

Eastern Illinois University

The Keep

Plan B Papers

Student Theses & Publications

1-1-1968

A Description and Comparison of the Linguistic Approach in the Teaching of Reading

Diane M. Richcreek

Follow this and additional works at: https://thekeep.eiu.edu/plan_b

Recommended Citation

Richcreek, Diane M., "A Description and Comparison of the Linguistic Approach in the Teaching of Reading" (1968). *Plan B Papers*. 572.
https://thekeep.eiu.edu/plan_b/572

This Dissertation/Thesis is brought to you for free and open access by the Student Theses & Publications at The Keep. It has been accepted for inclusion in Plan B Papers by an authorized administrator of The Keep. For more information, please contact tabruns@eiu.edu.

A DESCRIPTION AND COMPARISON OF THE LINGUISTIC APPROACH

IN THE TEACHING OF READING

(TITLE)

BY
Diane M. Richcreek

PLAN B PAPER

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR
THE DEGREE MASTER OF SCIENCE IN EDUCATION
AND PREPARED IN COURSE
Education 561

IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY,
CHARLESTON, ILLINOIS

1968

YEAR

I HEREBY RECOMMEND THIS PLAN B PAPER BE ACCEPTED AS
FULFILLING THIS PART OF THE DEGREE, M.S. IN ED.

May 21, 1968
DATE

[REDACTED]

ADVISER

May 21, 1968
DATE

[REDACTED]

DEPARTMENT HEAD

TABLE OF CONTENTS

Chapter		Page
I.	INTRODUCTION	1
	Nature of the Problem	
	Need for the Study	
	Statement of the Problem	
	Procedure	
	Definition of Terms	
II.	LINGUISTICS: BACKGROUND, NATURE AND ORGANIZATION OF MATERIALS.	7
	Overview of Reading Instruction	
	Linguistics	
	Analysis of Two Linguistic Programs	
	Unique Features of Linguistic Reading Series	
III.	RESULTS WITH THE LINGUISTIC APPROACH	29
IV.	SUMMARY.	39
	Conclusions	
	Recommendations	
	BIBLIOGRAPHY	43

CHAPTER I
INTRODUCTION

Between 1836 and 1920, more than 120 million copies of McGuffey's primers, readers, and spelling books were used by American school children.¹ Ever since, publishers have been producing materials to use in teaching reading. Usually they are described as containing unique features or representing a revolutionary approach to the teaching of reading.

The presses keep rolling, the books keep coming, the debate keeps raging. The question being asked is "Which are the best methods for teaching children to read?" To choose a method of decoding the written language which will lead to a successful reading has been a problem for educators. The controversy of selecting the best methods to teach reading has been recently joined by advocates of linguistics and language experience. The linguistic materials present new techniques for use in the teaching of reading. They attempt to control the inconsistency in the spelling of words which is a major hindrance to the process of decoding.

Nature of the Problem

Decoding: Nature of Word Analysis.--The spoken form of language existed long before written language. At the

¹Justin M. Fishbein, "Reading and Linguistics," Instructor (November, 1967), p. 25.

very least, speech is one hundred times as old as writing, and probably more.² Written language is a code representing sounds of speech. An early step in teaching a child to read is to teach him to crack the written language code. One of the significant problems in breaking the code is the degree of inconsistency that exists in the correspondence between the spoken and written form of language. This is perhaps more evident in the English language than in most other languages.

The following poem describes in a humorous way the concern about the inconsistent English language.

Our Queer Language

When the English Tongue we Speak
Why is "break" not rhymed with "freak"
Will you tell me why it's true
We say "sew" but likewise "few"?
And the Maker of the verse
Cannot cap his "horse" with "worse"
"Beard" sounds not the same as "heard"
"Cord" is different from "word"
Cow is "cow" but low is "low"
"Shoe" is never rhymed with "foe"
Think of "hose" and "dose" and "lose"
And think of "goose" and not of "choose"
"Doll" and "roll", "home" and "some"
And since "pay" is rhymed with "say"
Why not "paid" with "said" I pray?
"Would" is not pronounced like "could"
Wherefore "done" but "gone" and "lone"?
Is there any reason known?
And in short it seems to me³
Sounds and letters disagree.

The inconsistencies in the English language have been widely parodied. However, these irregularities are not

²Pose Lamb, Linguistics in Proper Perspective (Columbus, Ohio: Charles E. Merrill Publishing Company, 1967), p. 5.

³Ibid., p. 61.

always humorous, especially not to the beginning reader. In a preprimer the following words were presented: (1) stop, (2) come, (3) to, (4) go. In these words, the child is confronted with four different sounds of the letter "o." The variety of sounds represented by the letter combination "ough," or the variety of ways in which we graphically represent the many sounds of "e" in these words: (1) we, (2) seize, (3) key, (4) people, (5) eye, denote the lack of correspondence, too. These problems may only frustrate the beginning reader's attempts to break the code. In grouping words, it is found that 85 percent are regularly or phonetically spelled. However, the troublesome words, the other 15 percent, make up 85 percent of words in use.⁴

Nila Banton Smith has pointed out that as early as the seventeenth century, educators were discussing various methods of circumventing the inconsistencies of the English language during beginning reading.⁵ The proof of these inconsistencies, however, still remains and the educators of this century are still attempting to deal with them in a more effective manner in beginning reading programs. Several artificial orthographies, which attempt to control spelling patterns in reading, have been introduced. The Initial Teaching Alphabet has been developed with the intent of reducing the confusion which occurs when one letter is used

⁴Henry Smith, Linguistic Science and Teaching of Reading Film produced by the University of Buffalo in conjunction with the National Educational Television and Radio Center, Indiana University Audio Visual Center, Bloomington, Indiana.

