A Study of Some Predictors of Success in Beginning Reading

by

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I recommend this thesis for acceptance by the Honors Program of Ball State University for graduation with honors.

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Chapter I
INTRODUCTION

Upon entering a practical environment for testing the theoretical concepts that were being learned in methods classes, it was discovered that answers to practical problems are not always found in theoretical terms. But, being faithfully committed to theoretical methods, this researcher did not want to negate her past education. A student teacher quickly learns the limitations of her education and, also, the value of the contributions from educational research. In no other area of the curriculum was this realization more apparent than in that of reading. One of the responsibilities in student teaching was to help nine children learn to read. These students had been grouped for reading according to their scores on a readiness test. Everett T. Calvert, in a study of this particular readiness test with 746 children, determined that children scoring within the range that the nine children in this study group scored had as great a chance to fail in reading as to be successful.¹ Since a student teacher usually trusts studies, surveys and mathematical tables, there was a feeling that some of the children might not learn to read which would make failure a real possibility; however, most of these children were not having great difficulty. What

was the reason? Was it because the teacher's ability was exceptional or was the test in error? If the teacher's ability were not considered exceptional, it seemed feasible and practical to determine whether that test were inadequate as a predictor of success in reading and if it were what might replace it that would be more nearly successful. Here follows yet another survey to be trusted, distrusted, accepted or rejected presented for evaluation.

Statement of the Problem

The purpose of this study is to examine and analyze some possible methods which could be used to assess a child's aptitude to learn to read and to determine whether the results would constructively assist the teacher in deciding what reading method would lead to the greatest reading success for each student.

Relevant Definitions

In a study concerned with reading and the concepts which accompany the teaching of reading to beginners, words and phrases are used with many or varying meanings. In this study, the following definitions are used.

Reading. The identification of the printed language symbols and the interpretation of these symbols with meaning, a communication between readers and writers involving perception,
understanding, appreciation and use. 2

**Reading readiness.** A term used to identify the characteristics of "visual and auditory perception, . . . background of experience and comprehension, use of oral English" 3 which when present will allow the student to profit from reading instruction. 4

**Reliable.** The state or quality of being dependable in a large number of cases.

**Unreliable.** The state or quality of being inaccurate and undependable.

**Factors Related to Reading and Reading Readiness**

Since reading is a process which is extended for a period of several years, it is influenced by "methods, attitudes, interests, motivations, distributions of time and effort, and almost all the factors which affect any learning process." 5 Reading also has a physiological side. Marion Monroe, the developer of the Monroe Auditory Word Discrimination Test, explains the physiology of reading:

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Reading involves visual stimulation, which in turn necessitates a visual sensory apparatus, adequate for refracting upon the retina a clear-cut impression of the object seen. Defective visual acuity may hinder a child from learning to read.⁶

However, the perception of visual patterns is related more to the brain and the nervous system than to the sensory apparatus. Because patterns vary in complexity, a child who is able to discriminate between simple patterns may not be able to discriminate between complex patterns.⁷ Because reading is built upon the child's previous verbal understandings and abilities,⁸ auditory perception is important. The child must have the ability to discriminate between sounds.

In the discussion of reading readiness in Growing into Reading by Marion Monroe, the author states that when a child expresses a wish for wanting to learn to read he does so because of his previous experiences at home and in school. When the children enter school, their readiness for reading differs widely. "Many of these children need further training and experience before systematic effort should

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⁶Ibid., p. 80.
⁷Ibid., p. 81.
⁸Marion Monroe, Growing into Reading (Chicago: Scott, Foresman and Company, 1951), p. 68.
be made to teach them to read."  

Readiness tests attempt to measure the child's abilities as they relate to the factors of readiness. It is from an interpretation of the child's readiness that he is usually grouped for a formal reading program.

Significance of the Problem

Because of the social and cultural environment in the United States today, individuals must be able to read. Since the teacher is the one who instructs the child in a formal reading program, he must use some method to determine a child's readiness. It is of utmost importance that a child's first efforts to read result in a feeling of satisfaction and self-esteem. If his reading experiences are successful, he will anticipate each succeeding reading experience with pleasure and will develop favorable attitudes toward learning to read.

He must develop an appreciation of the spoken word as a unit of oral language and of the printed word as a unit of printed language. He must have an awareness of the point-by-point correspondence between oral and printed language and become accustomed to the conventional left-to-right sequence of printing. Moreover, he must attain sufficient emotional stability to sustain and direct his attention while forming the correct association between oral and printed symbols. 

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9 Ibid., p. vii.

10 Ibid., p. 19.
However, premature exposure to reading is apt to give the child a serious setback in learning to read. The significance of this study is seen as an attempt to help the teacher establish the most constructive reading program for each child. Reading determines a child's future success. This study is designed to lay the groundwork for this future success by giving the teacher some criteria for designing a reading program that will fully develop a child's aptitude to read.

\[\text{Ibid.}, \text{pp. 22, 27.}\]
Chapter II
RELATED LITERATURE

The purpose of this study was the examination of possible methods that could be used in helping a child learn to read successfully. Many studies, books, and articles were helpful. Literature related to various aspects of this problem will be discussed in this section. These aspects include definitions and background information of reading readiness, studies which have examined the relationship between readiness tests and a child's success in beginning reading, mental age as a factor of readiness and the child's previous experiences as they relate to his success in beginning reading.

