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ABSTRACT

In order to determine the opinions of third grade remedial reading pupils about trade books recommended in library selection aids and special series books recommended for poor readers, 57 pupils completed statements on book inventory forms about 24 picture books and 24 series books. Data was gathered on book completion, interest, and difficulty assessments. An additional factor in the study was the readability match category. These data were compared between book types. The scores from the total group of books were also analyzed between completion and interest; completion and difficulty assessments; completion and readability match categories; interest and difficulty assessments; interest and readability match categories; and difficulty assessments and readability match categories. Some of the findings indicated that there is no significant difference in the third-grade remedial reader's responses to book completion or book interest for series books compared with picture books; the series books had more difficulty assessments that were "too easy" and the picture books had more difficulty assessments that were "just right"; and books above the pupil's reading level according to the readability match were frequently rated as "just right" in difficulty by the pupils.  
 (Author/MKM)

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A COMPARISON OF TRADE BOOKS AND SPECIAL  
SERIES BOOKS FOR REMEDIAL READERS

AN ABSTRACT OF A THESIS  
SUBMITTED TO THE FACULTY  
OF THE GRADUATE SCHOOL OF EDUCATION

RUTGERS

THE STATE UNIVERSITY OF NEW JERSEY

BY

GLORIA DORWART

IN PARTIAL FULFILLMENT OF THE

REQUIREMENTS FOR THE DEGREE

OF

MASTER OF EDUCATION

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NEW BRUNSWICK, NEW JERSEY

JUNE 1976

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## ABSTRACT

In order to determine the opinions of third grade remedial reading pupils about trade books recommended in library selection aids and special series books recommended for poor readers, 57 pupils completed statements on book inventory forms about 24 picture books and 24 series books.

Data was gathered on book completion, interest, and difficulty assessments. An additional factor in the study was the readability match category determined by comparing the difficulty of the book based on the readability formula estimate with the reading ability of the pupil based on standardized test scores. These data were compared between book types.

Also the scores from the total group of books were analyzed between completion, interest; completion, difficulty assessments; completion, readability match categories; interest, difficulty assessments; interest, readability match categories; and difficulty assessments, readability match categories. The Chi-Square Test of Independence at the .05 level was used to test for significant differences.

This study did not find a significant difference in the third-grade remedial reader's responses to book completion or book interest for series books compared with picture books.

There were significant differences between the pupil's difficulty assessments of the two types of books.

Although more picture books were rated "hard" than series books, the series books had significantly more difficulty assessments that were "too easy" and the picture books had significantly more difficulty assessments that were "just right."

This study found a significant difference in the readability match categories between the two book types. The picture books tended to be above the pupil's reading level and the series books tended to be below or within the pupil's reading level.

A comparison of the pupil's completion and interest responses showed a significant difference. The pupils reported reading books they liked.

This study found a significant difference in both the completion and difficulty assessments and interest and difficulty assessments indicating that pupils tend to rate books they read and books they like as "too easy" or "just right" in difficulty.

This paper did not find a significant difference in the pupil's completion or interest responses and the readability match categories.

The comparison of the pupil's difficult assessments with the readability match categories showed a significant difference. The books rated "too easy" by the pupils tended to be in the readability match category of below the pupil's reading level. The books rated "just right" by the pupils tended to be in the readability match

category of within the pupil's reading level. However, although the majority of the books rated "hard" by the pupils are in the readability match category of above the pupil's reading level, the pupils tended to rate the majority of the books in the readability match category of above as "just right" in difficulty.

These data indicate that primary level retarded readers should be exposed to picture books and series books recommended in selection aids as there are no differences in the pupils' completion or interest ratings between books.

The interaction of interest and readability should be examined further.

The pupil's perception of a book's difficulty is related to completion and interest, and although the readability match is related to the pupil's difficulty assessment, this measure is not significantly related to completion or interest.

The pupil's difficulty ratings and the readability match categories indicated agreement for books that were easy; however, books that were above the pupil's reading level according to the readability match were rated as just right in difficulty by the pupils.

This lack of agreement may reflect the function of interest.

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## CHAPTER I

### INTRODUCTION

Selection aids attempting to match children and books have been developed largely by librarians and reading authorities. The category of children's reading interests has been the only element derived from the child.

The present study attempted to extend the investigation of the child's reactions to the dimensions of completion, interest, difficulty assessments, and readability. There is a need to validate the assumptions of authorities by comparing these to children's behaviors.

Historically the importance of interest as a factor in reading instruction has been emphasized by researchers (Strang, 1946; Terman & Lima, 1931).

Strang (1957) writes that interest regulates the span of attention and aids comprehension and memory. Spache (1972) points out that children's interests are the most important single influence on their attitudes toward reading.

While children's reading interests have received considerable attention, there have been few applications of this knowledge to comprehension. Dale and Chall (1956) point out that readability formulas do not include the

factor of interest.

In a study relating reading interests to reading comprehension, Shnayer (1968) reported that interest is a factor that may enable most students to read beyond their measured reading ability. He reported a high interest in content provided very little discrimination between reading ability levels except for children two or more years below grade level; however, a low interest in content differentiated between the reading ability groups.

However, Spache (1972) writes that interest alone, cannot overcome reading disability. He recommends readability formulas to help teachers match reading material to the reading abilities of poor readers.

In a recent article on the readability principle, Fry (1975) writes that high motivation overcomes high readability but low motivation demands low readability.

Authorities on reading instruction and library science emphasize the importance of encouraging supplementary reading (Bond & Tinker, 1967; Harris, 1970; Huck & Kuhn, 1968).

However selection aids for public and school libraries (Fidell, 1971; Gaver, 1972; Hodges, 1969) tend to recommend picture books for the primary grades selected according to research on children's reading interests and subjective policies of excellence to foster an appreciation of literary quality.

Reading authorities stress the importance of

children's reading interests and the readability of materials (Fry, 1975; Spache, 1972).

Spache (1972) writes that the readability of materials must constantly be matched to the reading abilities of the child or adult for whom a book is apparently intended. He notes that readability formulas are of particular value in providing fine discriminations of the probable reading difficulty of materials intended for young children and poor readers.

Once considered a research tool for professionals in the reading business, readability formulas are enjoying widespread applications by publishers and some librarians. One of the major references for school librarians, The Elementary School Library Collection: A Guide to Books and Other Media (Gaver, 1972) includes readability formula estimates of difficulty for many of the recommended titles. Gaver states that whereas interest determines a child's book selection, readability by the child determines his completion of the book. The majority of the picture books for the primary grades require at least third grade reading ability (Huck & Kuhn, 1968). However, Bormuth (1966) writes that it is problematic whether the presently available readability formulas help more than they hinder. He points out that the use of formulas to indicate the level of pupil reading ability necessary for adequate comprehension is misleading to educators. What appears to be a precise measurement is actually of questionable validity.

Publishers and writers, particularly those producing books for children, have adopted formulas for the evaluation and grading of their products. This practice has produced a trend toward the publication of large numbers of graded trade books in loosely related series. Spache (1972) recommends these books for use with poor readers. He writes that for the first time in the history of publishing, authors and editors are paying more attention to the readability of their products than to other characteristics.

