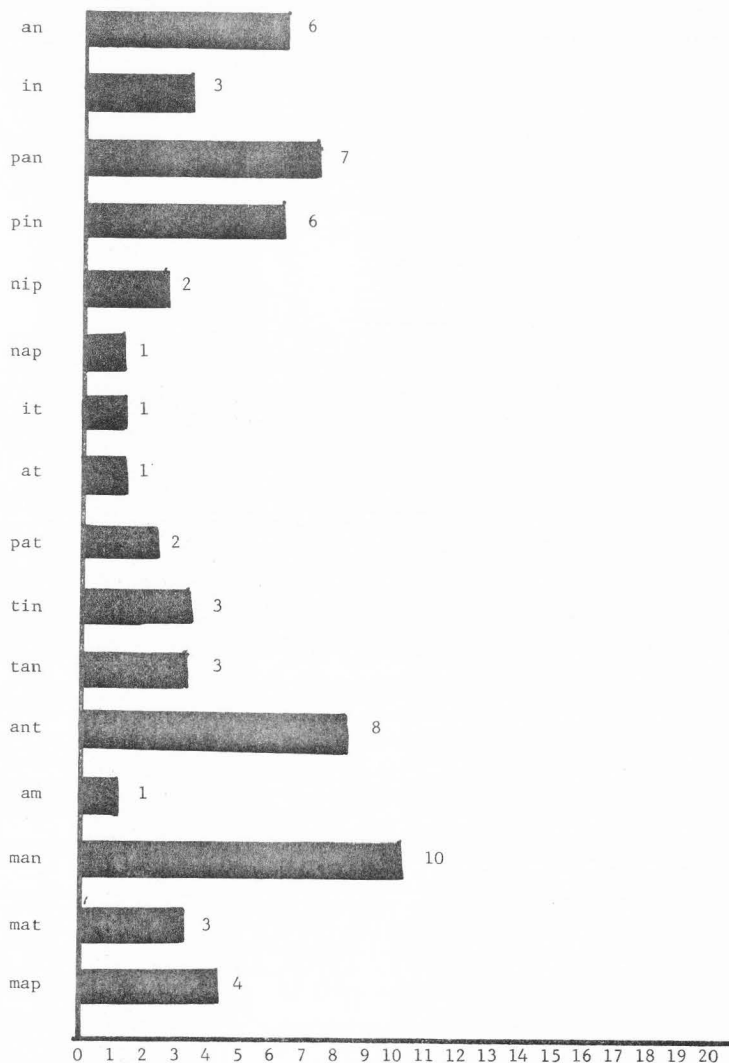


Figure 9. Frequency of correct word responses.

Table 3. Percentage of letters, letter sounds, and words learned

Group	Letters	Sounds	Words
Three-year-old boys	22	20	10
Three-year-old girls	15	18	16
Four-year-old boys	21	23	16
Four-year-old girls	30	29	35 ^a
Total boys	21	21	14
Total girls	23	23	27 ^a
Total three-year-old children	19	19	14
Total four-year-old children	29	26	26 ^a
Total Group	23	10	20

^aFigure skewed by one four-year-old girl's score.

Table 4. Number of correct responses to letters

Group	Number of letters						
	6	5	4	3	2	1	0
Three-year-old boys		1	2			1	
Four-year-old boys	1		1	1	2		
Three-year-old girls	1		1	1	2		1
Four-year-old girls	4						1

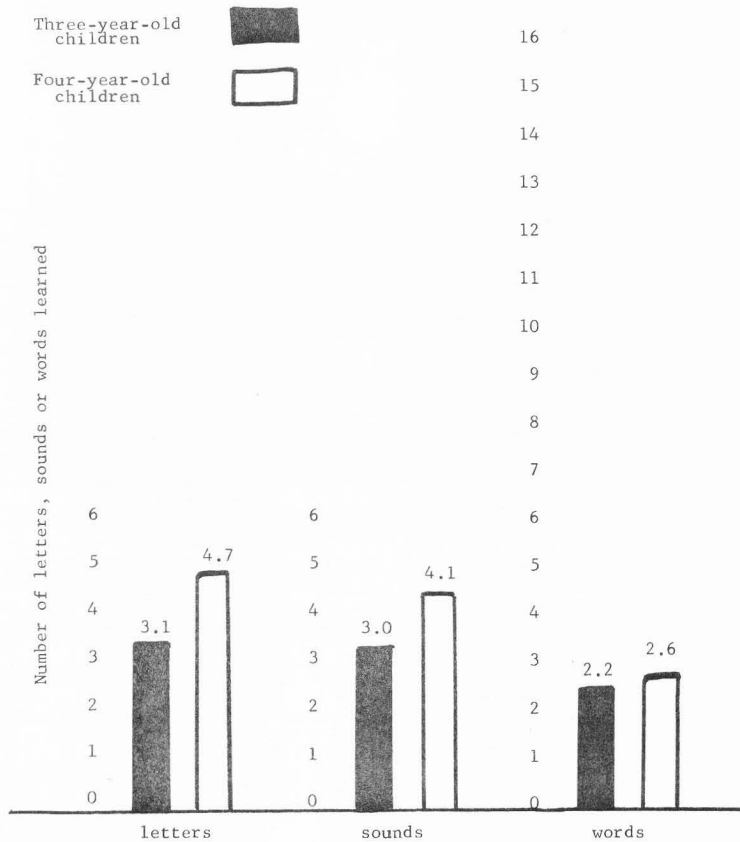


Figure 10. Performance of three-year-old children compared to four-year-old children.