Reading Readiness. Concerned with the aspect of readiness were three books by Marion Monroe, Children Who Cannot Read, Growing into Reading, and Foundations for Reading: Informal Preschool Procedures and one book by Arthur Gates, Methods of Determining Reading Readiness. These provided definitions of reading readiness and information on the factors involved in reading readiness and ways to measure reading readiness. Each of these will be discussed in the following paragraphs.

In Children Who Cannot Read¹² Dr. Monroe studied four hundred and fifteen children with reading defects and compared

¹²See Monroe, Children Who Cannot Read.
them with a control group of one hundred and one school children "in an average American school population." The book contains studies of individual cases, methods and results of remedial instruction in reading and causative factors in reading defects. For this particular study the chapter about causative factors in reading defects was the most significant because the defects in visual acuity, in discrimination of complex visual patterns, and in discrimination of orientation and sequence of patterns were explained to the reader. Defects in speech may also cause reading problems. A child's motor control, language background, environment and emotional state may be causative factors in defects in reading.

In Growing into Reading the author defines reading readiness and discusses many factors involved in it. The effect of a child's experiences in relation to reading is emphasized. A child's reading experiences begin at home. His emotional attitudes affect his ability to learn to read. Monroe discusses physical factors, auditory skills, visual skills, language skills and interpretation and their effect upon the reading process. Pre-reading programs are analyzed and the use of different types of tests is examined. This

\[^{13}\text{Ibid.}, \ p. \ 2.\]

\[^{14}\text{See Monroe, Growing into Reading.}\]
analysis is valuable because the use of effective readiness tests will assist the teacher in grouping children for an effective reading program.

Foundations for Reading: Informal Pre-school Procedures is a revision of Growing into Reading. Foundations for Reading focuses mainly on a developmental reading program for the classroom. This book helps to clarify for the teacher the relationship between child growth and development and the reading process. Included in the book are three specific suggestions for evaluation of an instructional program: (1) informal observation, (2) informal tests, and (3) standardized tests.

Methods of Determining Reading Readiness by Arthur I. Gates, et. al. is a study of reading readiness and of tests which measure reading readiness. Gates defines reading readiness "as something to be taught and not a series of attributes for the development of which a teacher can do nothing but wait." Different tests used to measure reading readiness

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16 Ibid., p. 2.

17 Ibid., pp. 1, 2, & 181-195.


19 Ibid., p. 53.
are discussed. Also included is a suggestion of those things which constitute a good reading readiness test. The suggestion labels a good reading readiness test as "... a 'diagnostic inventory' of actual reading abilities, techniques, skills, and interests. ..."²⁰

Relationship Between Tests and Success in Reading. Several studies have been done about the relationship between readiness tests and predicting success in beginning reading. The ones that were particularly helpful were "Predicting Accomplishment in Beginning Reading" by Everett T. Calvert, "Predictive Value of a Reading-Readiness Test and of Teacher's Forecasts" by Max S. Henig, "Measuring Reading Readiness" by J. Murray Lee, Willis W. Clark, and Dorris May Lee, "An Experimental Evaluation of Reading-Readiness Tests" by Arthur Gates, and "The Use of the Peabody Picture Vocabulary Test In the Prediction and Assessment of Reading Disability in Distrubed Children" by Paul S. Graubard. These studies will be discussed in the following paragraphs.

Everett T. Calvert studied ways in which to help the teacher in selecting which first grade students were ready for reading instruction and which were not.²¹ The

²⁰Ibid.

Metropolitan Readiness Test was given to 1208 entering first grade students in Kern County, California. Six and one half months later these same children were given the Devault Primary Reading Test and the Gates Primary Reading Test Type I. Results of all the tests were received for 746 children. Calvert found that 37% of the students failed to learn a satisfactory amount of reading. Of those students who scored under 40 on the readiness test 87% failed to make a satisfactory score of 20 or 1.5 on the Devault Reading Test. Of those students who scored 80 or above, 87% scored over 1.5 on the Devault Reading Test. Calvert concluded that:

We cannot predict reading success with the Metropolitan Readiness Test with enough certainty to use very literally in individual cases except... children who score over eighty on the Metropolitan Readiness Test are practically certain to succeed in reading and those who score under forty are practically certain to fail. It also indicates that children who score between forty and eighty are about as likely to succeed as not.22

The purpose of Max Henig's study of the Lee-Clark Reading Readiness Test was to determine the value of the teacher's estimates of their pupils likelihood to succeed in beginning reading as compared to the prediction by the Lee-Clark Reading Readiness Test of a pupil's success.23 This

22Ibid., p. 41.

test was given three weeks after the beginning of school to 98 first-graders by their teachers. Previously, the teachers had predicted how successful each child in the class would be in learning to read. Henig found that there was significant correlation between the teacher's ratings and the predictions of the Lee-Clark test. He also found that for that particular group of children the test results were reliable predictors of the degree of success each child would have in learning to read.\textsuperscript{24}

J. Murray Lee, Willis Clark, and Dorris Lee studied ninety-two pupils in Burbank, California to determine how reliable the Lee-Clark Reading Readiness Test was in predicting a child's success in learning to read.\textsuperscript{25} The materials for this study consisted of tests to measure the pupils' ability to recognize similarities and differences in letter and word forms and the kindergarten teachers' ratings of each pupil's traits which seemed to relate to reading readiness. Lee, Clark, and Lee found a correlation of .68 between the reading readiness test scores and the child's success in learning to read. They found that more study of the teachers' ratings was needed to discover the consistancy of their ability to rate. From this study,

\textsuperscript{24}Ibid., pp. 41, 43, & 45.