Some librarians feel that the "easy to read" and "beginning to read" books belong in a reading program, instead of the school library (Huok & Kuhn, 1968). Others have cautioned against the use of short, choppy sentences and the selection of vocabulary from word lists to produce books written to order for prescribed grade levels (Fry, 1975; Rhey, 1959). Still others, have pointed out that readability formulas indicate that the books selected by librarians for literary quality and aesthetic values are often too difficult for the intended child to read (Miller, 1946). However, Chall (1958) states that formulas are not sufficiently accurate to be used in adjusting the difficulty of materials or to determine if materials are suitable for students of a certain reading level.

In spite of these warnings, readability formulas are generating considerable impact on children's materials (Spache, 1972).

### Statement of the Problem.

This paper will examine third grade remedial reader's responses to questions covering completion, interest, and the difficulty of picture books and series books. An additional factor will be the readability match category based on a comparison of pupil's reading level with book readability.

The following questions will be asked:

1. Do pupils complete more series books or picture books?
2. Do pupils like series books or picture books better?
3. Is pupil assessment of the book's difficulty affected by book type?
4. Is the readability match category affected by book type?

Questions 5 through 10 include the total number of books.

5. Do pupils tend to complete books they like?
6. Is reading a book affected by the pupil's rating of the difficulty of the book?
7. Is reading a book affected by the readability match category of the book?
8. Is the pupil's rating of the difficulty of the book affected by his liking the book?
9. Does the book's readability match category affect the pupil's liking the book?



10. Is the pupil's rating of the difficulty of the book affected by the book's readability match category?

#### Null Hypotheses

The following null hypotheses will be tested:

Hypothesis 1.--Book Type vs. Completion Responses.

There is no significant difference in the number of responses to reading or not reading a book checked on the Book Inventory for picture books as compared to series books.

Hypothesis 2.--Book Type vs. Interest Responses.

There is no significant difference in the number of responses to liking or not liking a book checked on the Book Inventory for picture books as compared to series books.

Hypothesis 3.--Book Type vs. Difficulty Assess-

ments. There is no significant difference in the difficulty assessments of "too easy," "just right," or "hard" checked on the Book Inventory for picture books as compared to series books.

Hypothesis 4.--Book Type vs. Readability Match

Categories. There is no significant difference in the book's readability match category of below, within, or above the pupil's reading level for picture books as compared to series books.

Hypotheses 5 through 10 are compared on the total number of books.

Hypothesis 5.--Completion vs. Interest. There is no significant difference in the responses to liking or not liking a book for books that are read or not read.

Hypothesis 6.--Completion vs. Difficulty Assessments. There is no significant difference in the difficulty assessments of "too easy," "just right," or "hard" for books that are read or not read.

Hypothesis 7.--Completion vs. Readability Match Categories. There is no significant difference in the readability match categories of below, within, or above for books that are read or not read.

Hypothesis 8.--Interest vs. Difficulty Assessments. There is no significant difference in the difficulty assessments of "too easy," "just right," or "hard" for books that are liked or not liked.

Hypothesis 9.--Interest vs. Readability Match Categories. There is no significant difference in the readability match categories of below, within, or above for books that are liked or not liked.

Hypothesis 10.--Difficulty Assessments vs. Readability Match Categories. There is no significant difference in the readability match categories for books that are assessed "too easy," "just right," or "hard."

#### Importance of the Study

The results of this study can be an aid to reading specialists, classroom teachers, librarians, and anyone

concerned with the selection of supplementary materials for primary grade poor readers. It is hoped that data concerning today's third grade remedial readers' book completions, interest, and difficulty assessments and the effects of the readability matching categories on pupil responses will enable these educators to weigh the opinions of educational and literary experts against actual pupil responses.

While librarians are concerned with fostering children's reading interests and literary appreciation and the concept of readability focuses on the average reading ability necessary for adequate comprehension of written materials, the primary concern of educators is whether the child reads the book (Norvell, 1958).

#### Definition of Terms

Picture books.--A book in which the pictures are designed to be an integral part of the text. Most require at least third grade reading ability according to formula estimates of difficulty. Picture books are written for the young child's interest and appreciation. Examples are the following: Lentil, written and illustrated by Robert McCloskey and The Snowy Day written and illustrated by Ezra Jack Keats.

Series books, graded trade books, and beginning to read books.--Books scaled to recognized reading levels. Readability formulas are essential in the preparation of these books. Examples are the following: Easy Readers

published by Grosset and Cowboy Sam Series published by Benefic.

Readability.--The sum total of the elements in printed materials that affects the success a group of readers have with it (Dale & Chall, 1949).

Readability formula.--An objective technique of estimating the average reading ability needed for adequate comprehension of printed materials. Examples are the Fry Readability Graph and the Spache Readability Formula.

Readability match category.--A comparison of the pupil's reading level with the book's readability level (see Readability Match Category p. 28).

#### Limitations of the Study

This study does not purport to measure all remedial reading subjects' opinions of picture books and series books since only third grade remedial reading subjects are included in this study, and no conclusions can be drawn concerning other remedial reading pupils. The ratings of the children are related to the picture books and series books used in this study and not to all the available titles.

The children's reported statements were not questioned. There were no comprehension questions. This procedure was maintained to reduce the association of recreational reading with instructional reading. And by definition, the picture books' illustrations depict the text and might bias the study in favor of these books.

### Overview of the Study

Chapter II reviews findings secured by a search of existing literature. Chapter III explains the procedure used in planning for the materials and in instituting this comparative study with selected subjects. Chapter IV presents the results and discussion of the findings. Chapter V concludes with a summary of the findings and implications to be drawn from this study.

## CHAPTER II

### REVIEW OF THE LITERATURE

Although much has been written concerning readability, this review will be limited primarily to the research relating to the objective methods used to predict and control the difficulty of materials for young children. This chapter is organized around the following topics: (a) the nature of readability, (b) studies resulting in formulas, and (c) reliability and validity studies.

#### The Nature of Readability

Definition of readability.--Dale and Chall (1949) define readability as

the sum total (including the interactions) of all those elements within a given piece of printed material that affects the success a group of readers have with it. The success is the extent to which they understand it, read it at optimum speed, and find it interesting.  
(p. 23)

Investigators have attempted to quantify the aspects of printed matter that contribute to readability in terms of interest, legibility, and ease of understanding.

The concept of readability as comprehension of the printed text has received the greatest emphasis.

The problem of selecting books of appropriate difficulty for the reader has been approached in numerous

subjective and quantitative means without a complete and final solution (Spache, 1972).

Uses and limitations.--Before objective means were devised, the age or grade level of books had been estimated by authors, publishers, librarians, or teachers. However, these subjective means of estimating readability lacked a known point of reference against which intuition and judgment could be compared. Thus, estimates in book lists and catalogs representing the average judgments of experts indicated wide ranges from the average opinion.

Objective means of grading books according to reading abilities were devised to help teachers provide the child with a book he could read. The idea underlying readability measurement is the assumption that readers vary in their ability to read and that printed materials differ in readability, or in the ability required to read and understand it (Chall, 1958). Readability formulas are an objective technique of estimating readability. As Chall points out, the use of formulas has sought to identify the elements in the reading materials that differentiate easy from hard materials, to measure these elements, and to combine these into some expression in terms of the reading difficulty of the materials.