The average number of sounds learned by the entire group of children was 3.3 out of six sounds. The four-year-old children achieved an average of 3.0 letter sounds. This shows that the four-year-old children learned 1.1 more sounds than the three-year-old children (Tables 1, 3, and 5, Figure 8).

Table 5. Number of correct responses to sounds

Group	Number of sounds						
	6	5	4	3	2	1	0
Three-year-old boys			2	1	1		
Four-year-old boys	2			1	1	1	1
Three-year-old girls	1			1	2	1	
Four-year-old girls	3	1					1

The average number of words learned by the total group was 3.2 out of sixteen words. The four-year-old children achieved an average of 4.1 as compared with an average of 2.2 for the three-year-old children. This indicated that the four-year-old children learned an average of 1.9 more words than the three-year-old children at the end of ten tasks (Tables 1, 2, and 3, Figure 9). It must be noted, that the score for the four-year-old children is skewed by the score of sixteen words learned by one four-year-old girl.

Discussion

Working with the children, helping them learn the names of the letters, sounds of letters, and words proved interesting. For the most part the children showed more interest in the letters which would be pointed out in their individual names. They also retained those letter names and sounds more consistently. All but one child did show an increase on post-test over pre-test scores, which indicates that preschool children can be taught these skills.

It was felt by the investigator that with several of the children, the library (in which the study was conducted) was distracting at first. It was a new area the children had never been in, and some were fascinated by the books and other items stored in this room.

It was also found that at times it was difficult to entice a few of the children to leave their toys and friends out-of-doors playing and come indoors, even for a few minutes. Most of the children did appear to enjoy the "game" and to try once they were seated and working. There were two children that the investigator felt, in administering the post-test, were not trying, as they had been responding much more accurately in previous sessions.

The question is still unanswered in the mind of the investigator as to the value of early reading experiences for preschool children. It is accepted that these children can learn letter names, sounds, and simple two or three letter words; but is the learning that takes place beneficial enough to warrant taking them away from other learning

experiences that may prove to be just as important? Furth (1970) suggests that preschool children should be "learning to learn" rather than learning specific skills or concepts independently.

SUMMARY AND CONCLUSIONS

It is generally accepted that preschool children can be taught to read. The question as to whether teaching the preschool child to read is actually beneficial or not has not been settled at this time. Neither has it been ascertained at what age children learn to read with more proficiency or by what method this is best achieved.

The purpose of this study was to determine if children of preschool ages (three and four years) can learn alphabet names and associate sounds with these symbols. Also, to determine if young children can transfer learning by using these letter's sounds to form simple two or three letter words such as man, mat, am, pat, and pan. In addition, the investigator wished to determine if there was a difference in the ability of boys and girls to recognize letter names, sounds, and words with greater proficiency.

It was hypothesized (H_{01}) that girls will learn the six letter names and sounds and be able to recognize the words formed from them with more success than boys, and (H_{02}) that four-year-old children will find more success than three-year-old children in recognizing the six letter words formed from these letters of the alphabet.

Twenty children from the Child Development Nursery School on Utah State University, Logan, Utah campus were introduced to six letters of

the alphabet, the sound associated with each letter and sixteen simple two and three letter words that can be formed from these letters. At the end of ten tasks, the children were tested and the results were compared.

It was found that there is no meaningful difference in the achievement of boys as compared to girls, or three-year-old children as compared to four-year-old children, in letter names learned, letter sounds learned, or simple two and three letter words learned.

Conclusions

From the findings of this study, it may be concluded that age and sex do not appear to make a meaningful difference in the performance of preschool children in learning letter names, sounds associated with letters and simple three letter words. If such a difference does exist, it manifests itself at a later age.

Recommendations for further study

Since the results of this study did not indicate whether girls actually do find greater success in reading than boys, a similar study could be conducted with a slightly different format. Still working in groups of four or five, it might be interesting to see what the results would be if instead of one ten-minute session per day, two ten-minute sessions per day were conducted.

Objective of such a study might be to determine if more than one session per day would aid in additional retention of skills learned.

A further study might be conducted using the entire class and working as a group activity on the rug. The same tasks could be used, but working on the premise that the children would stimulate and learn from each other. The purpose of such studies might be to determine if children do learn from each other and help stimulate their peers interest and motivation in larger groups.

It might also be interesting to conduct the same study with one child at a time to see if more learning takes place on a one-to-one basis.

A further study which may prove beneficial would be a follow through study with a control group. It would be interesting to compare the achievement of two groups of children, one which had been provided with a rich environment and many stimulating experiences and another which had been provided with an early reading program. It might prove interesting to follow these two groups through third or fourth grade to determine if there is an appreciable difference in the achievement made by children with these two different backgrounds.

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APPENDIX

NAME _____

AGE _____ SEX _____

	a	i	m	n	p	t
Pre-test						
Post-test						

Comments:

Pre-test

Post-test

	an	in	pan	pin	nip	nap	it	at
Pre-test								
Post-test								

Comments:

	pat	tin	tan	ant	am	man	mat	map
Pre-test								
Post-test								

Comments:

Pre-test

Post-test

VITA

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