Lee, Clark, and Lee concluded that the Lee-Clark Reading Readiness Test has a reliability of .97.  

**Mental Age.** The relationship of mental age to reading success has been researched by many people. Arthur I. Gates conducted a study of factors involved in beginning reading. This study was related to a previous study and was designed as an analysis of tests used in first grade and to determine which tests given early in the year were most useful. In this study all students entering first grade in nine schools in a small Connecticut town were given 1) Picture Interpretation and Direction Test, 2) Word-Matching Test, 3) Word-Card Recognition Test, 4) Rhyming Test, 5) Blending Test, 6) Ability to Read the Letters of the Alphabet, and 7) Sounding the Letters. At the end of the term the students were given the Gates Primary Test Type I, II. Gates found that in this study, as in his earlier study, individual subtests were better predictors of reading readiness than was mental age. He concluded that no specific mental age is best for beginning reading.


Paul Graubard used the Peabody Picture Vocabulary Test in a study\textsuperscript{30} to "obtain congruent and concurrent measures in the Peabody test and to examine the Peabody test for unique contributions to the assessment of intelligence."\textsuperscript{31} Twenty-three institutionalized emotionally-disturbed boys with a disability problem were given the Metropolitan Achievement Test, Peabody Picture Vocabulary Test, Illinois Test for Psycholinguistic Abilities and Wechsler Intelligence Scale for Children. Graubard found that the Peabody test did not significantly correlate with academic success; therefore, he concluded that the Peabody test could not be used as a predictor of reading.\textsuperscript{32}

**Previous Experiences.** Another factor used to predict reading success is the breadth of the child's experiences prior to first grade. Millie Corinne Almy in her book *Children's Experiences Prior to First Grade and Success in Beginning Reading* studied experience as a factor in reading readiness.\textsuperscript{33}


\textsuperscript{31}Ibid., p. 3.

\textsuperscript{32}Ibid., pp. 3-5.

\textsuperscript{33}See Millie Corinne Almy, *Children's Experiences Prior to First Grade and Success in Beginning Reading* (New York: Bureau of Publications, Teachers College Columbia University, 1949).
Chapter III

METHOD

The purpose of this study was to examine and analyze some possible methods used to assess a child's aptitude to learn to read and to determine whether the results would constructively assist the teacher in deciding what reading program would lead to the greatest reading success for each student. An interest in this problem was stimulated during the student teaching experience when this researcher observed how first-grade students were grouped for reading. The materials used in this study were the Lee-Clark Reading Readiness Test, the Peabody Picture Vocabulary Test, the Monroe Auditory Word Discrimination Test, and a questionnaire to parents about their child's experiences prior to first grade. Each of these materials was selected because it measured a different factor related to reading readiness.

Description of the Group Studied

The children who participated in this study were a selected group of first-grade students in Kokomo, Indiana. These nine pupils were those who had been grouped for reading according to their scores on the Metropolitan Readiness Test and had been placed in the "best" reading group. This group of seven girls and two boys ranged from six years and two months to seven years and no months in their chronological
age at the time of entrance into first grade. Their mental ages ranged from five years and eight months to seven years and seven months. The following table shows each child's mental age and chronological age.

**TABLE I**

CHRONOLOGICAL AND MENTAL AGES OF NINE CHILDREN

| Mental Age | 7-7 | 7-6 | 7-5 | 7-4 | 7-3 | 7-2 | 7-1 | 7-0 | 6-11 | 6-10 | 6-9 | 6-8 | 6-7 | 6-6 | 6-5 | 6-4 | 6-3 | 6-2 | 6-1 | 6-0 | 5-11 | 5-10 | 5-9 | 5-8 | 5-7 |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 7-7        |     |     |     |     |     |     |     | x   |      |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     | x |
| 7-6        |     |     |     |     |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     | x |
| 7-5        |     |     |     |     |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     | x |
| 7-4        |     |     |     |     |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     | x |
| 7-3        |     |     |     |     |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     | x |
| 7-2        |     |     |     |     |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     | x |
| 7-1        |     |     |     |     |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     | x |
| 7-0        |     |     |     |     |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     | x |
| 6-11       |     |     |     |     |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     | x |
| 6-10       |     |     |     |     |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     | x |
| 6-9        |     |     |     |     |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     | x |
| 6-8        |     |     |     |     |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     | x |
| 6-7        |     |     |     |     |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     | x |
| 6-6        |     |     |     |     |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     | x |
| 6-5        |     |     |     |     |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     | x |
| 6-4        |     |     |     |     |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     | x |
| 6-3        |     |     |     |     |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     | x |
| 6-2        |     |     |     |     |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     | x |
| 6-1        |     |     |     |     |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     | x |
| 6-0        |     |     |     |     |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     | x |
| 5-11       |     |     |     |     |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     | x |
| 5-10       |     |     |     |     |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     | x |
| 5-9        |     |     |     |     |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     | x |
| 5-8        |     |     |     |     |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     | x |
| 5-7        |     |     |     |     |     |     |     |     |      |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     | x |

*an x represents one child
In the following sections of this paper the children will be referred to using the symbols in the above parentheses.