Dale and Chall (1956) write that formulas measure the vocabulary element in printed materials in terms of hard, long, or rare words. Formulas also consider sentence length, structure, and complexity. However, formulas

cannot predict the reader's interest or enjoyment of a book.

Dale and Chall (1956) and Spache (1972) claim that formulas reflect readability as well as readability can be measured.

Fry (1975) writes that formulas should supplement subjective judgment.

#### Major Studies Resulting in Formulas

Early studies that analyzed children's books.--The research to quantify the elements that distinguish easy materials from hard began with an analysis of reading materials. The factors studied were arrived at from intuition, judgment, or the results of surveys of opinion. The significance of the factors was generally checked by a comparison with a criterion, usually the ranking of materials in order of difficulty.

Although surveys of readers and librarians agree that content, stylistic elements, format, and organization contribute to difficulty (Gray & Leary, 1935), only stylistic elements have been related to reading difficulty.

One of the earliest studies to determine the significance of internal factors was conducted by Lively and Pressey (1923). They compared four measures of vocabulary with twelve reading texts and concluded that a weighted median index number based on Thorndike's word list (1921) ranked books in a manner similar to the one based on their own judgment.



An imaginative study was directed by Washburne and Vogel (1926). About 37,000 children were asked to fill out ballots on the books they read and liked during the school year. Almost 700 different books were mentioned and each was named by at least 25 children. Each book received as a grade rating the average reading score on the Stanford paragraph-meaning test of the children who read and liked it.

The titles of the 700 books, together with the grade rating of each book and a short description of its content, were published as the Winnetka Graded Book List (1926).

In order to grade books published after the Winnetka list was compiled, Washburne and Vogel conducted a study of readability factors. The criterion was 1,000 word samples from 150 books from grades 3 to 9 selected from the Winnetka book list. The books were analyzed for factors that could distinguish books used in the lower grades from those used in the higher grades. Altogether 10 factors were studied. However many of the factors correlated highly with one another and a combination of four had practically the same multiple correlation with the criterion as all 10. These four were: (a) number of different words in a sample of 1,000, (b) number of prepositions in a sample of 1,000, (c) number of words in 1,000 not in Thorndike's list of 10,000, and (d) number of simple sentences in 75 sample sentences.

A formula was developed through the use of

procedures so that when each of these four factors was counted in a book and given certain weights the grade level of the book could be predicted. This grade level meant that a child who obtained an equivalent reading grade on a standardized reading test would probably be able to read the book with adequate understanding (Vogel & Washburne, 1928).

Continuing the search for an ever larger number of elements, Gray and Leary (1935) attempted to quantify a total of 82 factors. Their criterion consisted of 48 selections of approximately 100 words each. The difficulty of the passages was the average comprehension score obtained by approximately 800 adults.

Noting a high relationship among the significant factors, they selected five elements that would give as good a prediction as possible. These elements were: (a) number of different hard words; (b) number of first, second, and third person pronouns; (c) percentage of different words; (d) average sentence length in words; and (e) number of prepositional phrases.

Lorge (1939) initiated the trend toward simplification in readability measurement. He wanted a simple formula that could be used to predict the difficulty of children's books in terms of grade scores. For his criterion, he used the McCall-Crabbs passages. Each of these passages was standardized on the basis of the number of questions answered correctly by children in terms of scores on the

Thorndike-McCall Reading Scale. In his formula, Lorge used three elements as the most efficient predictors of passage difficulty. These factors were: (a) the number of different hard words, (b) the average sentence length, and (c) the number of prepositional phrases. These three elements had a multiple correlation coefficient of .77 with the criterion.

Studies that counted grammatical elements:--The Dale-Chall formula (1948) arose from an attempt to find a simple and efficient formula that could be used with adult reading materials. Dale and Chall used a word list and average sentence length to discriminate beyond fourth grade levels. The criterion on which the formula was based was the McCall-Crabbs passages and health and social studies materials. Dale and Chall offer several groups of data in comparing various methods of estimating readability. They show that their formula correlated very highly with teachers' judgment of current events passages (.90). Similar relationships (.92) were found between the estimates of readability specialists.

Spache (1953) constructed a readability formula for evaluating primary level reading materials. He selected sentence length and proportion of hard words as most indicative of reading difficulty in primary materials. The data base on which this formula is based is basal readers and primary level social science, health, and science books. Each book was assigned the grade level designation of the

publisher. The multiple-correlation coefficient obtained by combining sentence length and percent of hard words in predicting the grade level of books is .818.

One of the most recent developments in readability estimates is the Readability Graph offered by Fry (1968). The graph represents the regression line obtained by using the average number of sentences and average number of syllables per 100 words from three samples. With these two facts, the user reads the graph to find the probable grade level of the book. The graph ranks books from first grade through college. The original data used to obtain the multiple-regression formula were publishers' estimates of the reading levels of their publications. Fry reports the following rank order correlations for the upper range of the Readability Graph: Dale-Chall formula, .94; Flesch, .96; SRA Reading Ease Calculator, .98; Botel formula, .78, and the average score of tenth graders on multiple choice comprehension tests, .93.

In a study to validate the Readability Graph at the primary levels, Fry (1969) reported the following rank order correlations: Spache formula, .90; Close technique, .95; and oral reading errors, .90.

Theoretically, then, when these formulas are applied to materials similar in content and range of difficulty to the criteria on which they were standardized, the various formulas should allow the classification of materials into broad relative orders of difficulty.

### Reliability and Validity Studies

The two kinds of reliability important for readability measurement are analyst and sampling reliability. Analyst reliability is evidence of the objectivity of the technique; most studies consider analyst reliability in the development of formulas. Sampling reliability is evidence of the representativeness of the sample analyzed for the entire book or article.

Sampling reliability.--Chall (1958) cites a study by Leifeste that considered the problem of representativeness of a sample. Leifeste compared successively longer samples with the grade level obtained by analyzing an entire book by the Yoakam technique.

Leifeste's study noted that while most of the larger samples showed greater consistency, there is an extreme variation in vocabulary difficulty from page to page and from chapter to chapter. She concluded that if sampling indicates that two books differ by one or two grades, the difference may be due to sampling errors.

In another early study to determine the reliability of a formula to estimate the difficulty of books, Chase (Chall, 1958) applied the Winnetka formula to three different 1,000 word samples in a history book recommended for the middle grades. Each sample resulted in a different grade level. Chase concluded that if books vary by only one year as determined by the Winnetka formula, we cannot say that one book is more difficult

than the other.

Chall (1958) writes that Chase's findings together with those of Leifeste indicate that a statement about relative difficulty within a single grade level is not justified because of sampling errors.

The Spache formula gives grade level to a tenth of a grade. Spache (1972) reports a probable error of estimate in predicting grade levels of books, using his formula of 3.3 months. Fry (1969) explains that half the time the true score of a book lies within a 6.6 months' band centered around the score obtained by working the formula and half the time the real grade level lies outside the 6.6 months' band. Therefore, accurately judging the grade level of a passage to within one tenth of a grade level by using the Spache formula is not possible (Fry, 1969).