Table 1 is important because it shows the wide range of chronological ages and mental ages of this group of children who participated in this study. From the wide range of scores, one can see that these children were more different than alike. These children with their great differences of mental age had been grouped together for reading because they had the highest readiness test scores.

All of these children had attended kindergarten in the public schools for a full school year. The socio-economic background of these children was lower-middle class with one or both of their parents being employed as a manual laborer in a factory. All of these children had other siblings. (See Appendix A)
Description of the Tests Used

In order to be able to knowledgeably examine the findings of this study one must be able to distinguish the characteristics of each of the predictors used which makes that predictor distinctive from the others. Following is a description of each of the predictors used in this study.

**Questionnaire to Parents.** This questionnaire answered by parents is similar to the one used by Millie Almy in her study of children's success in beginning reading. Questions about the child's play, independence, questions asked by the child about books, letters and writing were included in this questionnaire. (See Appendix B)

**Lee-Clark Reading Readiness Test.** This test is a group test consisting of four parts. Each section consists of a different type of item. The first part consists of matching letters, the second part of crossing out one of four letters which is unlike the other three, the third part of marking pictures according to verbal directions, and the fourth part of marking the one of four words that matches a given word. Thus, this test contains items requiring either visual discrimination of printed words or the following of verbal directions. All of these skills are a part of reading readiness.

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35Ibid., p. 114
This test uses experiences that the child will use when he learns to read.\(^{36}\) (See Appendix C)

**Peabody Picture Vocabulary Test.** This test is given individually. It purports to measure the student's mental age from which one can obtain an intelligence quotient. Each page of the test consists of four pictures. The examiner reads a word for each page and the student must respond by pointing to or giving the number of the picture which corresponds to the word read by the examiner.\(^{37}\)

**Monroe Auditory Word Discrimination Test.** The test consists of twenty pairs of words which the examiner reads to each student individually at one second intervals. The listener gives the response of "alike" or "different" to each pair of words. The test measures the child's ability to hear and identify slight differences of sounds as he distinguishes between twenty pairs of similar words.\(^{38}\) (See Appendix D)

**Basic Reading Test.**\(^{39}\) This test was designed by Scott, Foresman, and Company to measure a child's success in reading

\(^{36}\)Monroe and Rogers, pp. 192-193.


\(^{38}\)See Monroe, *Children Who Cannot Read*.

\(^{39}\)The *Basic Reading Test* were designed by Marion Monroe and Helen M. Robinson to accompany *The Three-Pre-Primers* (Curriculum Foundation Series; Chicago: Scott, Foresman and Co, 1963).
as he used the Scott, Foresman reading program. The results of this test measure a child's success in reading the Scott, Foresman material.⁴⁰

Method of Administering Predictors Used

In this section is an explanation of the way in which the predictors described in the preceding section were administered and used by this researcher.

The Questionnaire. In order to obtain information about each child's experiences with books, language and other people, in October 1969 a questionnaire was sent to the parents of the students participating in the study. The questionnaire was answered and then returned to this researcher at the parent-teacher conferences on November 6 and 7, 1969. (See Appendix B) This questionnaire was used because in educational research much discussion is centered upon the effect that a child's previous experiences have on his ability to learn. This researcher wished to determine whether a child's experiences with books, with adults and at play had any relationship to his success in beginning reading. Also, because many materials are being printed to teach children to learn to read early and because of television, it was possible that these children had had previous contact with the printed word. This researcher used the questionnaire to find out how

⁴⁰Monroe and Rogers, p. 192.
many parents had tried to teach their children to read, what method the parents had used, and whether these experiences had affected the child's ability to learn to read at school. To find the answers to these questions this researcher analyzed and compared the answers to the questionnaires that had been completed by the parents. A weakness of this method soon became apparent. It was possible that some of the parents might have answered the questions in ways which make their child "look good" or as they think the teacher might have wanted the questions answered. Nevertheless, this method is of benefit to the teacher in helping her know what kinds of experiences each child has had. From these experiences she will know some of his strong points, weaknesses, and interests.

The Lee-Clark Reading Readiness Test. Mr. James Moss, a doctoral student at Ball State University, administered the Lee-Clark Reading Readiness Test to the students in the room where this researcher was student teaching. The test was given early in the fall of 1969. The tests were scored by this researcher. From the scores the expectation of success in beginning reading and the delay indicated was obtained. The results of the Lee-Clark test were compared with the child's success in beginning reading as measured by the Basic Reading Test.

Peabody Picture Vocabulary Test. This test was individually administered and scored in October 1969 by this
researcher. From this test the mental age of each child was obtained. The mental age of each child was compared to his chronological age. Because some research states that a child with a specific mental age or above will be more successful in learning to read, this researcher compared each child's mental age with his rank on the Basic Reading Test.

**Monroe Auditory Word Discrimination Test.** In November, 1969 this researcher administered the Monroe test to each student individually. After scoring the tests, the results of each child were compared with the other members of the group.

**Metropolitan Readiness Test.** This test was administered in the spring of 1969 by the kindergarten teachers in the Kokomo school system. The results of this test were used as the basis for dividing the children into reading groups and one of the factors used to divide the children into different first-grade classes.

**Basic Reading Test.** This test was administered early in 1970 by Mrs. Ann Millikan, first-grade teacher at Bon-Air School in Kokomo, Indiana. The results of the test were compared by this researcher to the child's mental age and to the expectancy of success in beginning reading as predicted by the Lee-Clark Reading Readiness Test.
Chapter IV
FINDINGS

The findings and the results of the predictors in trying to discover reliable ways to help children reach their maximum potential in reading are presented in this chapter. These findings are divided into two classifications: reliable predictors of reading success as found by this study and unreliable predictors of reading success as found by this study. Evidence is given for each of these classifications as they apply to this group of children.

Reliable Predictors of Reading Success

The questionnaire and the Lee-Clark Reading Readiness Test as they pertain to this study seem to be reliable predictors of the children's success in beginning reading.

The Questionnaire. According to the answers given by the parents, many books were available to the children in the home. All of the children asked to be read to at a minimum of three times a week; in all but one case (B-2) the child was allowed to choose or help choose what was to be read. In the home of child B-2 the mother always chose what was to be read. All of the parents had attempted to teach their children to read. Some parents used the method of association between words and pictures; other parents had just told the child the word and had expected him to remember it.
In the children's play, mixed age groups were common. Their play consisted of activities with dolls, or cowboys, games, educational toys, and playing school. The child's interest in books and learning is expressed by playing school.

The children liked to play games with adults, go shopping with them, help with the housework, travel and read with adults. Here, again, the development of the children's interest in reading and in books is seen.

These children in this study had had many experiences with books and the language associated with them before entrance into first grade. In school eight of the nine children met with success in reading.

Almy's study supports the findings of this study "that there is a positive relationship between the child's responses to reading opportunities prior to first grade and his success in learning to read."41 Therefore, since a positive relationship exists between the child's experiences and his reading success in this study, the questionnaire is a reliable predictor of reading success.

The Lee-Clark Reading Readiness Test. In this study the Lee-Clark Reading Readiness Test proved to be a reliable predictor of reading success. The test results indicated that only one

41 Almy, p. 114.
child (B-2) in the group should be delayed in being given formalized reading instruction. However, instruction was not delayed and it resulted in considerable difficulty for the child. Early in November child B-2 was moved to a different reading group. For the rest of the students, no problems in learning to read were encountered or predicted. The test had indicated that these other children would not have any difficulty. This conclusion was proven true as shown by the achievement of these eight children. Table 2 illustrates the grade placement equivalent, expectations of success and the delay indicated for each child.

### TABLE 2
RESULTS OF THE LEE-CLARK TEST

<table>
<thead>
<tr>
<th>Child</th>
<th>Grade Placement Equivalent</th>
<th>Expectation of success</th>
<th>Delay Indicated</th>
</tr>
</thead>
<tbody>
<tr>
<td>G-1</td>
<td>1.3</td>
<td>Good</td>
<td>none</td>
</tr>
<tr>
<td>G-2</td>
<td>1.5</td>
<td>Excellent</td>
<td>none</td>
</tr>
<tr>
<td>G-3</td>
<td>1.3</td>
<td>Good</td>
<td>none</td>
</tr>
<tr>
<td>G-4</td>
<td>1.6</td>
<td>Excellent</td>
<td>none</td>
</tr>
<tr>
<td>G-5</td>
<td>1.8</td>
<td>Excellent</td>
<td>none</td>
</tr>
<tr>
<td>G-6</td>
<td>1.8</td>
<td>Excellent</td>
<td>none</td>
</tr>
<tr>
<td>G-7</td>
<td>1.6</td>
<td>Excellent</td>
<td>none</td>
</tr>
<tr>
<td>B-1</td>
<td>1.6</td>
<td>Excellent</td>
<td>none</td>
</tr>
<tr>
<td>B-2</td>
<td>0.5</td>
<td>Fair</td>
<td>1-6 months</td>
</tr>
</tbody>
</table>
According to this table eight of the nine children were to begin reading instruction without any delay. For one student a delay of one to six months before beginning reading instruction was indicated. According to the Lee-Clark test, six of the students had an excellent expectation of success in beginning reading; two had a good expectation; and one had a fair expectation.

Unreliable Predictors of Reading Success

This section examines those tests which seemed to be unreliable predictors of reading success in this study. Those tests were the Peabody Picture Vocabulary Test, the Metropolitan Test and the Monroe Auditory Word Discrimination Test.

The Peabody Picture Vocabulary Test. This test gives the teacher the child's mental age by measuring his verbal intelligence. This test was used because it gives a measurement of mental age. (See Tables 1 and 3). "Some research supports the conclusion that a mental age of 6.5 years or more is conducive to success in beginning reading."42 This test was used on the assumption that the knowledge of mental age would yield knowledge of reading success.

To test the progress and success the child was having in reading, the Basic Reading Test was used. Table 3 shows

the child's mental age as a result of the Peabody test at the time of beginning reading instruction and each child's rank on the Basic Reading Test or his success in learning to read.