However in a study of the reliability of the Spache formula in relation to the number and method of sampling contents of a book, Clymer (1959) reported sampling errors of one month with the true readability of six second- and third-grade science textbooks. Clymer made 6 to 15 samples throughout the books. The samples yielded estimates within one month of the true readability of each book in about 16 out of 18 samples. Sampling from the beginning or ending of each chapter was least accurate.

Cross-validation studies.--Most of the evidence of the validity of formulas comes from original presentations,

cross validation studies, and experimental validation studies.

Chall (1958) reports that readability formulas giving the most clear-cut evidence of validity are those based on correlation with materials graded by comprehension tests.

The Dale-Tyler, Gray-Leary, Lorge, Flesch, and Dale-Chall report multiple correlation coefficients ranging from .5 to .7. Thus only about half of the difficulty of the criterion passages is accounted for by formulas.

The validity coefficient of the Spache formula is .81. The Spache formula accepts publisher's grading of schoolbooks as evidence of comprehension difficulty. Chall states that the Spache formula does not estimate tested comprehension difficulty, but determines the similarity of books to the books used in the elementary school at the time the formula was derived.

In other validation studies, the researchers applied readability formulas to books or selections already graded by an independent method, such as expert judgment of comprehension by children of tested reading ability. The estimates of difficulty are compared and the formula is considered valid when its predictions of difficulty correlate highly with the independent estimate of difficulty.

Staiger (1955) reported a rank order correlation of .70 between scalings based on the Spache formula and pupil performances in oral reading errors and comprehension. The reading selections were from basal readers.



Fry (1968) cites a study by Kistulentz in which scalings of books based on student comprehension indicated the following rank order correlations among formulas: Fry, .93; SRA, .90; Botel, .64; Dale-Chall, .90; and Flesch, .94.

However the use of comprehension tests has been criticized because of the uncertainty whether the test question or the difficulty of the passage is being measured (Chall, 1958; Fry, 1968; Lorge, 1939)..

In another study Fry (1969) compared his graph with the Spache formula and with 30 pupils' percent of errors in a cloze test and in oral reading. The four-way comparison was based on seven books. Fry reported the following correlations with cloze errors: Fry, .95; Spache, .96; and oral reading, .86.

Most of the research designed to test the validity of readability formulas gives evidence of the relative agreement of the predicted order of difficulty with the order of difficulty as determined by some independent criterion. Fewer studies present evidence on the validity of the grade placement predictions.

In a study to compare the Spache and Fry formulas, Fry (1969) reported that both formulas indicated agreement on readability grade level scores within a grade level for six books. An additional book was beyond the Spache formula's range.

Russell and Merrill (1951) compared the average



difficulty ratings of 63 librarians for 12 juvenile books with estimates based on 6 readability formulas. Except for one book, the average librarian rating agreed within one grade level with the average based on the six formulas. They concluded that on the average, a group of librarians and a group of readability formulas were in fairly close agreement, although some of the readability formulas varied more from their own average than did the librarians.

In another study of similar nature, Russell and Fea (1951) compared the judgments of librarians with the estimates derived from each of six readability formulas. They found that the Dale-Chall formula differed from the average of the librarians' rating by less than half a year on the average.

Chall (1958) analyzed the reported readability estimates offered in the studies of Russell and Fea. She concluded that these studies confirm the findings of Elliott (1941) that one readability formula may rate a book as the most difficult within a grade while another may rate it as easiest.

These studies indicate that readability formulas arrange materials into broad levels of difficulty corresponding roughly to external measures. There is considerable agreement among various formulas in assigning relative positions especially when the materials cover a wide range of difficulty. However, some formulas appear to have a higher positive relationship with one another.

Agreement among the various formulas in assigning grade levels to the same material varies according to the formula and the difficulty of the material compared.

Chall (1958) concludes from her survey of the research on readability that it is questionable whether the grade levels arrived at by formulas can be used to make a statement about the suitability of a particular piece of reading matter for a certain level of reading ability or the suitability of a book for a particular grade.

Experimental validation studies.---The experimental validation studies give some evidence of the effects of rewriting materials within the specifications of particular formulas or factors associated with readability.

In general the findings confirm the warnings of Lorge (1949) and Fry (1975) that readability formulas cannot be used as rules for writing. While some benefits in terms of increased comprehension and interest have been demonstrated by simplifying vocabulary and sentence structure, these benefits were noted only when gross changes were made or when subtle factors such as organization or directness of approach were also changed (Nolte, 1937; Robinson, 1940).

In a study of the effects of simplification by means of various readability factors on interest, retention, and tested comprehension, Swanson and Fox (1953) concluded that when inherent interest is low, readability may increase the number of readers.

In a study of materials, written according to the formula approach, Ridgeway (1955) investigated the readability, interest, and gains in reading skills of students in grades four through eight who read and did not read such books. He reported that the publisher's estimates of difficulty for the books were reliable indicators of difficulty when compared with Dale-Chall readability scores for the same books; that the readability of a book assumes a minor role when interest in the book is high; and that there was a slight significant difference in gains in reading skills for students using the special materials. Ridgeway concluded that interest in a book influences a pupil's estimate of the book's difficulty. When the student was interested in a book, he read above his measured reading level; however when interest was low, books were rated as too difficult, even though below the student's reading level.

#### Summary

Interest in the study of readability has progressed steadily since Thorndike gave investigators a basic tool with which to measure vocabulary frequency. In recent years there has been considerable interest in and use of formulas for judging the reading difficulty of printed materials. The idea underlying readability measurement is the appropriate matching of reader and printed materials. It assumes that readers differ in their ability to read and

that printed materials vary in readability, that is in the amount and kind of ability required to read and understand it.

As Chall (1958) points out, the use of formulas has sought to identify objectively elements in the reading material that differentiate easy from hard materials, to find a reliable means of measuring these elements, and to combine these into a practical means of expressing these facts in terms of the reading difficulty of the materials.

Writers and publishers, particularly those producing books for children, have used formulas for the evaluation and grading of their materials. This practice has produced a trend toward the publication of large numbers of graded trade books in loosely related series.

Chall (1958) has pointed out that formulas rank reading materials in order of difficulty according to various criteria. But formulas are not sufficiently accurate to warrant the use of adjusting the difficulty of materials or to determine if materials are suitable for students of a given level of reading ability.

However, the Ridgeway study (1955) of materials written for retarded readers in grades four through eight, reported that although the readability of a book assumes a minor role when interest in a book is high, pupils using the materials had slight significant gains in reading achievement.

## CHAPTER III

### PROCEDURE

This study was administered over a period of six weeks to third grade remedial reading pupils in two elementary schools in the same school district. Each school had an equal number of series books and picture books. The children were instructed to choose a book, sign their name on the corresponding Book Inventory Sheet, and return the book and complete the questions on the sheet the following week. They were then to check out another book. The Book Inventory provided for five separate pupil's evaluations for each book. The class administration of the Book Inventory was supervised by the respective remedial reading teacher in each school. The children's questions were answered if they related to form meanings only. The books stopped circulating when five ratings had been completed.

#### Subjects

The subjects consisted of the third graders in remedial reading classes in the school district. Although a total of 61 children were to take part in the study, 4 of the pupils signed the forms, but failed to complete the questions. Therefore, 57 children took part in the study.