**TABLE 3**

**COMPARISON OF MENTAL AGE WITH ACHIEVEMENT IN READING**

<table>
<thead>
<tr>
<th>Child</th>
<th>Mental Age</th>
<th>Rank on Basic Reading Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>G-1</td>
<td>5 years-11 months</td>
<td>High Average</td>
</tr>
<tr>
<td>G-2</td>
<td>6 years-4 months</td>
<td>High Average</td>
</tr>
<tr>
<td>G-3</td>
<td>5 years-8 months</td>
<td>High Average</td>
</tr>
<tr>
<td>G-4</td>
<td>7 years-7 months</td>
<td>High Average</td>
</tr>
<tr>
<td>G-5</td>
<td>6 years-6 months</td>
<td>High</td>
</tr>
<tr>
<td>G-6</td>
<td>6 years-4 months</td>
<td>High Average</td>
</tr>
<tr>
<td>G-7</td>
<td>7 years-0 months</td>
<td>Low Average</td>
</tr>
<tr>
<td>B-1</td>
<td>5 years-8 months</td>
<td>Low Average</td>
</tr>
<tr>
<td>B-2</td>
<td>5 years-8 months</td>
<td>----------------------------</td>
</tr>
</tbody>
</table>

As can be seen from the table, there seems to be no relationship between mental age and success in reading. Two children with a mental age of five years no months are widely different in achievement. The child with the highest mental age has a high average rank but a child with a 7-0 mental

---

43 B-2 did not take the test because he was changed in November to a different reading group which used a different reading program.
age is in the low average rank. Therefore, this test was not a reliable predictor of reading success in this study.

The finding that the Peabody Picture Vocabulary Test was an unreliable predictor of reading success in this study is supported by a study done by Paul S. Graubard. In his study Graubard concluded that the Peabody test did not have high enough correlation with reading success to make it reliable.\textsuperscript{44} Since the Peabody test yields only mental age and in this study mental age was not related to success in reading, the test is not a reliable predictor of reading success.

\textbf{The Metropolitan Readiness Test}. In this study the Metropolitan test was found to be an unreliable predictor of reading success. Designed to measure perceptual and reasoning ability, language usage, motor control, ability to use pencils and crayons in drawing, number information, and general knowledge, the Metropolitan Readiness Test attempts to ascertain "measurable signs of maturity on the first grade level."\textsuperscript{45} The children in this study scored between fifty-five and sixty-nine on this test. The scores of sixty-nine, sixty-seven, and sixty-four have a rating of "B". The other scores have a rating of "C".

\textsuperscript{44}Graubard, p. 4.

\textsuperscript{45}Calvert, p. 36.
In this study, only B-2 was not successful in his reading experiences. However, he scored 60 on the test while two other students, G-6 and G-7 who scored lower than B-2 were successful in reading. Because of the inconsistency with which this test measures success it seems to be an unreliable predictor of reading success. In support of this study's
findings the reader is referred to the study by Everett Calvert. In his study he concluded that one cannot predict reading success with the Metropolitan test with enough certainty to use it except for those students who score over eighty or under forty.\textsuperscript{46} Since all of the children used in this study were between forty and eighty, the Metropolitan Readiness Test gave no definitive answers.

\textbf{The Monroe Auditory Word Discrimination Test.} To grade this test the number of correct responses provides the score for the test.\textsuperscript{47} In the group studied the scores ranged from a high of eighteen correct responses to a low of eight correct responses.

\textsuperscript{46}Ibid., p. 41.

\textsuperscript{47}The Reading Center, Ball State University, Instruction Sheet for Monroe Auditory Word Discrimination Test (Muncie, Indiana: The Reading Center, Ball State University). dittoed.
TABLE 5
CORRECT RESPONSES ON THE MONROE AUDITORY WORD DISCRIMINATION TEST

Correct Responses

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<tr>
<th></th>
<th>G-1</th>
<th>G-2</th>
<th>G-3</th>
<th>G-4</th>
<th>G-5</th>
<th>G-6</th>
<th>G-7</th>
<th>B-1</th>
<th>B-2</th>
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</table>

Children

In this study two-thirds of the children scored within four points of each other and the other third scored five to six points lower. However, to determine a student's "competency or difficulty" in this area of auditory discrimination, it is the teacher's responsibility to interpret each child's score because no norms have been established for the interpretation of the scores.\(^{48}\) The test indicates how a child compares

\(^{48}\)Personal interview with Dr. D. Lumpkin conducted by Martha E. Prather at The Reading Center, Ball State University.
with other children in the same group in auditory discrimination. Because no norms have been established the teacher cannot compare the child's ability with others in a wider sample of children. It is for this reason of limited comparison due to the fact that there are no standard norms that this test is found to be an unreliable predictor in testing the area of auditory discrimination as it relates to reading readiness.

Summary of the Findings

**Reliable Predictors.** In this study the questionnaire and the Lee-Clark Reading Readiness Test were found to be reliable predictors of reading success. The questionnaire provided information about the child's experiences. This information will aid the teacher in knowing with what concepts a child is familiar. The Lee-Clark Reading Readiness Test accurately predicted which children would be successful in beginning reading and with which child reading instruction should be delayed.

**Unreliable Predictors.** Three tests that were studied were found to be wholly or partially unreliable. The Peabody Picture Vocabulary Test was used on the assumption that if the teacher knows the mental age of a child she can predict his success in reading. When this study, along with the study by Graubard, reveals that that assumption is false, one could conclude that the Peabody Picture Vocabulary Test is unreliable.
in predicting the ability of a child to learn to read. This statement does not say that the Peabody test is unreliable in predicting mental age, but it is only unreliable in predicting reading success. The results of the Metropolitan Readiness Test were found to be inconclusive in the group of children scoring between forty and eighty; therefore, it is unreliable in predicting success for most of the group. Lastly, because no pattern of correlation and no norms can be found to measure the results of the Monroe Auditory Word Discrimination Test with success in reading, the scores on this test lead to inconclusive results. A reliable test would have been dependable in a large number of cases and the results of these tests were inconclusive; therefore, they can be termed unreliable.
Chapter V
SUMMARY AND CONCLUSIONS

The purpose of this study was to examine and analyze some possible methods which could be used to assess a child's aptitude to learn to read and to determine whether the results would constructively assist the teacher in deciding what reading method would lead to the greatest success for each student. If this success is determined, a teacher will begin to understand what individual help each child will need to successfully learn to read.

A group of first-grade children was chosen as a sample. Each child was given a variety of tests to predict his success in beginning reading. The results of these tests were then compared to the actual success that a particular child was having in learning to read. As might be expected some of these tests were more successful in accurately portraying the child's success than others.

It is felt that the Lee-Clark Reading Readiness Test could be given to first-grade children because it rather accurately portrays the children's future difficulty or success in beginning reading. A teacher may use the results of this test to classify the children in various groups related to their potential level of attainment.

Also of value to a teacher would be a questionnaire constructed similarly to the one used by Millie Almy. This type
of questionnaire would allow the teacher to see what the parents expect of the child and what experiences a child might have had prior to the first grade. A child whose experiences have varied ought to understand different ideas more easily than a child whose experiences have been lacking. This questionnaire can show the teacher the need to supplement some children's backgrounds before they can progress successfully in reading.

The Metropolitan Readiness Test may also be used, but, as suggested in this study, if the scores are between forty and eighty, another method should be used to assure accurate results. In this study the Peabody Picture Vocabulary Test was also found to be an unreliable predictor of reading success. The Peabody test yields only mental age and in this study mental age was not found to be related to success in reading. The Monroe Auditory Word Discrimination Test was found to be an unreliable predictor of auditory discrimination as it relates to predicting reading success. Because no norms have been established, the beginning teacher can only compare the children with others in his group. She has nothing to use in comparing the child's ability with a wider sample.

The conclusions were the following: (1) the Lee-Clark Reading Readiness Test was an accurate predictor of reading success in this study, (2) the questionnaire was valuable to
show the children's previous experiences, (3) for children scoring between forty and eighty a test other than the Metropolitan Readiness Test should be used for predicting success in beginning reading, (4) the Peabody Picture Vocabulary Test was not an accurate predictor of reading success, and (5) the Monroe Auditory Word Discrimination Test was an unreliable predictor of auditory discrimination as it relates to prediction of reading success.

This study was an attempt to discover methods that could be used to help a teacher be assured that her pupils would have a successful reading experience. If the Lee-Clark Reading Readiness Test is used and the results supplemented by using the information from a questionnaire or from a personal interview with the parents, a teacher has accurate evidence to allow her to see what special needs each child has. In this writer's opinion, reading is the most important subject taught in the first grade and an initial experience with this subject must be successful.
Bibliography

Books


Articles


Graubard, Paul S. "The Use of the Peabody Picture Vocabulary Test In the Prediction and Assessment of Reading Disability in Disturbed Children." *The Journal of Educational Research, LXI* (September, 1967), pp. 3-5.


Appendix A
DESCRIPTION OF CHILDREN
G-l

This student's father is employed in one of the local factories. He has a grade school education. Her mother is employed in one of the hospitals. She had a four year high school education. G-l has two older sisters and no brothers. Her paternal grandmother lives with the family. G-l's interests at home are playing with dolls and playing the game of Don't Spill the Beans. At school she likes to use the magnetic board.

Test scores:
Lee-Clark Reading Readiness Test--1.3 grade placement
Metropolitan Readiness Test--67
Peabody Picture Vocabulary Test--5 years-11 months
Monroe Auditory Word Discrimination Test--15
Basic Reading Test--High Average
G-2

This student's father is employed in one of the local factories. Her mother is a housewife. Both parents have a high school education. G-2 has one younger brother and one younger sister. Her interests at home are looking at comic books and playing with Barbie dolls. At school she likes to use the magnetic board.

Test scores:
Lee-Clark Reading Readiness Test--1.5 grade placement
Metropolitan Readiness Test--64
Peabody Picture Vocabulary Test--6 years-4 months
Monroe Auditory Word Discrimination Test--17
Basic Reading Test--High Average
G-3

This student is a twin. She has one younger sister and one older brother in addition to her twin sister. Her father works in one of the factories and her mother is a housewife. Both parents have a high school education. G-3's interest at home is playing with Barbie dolls. At school she likes to listen to the record player and to play Old Maid at recess.

Test scores:
Lee-Clark Reading Readiness Test--1.3 grade placement
Metropolitan Readiness Test--69
Peabody Picture Vocabulary Test--5 years-8 months
Monroe Auditory Word Discrimination Test--16
Basic Reading Test--High Average
G-4

This girl lives with her mother and her step-father. He is employed by one of the factories. Her mother also works in a factory. Both have a high school education. G-4 has one younger sister and no brothers. At home she is interested in playing board games; at school she likes to look at books and to paint.

Test scores:
Lee-Clark Reading Readiness Test--1.6 grade placement
Metropolitan Readiness Test--61
Peabody Picture Vocabulary Test--7 years-7 months
Monroe Auditory Word Discrimination Test--18
Basic Reading Test--High Average
G-5

This student was born in Germany. Her father is employed in one of the local factories and her mother is a housewife. Each parent has a high school education. G-5 has one younger sister and no brothers. At home she is interested in listening to records and at school in doing addition problems and reading books.