The children in school A consisted of 12 boys and 7 girls distributed in 3 classes; school B had 25 boys and 13 girls. All pupils had taken the Iowa Tests of Basic Skills in October, 1973. The mean reading comprehension grade equivalent was 2.4 with a range from 1.4 to 4.7.

The school district has a median income of \$11,941 which is almost the same as the median income of \$11,972 for the county, according to the 1970 Census. According to the 1970 Census of Population and Housing, school A draws its students from \$22,500 median priced housing units and school B draws its students from \$30,000 median priced housing units.

The district has a population of 10,394. According to the 1970 Census, of the total population 26 are Blacks. Professional, technical, craftsmen, and kindred workers are the largest occupation groups for men; clerical and kindred workers are the largest occupation groups for the women. The median school years completed for persons 25 and over was 12.2 for school A and 12.7 for school B.

Therefore, according to the median income data, occupation, housing unit, and education data, both schools appear to be in the middle class, predominantly white socioeconomic grouping.

#### Construction of Instrument

A book inventory was developed to be filled out by the subjects. It consisted of a cover sheet and one

page per book, with the title of Book Inventory. The essential features of the inventory were the following: The cover sheet provided for a statement of the purpose of the study, directions for the teacher, and teacher-read directions for the children (see Appendix A). Each succeeding page of the inventory listed one of the books in alphabetical order and contained spaces for five names and responses (Figure 1).

The first question referred to the pupil's completion of the book. The second question referred to the pupil's interest in the book. The third item permitted the pupil to indicate, by checking (x), whether he considered the book to be "too easy," "just right," or "hard." This rating was the difficulty assessment.

#### Readability Match Category

The readability match category is a comparison of the book's readability level with the pupil's reading level. The purpose of the readability match category is to see how readability of the books affected book completion, interest, and difficulty assessments. Data was collected on the difficulty of 48 books by readability formula and on reading ability of the pupils by standardized test.

The readability match category is computed in the following manner: Readability estimates designated by the Fry Graph have a probable error of one year above and below the computed grade level (Fry, 1968). Books are considered within the pupil's reading ability if the pupil's tested

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Name \_\_\_\_\_

1. Did you read the book?       yes       no
2. Did you like it?       yes       no
3. Was this book       too easy       just right       hard
- 

Figure 1. Instrument.



reading level is included in this range. Books with readability levels that do not include the pupil's reading level are either above or below the pupil's reading level.

Gaver (1972) presents the Spache levels in terms of half year increments in a list of books for independent reading on first- and second-grade levels. The following information expresses the grade level conversions: 1<sup>1</sup> includes 0 through 1.5, 1<sup>2</sup> includes 1.0 through 2.0, 2<sup>1</sup> includes 1.5 through 2.5, and 2<sup>2</sup> includes 2.0 through 3.0. These ranges include the grade level designations supplied by Spache (1972).

Spache estimates provide finer discriminations of reading difficulty than the Fry Graph (Gaver, 1972; Spache, 1972), therefore books are considered within the pupil's reading ability if the subject's tested reading level is included in the range of approximately 1 grade or 11 months. Books with readability levels that do not include the pupil's reading level are either above or below the pupil's tested ability.

#### Selection of Books

The books, 24 picture books and 24 series books, were selected from the available titles in the respective school libraries which were included in at least one of the following selection aids: Children's Catalog (Fidell, 1971), The Elementary School Library Collection: A Guide to Books and Other Media (Gaver, 1972), and Good Books for Poor

Readers (Spache, 1972). The above sources were listed by Huck and Kuhn (1968).

School A had 11 picture books and 11 series books. Three books from each category were duplicated. School B had 20 picture books and 20 series books. Four of the books from each category were duplicated. The repetition of titles was to allow each pupil to begin the study with a book. However, each book stopped circulating after five ratings had been completed on the Book Inventory so there were no more than five ratings for any one title.

Readability levels were given for many of the books by Gaver (1972). Books having a level of first or second grade are computed by the Spache formula; higher grade levels are computed using the Fry Graph (Gaver, 1972).

The reading levels for all books not given a specific level are computed using the Fry Graph; publisher's reading levels for the series books are also listed (see Appendix B).

The picture books have a mean readability level of 4.2 with a range from grade two to grade six. The series books have a mean readability estimate of 2.2 with a range from grade one to grade three.

#### Statistical Treatment of Data

Upon the completion of six weeks, the Book Inventories were collected from the two schools. Each sheet was separated according to picture book or series book. The

total raw scores for each pupil response to completion, interest, and difficulty assessment were tallied. The book's readability match category was also tallied for each child.

The raw scores were analyzed for significant differences between series books and picture books using the Chi-Square Tests of Independence at the .05 level.

Also the raw scores from the total group of books were analyzed between completion, interest; completion, difficulty assessments; completion, readability match categories; interest, difficulty assessments; interest, readability match categories; and difficulty assessments, readability match categories. The Chi-Square Test of Independence at the .05 level was used to test for significant differences.

#### Summary

Within a six week span, book inventories were filled out by 57 third-grade remedial reading pupils. The pupils rated 24 picture books and 24 series books according to completion, interest, and difficulty. The books were also rated in terms of the readability match category, a comparison of the pupil's reading level with the book's readability level. The raw scores were analyzed for significant differences between picture books and series books using the Chi-Square Tests of Independence at the .05 level.

The scores from the total group of books were

analyzed between completion, interest; completion, difficulty assessments; completion, readability match category, interest, difficulty assessments; interest, readability match categories; and difficulty assessments, readability match categories. The Chi-Square Test of Independence at the .05 level was used to test for significant differences.

## CHAPTER IV

### FINDINGS AND DISCUSSION

The book inventory sheets were separated according to picture books and series books. The raw scores for the completion, interest, difficulty assessments, and readability match categories were analyzed to test for possible differences between the picture books and series books.

Also the scores from the total group of books were analyzed between completion, interest; completion, difficulty assessments; completion, readability match categories; interest, difficulty assessments; interest, readability match categories; and difficulty assessments, readability match categories. The Chi-Square Test of Independence at the .05 level was used to test for significant differences.

#### Results

Hypothesis 1.--Book Type vs. Completion Responses. This study did not find any significant difference between picture books and series books when they were looked at in terms of completion responses. The null hypothesis is accepted. In other words, as many picture books as series books were completed by the pupils (Table 1).

Hypothesis 2.--Book Type Vs. Interest Responses.

TABLE 1  
 COMPLETION AND INTEREST RESPONSES FOR  
 PICTURE BOOKS AND SERIES BOOKS

Book		n
Completion responses <sup>a</sup>		
Picture	Yes	91
	No	15
		106
Series	Yes	87
	No	6
		93
Interest responses <sup>b</sup>		
Picture	Yes	88
	No	12
		100
Series	Yes	81
	No	11
		92

<sup>a</sup>Chi-Square Test of Independence = 2.349. Not significant at the  $p < .05$  level.

<sup>b</sup>Chi-Square Test of Independence = .45. Not significant at the  $p < .05$  level.

This study did not find any significant difference between picture books and series books when they were looked at in terms of completion responses. The null hypothesis is accepted. In other words, as many picture books as series books were liked by the pupils (see Table 1).

Hypothesis 3.--Book Type vs. Difficulty Assessments.

This study did find a significant difference between picture books and series books when they were looked at in terms of the difficulty assessment. The null hypothesis is rejected. Although more picture books were rated "hard" than series books, significantly more series books were rated "too easy" and significantly more picture books were rated "just right" in difficulty (Table 2).

Hypothesis 4.--Book Type vs. Readability Match

Categories. This study did find a significant difference between picture books and series books when they were looked at in terms of the difficulty categories. The null hypothesis is rejected. Significantly more picture books were above the pupil's reading level. And significantly more series books were below or within the pupil's tested reading level (Table 2).

Hypothesis 5.--Completion vs. Interest. This study did find a significant difference between completion and interest responses when they were looked at in terms of total books. The null hypothesis is rejected. Significantly more pupils reported reading books they liked. And significantly more pupils reported not reading books they

TABLE 2

DIFFICULTY ASSESSMENTS AND READABILITY MATCH CATEGORIES  
FOR PICTURE BOOKS AND SERIES BOOKS

Book		n
Difficulty assessments <sup>a</sup>		
Picture	Too easy	23
	Just right	64
	Hard	16
		103
Series	Too easy	50
	Just right	38
	Hard	5
		93
Readability match categories <sup>b</sup>		
Picture	Below	4
	Within	32
	Above	70
		106
Series	Below	45
	Within	43
	Above	5
		93

<sup>a</sup>Chi-Square Test of Independence = 21.923. Significant at the  $p < .05$  level.

<sup>b</sup>Chi-Square Test of Independence = 91.795. Significant at the  $p < .05$  level.



did not like (Table 3).

Hypothesis 6.--Completion vs. Difficulty Assessments. This study did find a significant difference between completion responses and difficulty assessments when they were looked at in terms of total books. The null hypothesis is rejected. Significantly more children reported reading books they rated "too easy" or "just right" in difficulty. And books that were not read tended to be rated "hard." However the computed chi-square may not be reliable because one cell had an expected frequency of less than five (Table 4).

Hypothesis 7.--Completion vs. Readability Match Categories. This study did not find a significant difference between completion responses and the readability match categories when they were looked at in terms of total books. The null hypothesis is accepted. In other words, the readability match categories had little relationship to pupil's reading or not reading a book (Table 4).

Hypothesis 8.--Interest vs. Difficulty Assessments. This study did find a significant difference between interest responses and the difficulty assessments when they were looked at in terms of total books. The null hypothesis is rejected. Significantly more children reported liking books they rated "too easy" or "just right." However the computed chi-square may not be reliable because one cell had an expected frequency of less than five (Table 5).

Hypothesis 9.--Interest vs. Readability Match

TABLE 3  
 COMPLETION RESPONSES COMPARED WITH INTEREST  
 RESPONSES FOR TOTAL BOOKS

Completion responses	Interest responses	n
Yes	Yes	167
	No	11
		<u>178</u>
No	Yes	4
	No	12
		<u>16</u>

Note. Chi-Square Tests of Independence = 60.112. Significant at the  $p < .05$  level.

TABLE 4  
 COMPLETION RESPONSES COMPARED WITH DIFFICULTY  
 ASSESSMENTS AND READABILITY MATCH  
 CATEGORIES FOR TOTAL BOOKS

Completion responses		<u>n</u>
Difficulty assessments <sup>a</sup>		
Yes	Too easy	70
	Just right	99
	Hard	10
		<u>179</u>
No	Too easy	3
	Just right	3
	Hard	11
		<u>17</u>
Readability match categories <sup>b</sup>		
Yes	Below	45
	Within	70
	Above	63
		<u>178</u>
No	Below	4
	Within	5
	Above	12
		<u>21</u>

<sup>a</sup>Chi-Square Test of Independence = 56.796. Significant at the  $p < .05$  level.

<sup>b</sup>Chi-Square Test of Independence = 3.854. Not significant at the  $p < .05$  level.

TABLE 5

INTEREST RESPONSES COMPARED WITH DIFFICULTY  
ASSESSMENTS AND READABILITY MATCH  
CATEGORIES FOR TOTAL BOOKS

Interest responses		<u>n</u>
Difficulty assessments <sup>a</sup>		
Yes	Too easy	61
	Just right	98
	Hard	9
		168
No	Too easy	11
	Just right	3
	Hard	7
		21
Readability match categories <sup>b</sup>		
Yes	Below	44
	Within	65
	Above	60
		169
No	Below	5
	Within	8
	Above	10
		23

<sup>a</sup>Chi-Square Test of Independence = 25.301. Significant at the  $p < .05$  level.

<sup>b</sup>Chi-Square Test of Independence = .572. Not significant at the  $p < .05$  level.

Categories. This study did not find a significant difference between the interest responses and the readability match categories when they were looked at in terms of total books. The null hypothesis is accepted. In other words the readability match categories had little relationship to pupil's liking or not liking a book (see Table 5).

Hypothesis 10. --Difficulty Assessments vs. Readability Match Categories. This study did find a significant difference between the pupil's difficulty assessments and the readability match categories when they were looked at in terms of total books. The null hypothesis is rejected. Significantly more books that the pupils rated as "too easy" were in the difficulty category of below the pupil's reading level. Significantly more books that the pupils rated "just right" in difficulty were in the difficulty category of within the pupil's reading level. However although the majority of the books rated "hard" by the pupils were in the difficulty category of above the pupil's reading level, the pupils tend to rate most of the books in the difficulty category of above as "just right" in difficulty (Table 6).

### Discussion

This paper did not find a significant difference in the third grade remedial readers' responses to book completion or book interest for series books compared with picture books.

TABLE 6

DIFFICULTY ASSESSMENTS COMPARED WITH  
READABILITY MATCH CATEGORIES

Difficulty assessments	Readability match categories	$\bar{n}$
Too easy	Below	31
	Within	24
	Above	18
		<u>73</u>
Just right	Below	16
	Within	44
	Above	42
		<u>102</u>
Hard	Below	2
	Within	5
	Above	14
		<u>21</u>

Note. Chi-square Test of Independence = 25.084. Significant at the  $p < .05$  level.

These findings would indicate that poor readers in third grade should be exposed to books recommended in library references for primary level pupils and books written for retarded readers as there are no differences in the pupil's interest and completion of these books.

While there were no significant differences in the completion and interest responses between the two book types, there were significant differences between the pupil's difficulty assessments of the two types of books. Although more picture books were rated "hard" than series books, the series books had significantly more difficulty assessments that were "too easy" and the picture books had significantly more difficulty assessments that were "just right."

The pupil's assessments of "too easy" for the series books may reflect an awareness of publisher's control of vocabulary and sentence length factors. The greater number of "hard" assessments for the picture books agrees with the statement by Huck and Kuhn (1968) that most picture books require at least third grade reading ability. However the majority of the pupil's picture book assessments as "just right" in difficulty would seem to support Gray and Leary's (1935) finding that there are other factors involved that determine the reader's opinion of reading difficulty than measurable stylistic elements.

The two types of books showed significant differences in the readability match categories. The picture

books tend to be above the pupil's reading levels and the series books tend to be within and below the pupil's reading levels. These findings appear to support Miller's conclusions that formulas rate books selected by librarians above the reading ability of the intended group of children. However the readability match category places the series books within or below the pupil's reading ability. As Spache (1972) has noted, the stylistic elements measured by readability formulas are controlled in the preparation of these books.