Test scores:
Lee-Clark Reading Readiness Test--1.8 grade placement
Metropolitan Readiness Test--62
Peabody Picture Vocabulary Test--6 years-6 months
Monroe Auditory Word Discrimination Test--15
Basic Reading Test--High
Her father is employed by a granary and her mother is a housewife. Both have a high school education. G-6 had two older sisters and one older brother. At home she likes to play with dolls and to play school. At school she likes to paint and to do math.

Test scores:
Lee-Clark Reading Readiness Test--1.8 grade placement
Metropolitan Readiness Test--55
Peabody Picture Vocabulary Test--6 years-4 months
Monroe Auditory Word Discrimination Test--8
Basic Reading Test--High Average
G-7's father is employed in one of the factories and her mother is a housewife. Both parents have a high school education. G-7 has two older sisters and one older brother. At home she likes to play with Barbie dolls. At school she likes to listen to records.

Test scores:
Lee-Clark Reading Readiness Test--1.6 grade placement
Metropolitan Readiness Test--55
Peabody Picture Vocabulary Test--7 years-0 months
Monroe Auditory Word Discrimination Test--9
Basic Reading Test--Low Average
B-1

B-1's father is employed in the steel mill. He has a grade school education. His mother is employed in a factory. She had two years of high school. B-1 has one older brother and one younger sister. B-1 is interested in playing the drums and flying kites at home. At school he likes to play number games.

Test scores:
Lee-Clark Reading Readiness Test--1.6 grade placement
Metropolitan Readiness Test--67
Peabody Picture Vocabulary Test--5 years-8 months
Monroe Auditory Word Discrimination Test--16
Basic Reading Test--Low Average
B-2

B-2's father is presently employed by one of the factories; however, during this school year he has also been employed as a city policeman, and employed in a factory other than the one in which he is now working. His father has had four years of high school. B-2's mother is employed in a factory also. She has had two years of high school. B-2 has three older brothers and three older sisters. His maternal grandmother also lives with the family. At home he likes to play with his spaceman, his cement truck and his electric train. At school he likes to read "Dick and Jane books." (This statement is interesting since he was the one moved out of the group using these books.)

Test scores:
Lee-Clark Reading Readiness Test--0.5 grade placement
Metropolitan Readiness Test--60
Peabody Picture Vocabulary Test--5 years-8 months
Monroe Auditory Word Discrimination Test--9
Basic Reading Test--He did not take this test.
Appendix B
QUESTIONNAIRE
1. Did any one try to help your child to read?
   No?

2. What kind of play did your child do in the year before first grade?
   Did he play with children his own age?
   Older?
   Younger children?
   Lived ones?
   What did he play?
   What kind of toys or playthings did he like best?
   Did he ever use books, magazines, paper, or pencil in his play?
   Which?

3. How much was child on own before first grade?
   Dress himself?
   Errands for family?
   Cross street alone?
   Pick up own things?
   Play outside house without adult?
   Other?

4. In your before first grade had he ever ridden in a:
   hat was he most interested in?

5. What were some of the things he liked to do with adults?

6. Did he ask many questions?
   What about?
   Are people often too busy to answer his questions?

7. Did he ever ask questions about words, letters, or numbers that he
   saw around him?
   Questions about?
   Signs and prices? cards (playing)? grocery or
   laundry lists? letters? magazines and books?
   Phonograph records? radio? signs table
   games? telephone? Other?
   Did anyone try to teach him to recognize any of the words on
   these? No? How? How?
6. Did he ask to be read to often? ________________________________
How often? ________________________________
Who read to him? ________________________________
Who chose what was to be read? ________________________________
Did the person reading to him just read along through the story? or make explanations as he went along? ________________________________
Point out words he thought the child should know? ________________________________
Did the child usually just listen? ________________________________
9. Did the child ever pretend he was reading? ________________________________
How often? ________________________________
10. What did he like to read? ________________________________
11. Did he ever try to write? ________________________________
Copy anything he saw printed? ________________________________
12. Could he recognize own name? ________________________________
Write name? ________________________________
13. What does your child do with the library book he brings home each week? ________________________________
14. Other? ________________________________
Appendix C
LEE-CLARK TEST
Appendix D
MONROE AUDITORY WORD DISCRIMINATION TEST
Reading Discrimination (Auditory Discrimination Test)

Monroe, Indiana: The Indiana University, Ball State University.

Ages: Any age

Specific Abilities Required:

The ability to distinguish between twenty pairs of similar words, those which sound "alike" and those which are "different." The ability to hear and identify slight differences.

Administration:

Individual

Time: Approximately 2 minutes

Procedure: Examiner stands behind listener and reads each pair of words requesting a response of "alike" or "different" to each pair.

Norms:

Number of correct responses in the twenty pairs of words provides a score for the test. Evidence of competency or difficulty can be interpreted.

Recommended Uses:

When a check on auditory word discrimination is desired.

Notes:


This test might be adapted for use with small groups.
### Gates Auditory Perception Test

**Stated Initial Sounds - Form I**

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<thead>
<tr>
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<th>Initial Sounds</th>
<th>Form I</th>
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<td>s-saw</td>
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<td>n-now</td>
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<td>2.</td>
</tr>
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**Stated Final Sounds - Form I**

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### Monroe Auditory Word Discrimination Test

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