There was no relationship between the readability match category and book completion or interest. This finding supports the statement by Dale and Chall (1953) that readability formulas do not determine if pupils will be interested in a book or complete it.

The significant difference on the completion and interest responses indicating that children tend to complete books they like supports Spache's conclusion that interest is the most important influence on children's attitudes toward reading. And Fry's (1975) readability principle that high motivation overcomes high readability. However the computed chi-square may not be reliable because one cell had an expected frequency of less than five.

The pupils tended to rate books they read as "too easy" or "just right." This finding appears to support Gaver's statement that the child's perception of the book's difficulty determines whether the book will be completed.



The pupils reported that books they liked were "too easy" or "just right" in difficulty. This finding suggests that interest in a book probably aids comprehension as Fry (1975), Shnayer (1968), and Strang (1956) have reported.

There is a relationship between the pupil's difficulty assessments of the books and the readability match categories. Books in the readability match category of below the pupil's reading ability tended to be rated as "too easy" by the pupils. Books in the readability match category of within the pupil's reading ability tended to be rated as "just right" in difficulty by the pupils. These results would seem to indicate some agreement between the factors associated with reading ease in terms of pupil assessments and the factors sampled by formulas.

However, books in the readability match category of above the pupil's reading level tended to be rated as "just right" in difficulty by the pupils. This lack of agreement may reflect the function of interest. Ridgeway (1955) noted that the readability of books assumed a minor role when interest in a book was high and pupils tended to rate books they liked as "just right" in difficulty that were above their tested reading levels.

Although this study did not note a relationship between formula estimates of reading difficulty and pupil reading ability compared with book completion and interest, this study does point out that the use of formulas to control vocabulary and sentence difficulty of materials for

designated levels of reading ability has resulted in the production of materials of at least equal acceptance to poor readers as materials selected by librarians for literary value.

The pupils seem to have definite opinions concerning reading ease or difficulty. With the exception of one readability match category, the children's difficulty ratings tend to agree with statements by educators, librarians, and the other two readability match categories.

A problem was noted in Table 1 that a vast majority of the students responded yes giving a possible ceiling effect. This may be the cause of failure to find significance.

## CHAPTER V

### SUMMARY AND CONCLUSIONS

#### Summary

In an attempt to determine primary level poor reader's opinion of children's books selected according to readability and literary values, 57 children in third grade remedial reading classes completed statements on 48 books.

The books consisted of 24 series books from the school library included in Spache's Good Books for Poor Readers (1972) and 24 picture books that were included in at least one of the selection aids for public or school libraries (Fidell, 1971; Gaver, 1972; Hodges, 1969).

All of the books recommended in the preceding references were selected to appeal to the reading interests of young children.

Data was gathered on book completion, interest, and the pupil's assessment of the book's difficulty. An additional part of the study was to see how readability of the books affected the pupil's opinions. A readability match category was computed for each book according to a comparison of the readability of the book with the pupil's tested reading level. These data were compared between book types. Also the scores from the total group of books were analyzed

between completion, interest; completion, difficulty assessments; completion, readability match categories; interest, difficulty assessments; interest, readability match categories; and difficulty assessments, readability match categories. The Chi-Square Test of Independence at the .05 level was used to test for significant differences.

This paper did not find a significant difference in the pupil's completion or interest responses between the two types of books.

However, it was found that the children appear to rate picture books as "just right" in difficulty, while most series books were rated "too easy."

This study found a significant difference in the readability match categories between the two book types relating to the comparison of the book's readability with the pupil's tested reading level. The picture books tended to be above the pupil's reading level and the series books tended to be below or within the pupil's reading level.

A comparison of the pupil's completion and interest responses showed a significant difference. The pupils tended to read books they liked.

Although this study found a significant difference in the completion and difficulty assessments indicating that pupils tend to rate books they read as "too easy" or "just right" in difficulty, the computed chi-square may not be reliable because one cell had an expected frequency of less than five.

This study did not find a significant difference in the pupil's completion responses between the readability match categories. There is little relationship concerning the pupil's reading or not reading a book and the comparison of the book's readability with the pupil's tested reading level.

This study found a significant difference in the comparison of the interest responses with the difficulty assessments indicating that pupils tend to rate books they like as "too easy" or "just right" in difficulty. However the computed chi-square may not be reliable because one cell had an expected frequency of less than five.

This paper did not find a significant difference in the pupil's interest responses between the readability match categories. There is little relationship concerning the pupil's liking or not liking a book and the comparison of the book's readability with the pupil's tested reading level.

Significantly more books rated "too easy" by the pupils were in the readability match category of below the pupil's reading level. Significantly more books rated "just right" by the pupils were in the readability match category of within the pupil's reading level. However although most of the books rated "hard" by the pupils are in the readability match category of above the pupil's reading level, the pupils rated the majority of the books, in the readability match category of above as "just right" in difficulty.

### Conclusions

The conclusions reached in the study are:

1. Pupils should be exposed to series books and picture books as there are no differences in their interest or completion responses for the two types of books.

2. Pupils tend to rate picture books as "just right" in difficulty and series books are rated "too easy."

3. The readability match category tends to rate picture books above the pupil's reading level and series books tend to be rated within and below the pupil's reading level.

4. There is little relationship between the readability match category and pupil's book completion or interest responses.

5. Pupils tend to read books they like.

6. Pupils tend to rate books they read as "too easy" or "just right" in difficulty.

7. Pupils tend to rate books they like as "too easy" or "just right" in difficulty.

8. Pupil's difficulty assessment of books and the readability match categories show considerable agreement except for one rating. Books that were rated above the pupil's reading level by the readability match category tend to be rated "just right" in difficulty by the pupils.

### Suggestions for Further Research

Third grade remedial reading pupils' opinions of children's books should be further researched. This paper

has furnished data comparing the children's completion, interest, and difficulty assessments of picture books and series books. A readability match category was also examined.

This study indicated that children's assessments of a book's difficulty was significantly related to whether the book was completed or liked. The readability match category was significantly related to the children's difficulty assessments. However, the readability match category was not significantly related to completion or interest. This area can be examined further.

This study found no differences between the pupil's completion and interest responses to picture books and series books. However, researchers should determine if one type of book has a favorable influence on reading achievement or increasing the frequency of reading.

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APPENDIX A

COVER SHEET AND BOOK INVENTORY

The purpose of this study is to determine third grade remedial reading pupil's interest and difficulty ratings of selected series books as opposed to selected picture books.

#### Teacher Directions

The book titles will be in alphabetical order. Please have each child sign his name on the line under his book. The next week, he will complete items 1-3 under his name with a check or an x. Please explain the form to the children. But let them answer the statements themselves. Do not question their responses. These books will take the place of one of their regular library book check-outs.

#### Children Directions (Teacher Read)

You are going to take part in an experiment. Each week you will choose one of these books. Write your name on the sheet that has your book's name on the top. Please read the book. Then next week check or x the answer that tells what you think of the book.

This experiment will tell the books and kinds of books you like, so please answer honestly.

These are library books so please take out only one book during your library time. And return the book each week.

Name \_\_\_\_\_

1. Did you read the book?       yes       no
2. Did you like it?       yes       no
3. Was this book       too easy       just right       hard

Name \_\_\_\_\_

1. Did you read the book?       yes       no
2. Did you like it?       yes       no
3. Was this book       too easy       just right       hard

Name \_\_\_\_\_

1. Did you read the book?       yes       no
2. Did you like it?       yes       no
3. Was this book       too easy       just right       hard

Name \_\_\_\_\_

1. Did you read the book?       yes       no
2. Did you like it?       yes       no
3. Was this book       too easy       just right       hard

Name \_\_\_\_\_

1. Did you read the book?       yes       no
2. Did you like it?       yes       no
3. Was this book       too easy       just right       hard

APPENDIX B

TITLES AND READING LEVELS OF BOOKS

Picture Books

Angus and the Cat by Marjorie Flack. Reading Level 3 (Fry).

Bedtime for Frances by Russell Hoban. Reading Level 2 (Fry).

CriCTOR by Tomi Ungaro. Reading Level 3 (Fry).

Crow Boy by Taro Yashima. Reading Level 3 (Fry).

Curious George Gets a Medal by H. A. Rey. Reading Level 4 (Fry).

Excuse Me! Certainly! by Louis Slobodkin. Reading Level 5 (Fry).

Georgie by Robert Bright. Reading Level 6 (Gaver, 1972).

Harry by the Sea by Gene Zion. Reading Level 2 (Gaver, 1972).

Hercules by Hardie Gramatky. Reading Level 6 (Gaver, 1972).

How Big is a Foot? by Rolf Myller. Reading Level 4 (Fry).

Lentil by Robert McCloskey. Reading Level 6 (Gaver, 1972).

Make Way for Ducklings by Robert McCloskey. Reading Level 4 (Gaver, 1972).

May I Bring a Friend by Beatrice Schenk De Regniers. Reading Level 2 (Gaver, 1972).

Mike Mulligan and His Steam Shovel by Virginia Lee Burton. Reading Level 6 (Gaver, 1972).

Rain Drop Splash by Alvin Tresselt. Reading Level 3 (Fry).

Swimmy by Leo Lionni. Reading Level 3 (Fry).

The Biggest Bear by Lynd Ward. Reading Level 5 (Fry).

The Big Snow by Berta and Elmer Hader. Reading Level 3 (Fry).

The Little Carousel by Marcia Brown. Reading Level 3 (Fry).

The Snowy Day by Ezra Jack Keats. Reading Level 2 (Gaver, 1972).

The Story of Ferdinand by Munro Leaf. Reading Level 3 (Gaver, 1972).

The Tomtem by Astrid Lindgren. Reading Level 3 (Gaver, 1972).

Two is a Team by Lorraine and Jerrold Beim. Reading Level 2 (Gaver, 1972).

Where the Wild Things Are by Maurice Sendak. Reading Level 5 (Fry).

#### Series Books

Butternut Bill and Little River by Edith McCall. Reading Level 1 (Fry) Primer (publisher).

Butternut Bill and the Bear by Edith McCall. Reading Level 1 (Fry) Primer (publisher).

Butternut Bill and the Pumpkin by Edith McCall. Reading Level 1 (Fry) Primer (publisher).

Cowboy Sam and Big Bill by Edna Walker Chandler. Reading Level 1 (Fry) Preprimer (publisher).

Cowboy Sam and Dandy by Edna Walker Chandler. Reading Level 1 (Fry) Preprimer (publisher).

Cowboy Sam and Freckles by Edna Walker Chandler. Reading Level 1 (Fry) Preprimer (publisher).

Curious George Flies a Kite by Margret Rey. Reading Level 1 (Gaver, 1972).

Dan Frontier by William Hurley. Reading Level 1<sup>1</sup> (Gaver, 1972) Preprimer (publisher).

Dan Frontier and the New House by William Hurley. Reading Level 1 (Fry) Preprimer (publisher).

Dr. Doolittle and the Pirates by Al Perkins. Reading Level 3 (Fry) 2.7 (publisher).

Fox in Socks by Dr. Seuss. Reading Level 2<sup>1</sup> (Gaver, 1972) 1.7 (publisher).

In the Woods by Edward and Marguerite Dolch. Reading Level 2 (Fry) 1 (publisher).

Jim Forrest and Ranger Don by John and Nancy Rambeau. Reading Level 2 (Fry) 1.7 (publisher).

Leonard Goes to the Olympics by Gene Darby. Reading Level 3 (Fry) 2.3 (publisher).



Leonard Visits Sitting Bull by Gene Dary. Reading Level 3  
(Fry) 2.1 (publisher).

Little Bear's Friend by E. H. Minarik. Reading Level 2<sup>1</sup>  
(Gaver, 1972).

Little Runner of the Longhouse by B. Baker. Reading Level  
2.2 (Gaver, 1972).

Once There Was a Bear by Edward and Marguerite Dolch. Read-  
ing Level 2 (Fry) 1 (publisher).

Red Fox and His Canoe by N. Benchley. Reading Level 2<sup>1</sup>  
(Gaver, 1972).

Stanley by Syd Hoff. Reading Level 2<sup>2</sup> (Gaver, 1972).

The Case of the Hungry Stranger by C. Bonsall. Reading  
Level 2.1 (Gaver, 1972).

The Cat in the Hat Comes Back by Dr. Seuss. Reading Level  
2.1 (Gaver, 1972) 2.0 (publisher).

The Strange Disappearance of Arthur Cluck by Nathaniel  
Benchley. Reading Level 2.1 (Gaver, 1972).

Too Many Pockets by Dorothy Levenson. Reading Level 1  
(Fry).

COURSE WORK FOR MASTER'S DEGREE IN READING  
RUTGERS UNIVERSITY

Instructor

Summer, 1968

290:540	Introduction to Learning	Dr. Bloom
299:561	Foundations of Reading Instruction	Dr. Kling

Summer, 1969

299:564	Remedial Reading	Dr. Swalm
299:565	Laboratory in Remedial Reading	Dr. Swalm

Fall, 1969

299:566	Seminar in Reading Research and Supervision	Dr. Kling
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Spring, 1970

290:501	Introduction to Principles of Measurement	Dr. Geyer
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Summer, 1970

290:381	Educational Psychology	Dr. Bloom
290:519	Psychology of the Exceptional Child	Dr. Holowinsky

Fall, 1970

290:513	Introduction to Early and Middle Childhood	Dr. Gormly
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Fall, 1971

290:518	Psychology of Personality	Dr. Leon
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Instructor

Spring, 1973

610:581 Reading Materials for Children  
(K-6)

Mrs. Green

Fall, 1973

299:599 Thesis Research

Dr. Fry

Spring, 1974

299:599 Thesis Research

Dr. Fry

Fall, 1975

299:599 Thesis Research

Dr. Fry

Spring, 1975

299:599 Thesis Research

Dr. Fry

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High School: Lovington High School  
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September 1962-June 1963

Eastern New Mexico University  
Portales, New Mexico  
June 1963-July 1963

University of New Mexico  
Albuquerque, New Mexico  
September 1963-January 1966  
B.S., 1966  
General Elementary

Professional Experience:

1967-71 Second Grade Teacher  
Budd Lake Elementary School  
Mt. Olive, New Jersey

1966-67 Second Grade Teacher  
Kit Carson Elementary School  
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