⁵Nila Banton Smith, Reading Instruction for Today's Child (New York: Prentice Hall, Inc., 1963), p. 78.

to represent a variety of sounds: (1) ate, (2) apple, (3) are, etc. In materials printed in i/t/a, each letter would be clearly distinguishable in its visual as well as auditory form. Still another alphabet which attempts to control the phoneme-grapheme relationship is Unifon, or the "Single Sound" alphabet. John Malone developed this Unifon alphabet because he felt that i/t/a was inappropriate for speakers of American English since it was developed in England.

Another of the reading innovations is the linguistic approach. The linguist is one of the advocates of regularizing the spelling patterns in words presented to children in their readers. Through use of linguistic readers, the objective is to delay the beginning reader's encounter with such irregularly formed words of spelling until after the child has developed confidence in his reading ability.

Need for the Study

Since much material is coming out to be used in the area of reading the educator is faced with the problem of selecting the approach or approaches that will be most effective. The influence of linguistics is developing in field of reading. However, linguistics is still a relatively new term to many educators. There is a need for more familiarization with this approach before the educator will know if it is an answer to the question being asked: "Which is the best approach for teaching children to read?" This

study will attempt to find out what linguistic materials are, how they differ from other materials, and what contributions they make to reading instruction. With this background of linguistics it may aid the educators with answers to some of the reading problems.

Statement of the Problem

The nature of research is to determine if the linguistic approach is a unique or different approach which results in children learning to read more effectively than with other approaches.

Procedures

The data for this study was gathered from several sources. Included in the sources were current periodicals and books pertaining to English, linguistics, and linguistics in reading found in Booth Library, Eastern Illinois University. Pamphlets, bulletins, descriptive materials and commercially prepared textbooks obtained from the publishers of Merrill Linguistic Readers and Science Research Associates Linguistic Readers.

The first step in the study will be to briefly present a historical overview of the various methods used in reading instruction. The second step will summarize the characteristics of structural linguistics. The third step in the study will examine the features of two linguistic series to note similarities and differences from traditional materials. The fourth step will list the unique features of the linguistic

approach. The findings of research will be studied to determine the results of linguistic approach in reading in step five of the study. The final step will be to summarize the paper with an attempt made to draw conclusions and make recommendations.

Definitions

Basal reader - One of a sequential series of reading textbooks designed for use in a reading program.

Linguist - A scholar-scientist whose training is in the field of human language.

Linguistics - The scientific study of human languages.

Morpheme - The smallest meaning-bearing units of a language, consisting of certain phonemes or combinations of phonemes. Also "a word, or a part of a word, that bears meaning: indivisible into smaller parts without violation of its meaning or meaningless remainders."

Phonemes - These are the smallest sound units in the English language.

Syntax - That phase of grammar which deals with the relationship of words in sentences and the manner in which words are put together to form sentences.

Traditional Orthography - The art of writing words with the proper letters according to standard usage.⁶

⁶Mario A. Pei, A Dictionary of Linguistics (New York: Philosophical Library, 1954), p. 14.

CHAPTER II

LINGUISTICS: NATURE AND ORGANIZATION OF MATERIALS

Overview of Reading Instruction

Before considering the linguistic approach to beginning reading, it might be helpful to review briefly some of the other methods used over the years in the teaching of reading. In this historical review the placement of linguistics will be noted, too. This historical analysis of reading instruction in the United States will begin with methods used prior to 1900 and extend to present techniques.

The Alphabet Method was widely used prior to and during the nineteenth and twentieth centuries. Children proceeded from the smallest unit, the letter, and built up to the word. This method produced slow readers but good spellers.⁷ Although it had shortcomings, generations of Americans learned to read this way.

The Phonic Method has varied in its degree of emphasis but it continues to be a vital part of programs such as the eclectic method, the linguistic method, etc. It is a method of sounding out letters or groups of letters and printed words that the child cannot recognize at first sight.⁸ It includes rules that only apply to elements of language that

⁷Ruth Strang, Making Better Readers (Boston, Mass.: D. C. Heath and Company, 1957), p. 12.

⁸Ibid.

are regular. There are exceptions to the rules and to some children these prove very confusing.

Some of the phonic programs in use during 1910 to 1930 incorporated linguistic principles.⁹ However, lack of continuity of thought developed materials that were not particularly interesting. With all its shortcomings, the phonic approach does provide the child with better tools for attacking words. It has enjoyed a longer period of popularity than most of the other approaches.

The Sight Word Method was used for about a decade when the phonic method was practically discontinued during the early thirties. It was an adaptation of the word method with the addition of vocabulary control. To avoid frustrating the beginning reader by asking him to memorize the sounds and forms of an unlimited number of words, this method limited to 250 or 300 the number of words to which a student was exposed during any one year of instruction.¹⁰

The Linguistic Method suggests that initial instruction should present words in which patterns or symbol-sound relationship are both readily apparent and consistent. However, the linguist did not have a great impact on the educator until the middle 1950's.

The three general principles of the linguistic approach are (1) consistency of spelling patterns at the early stages, (2) oral rather than silent reading, (3) no picture clues.¹¹

⁹Linguistics and Reading (Chicago, Illinois: Science Research Associates, Inc., 1966), p. 1.

¹⁰Ibid.

¹¹Ibid.

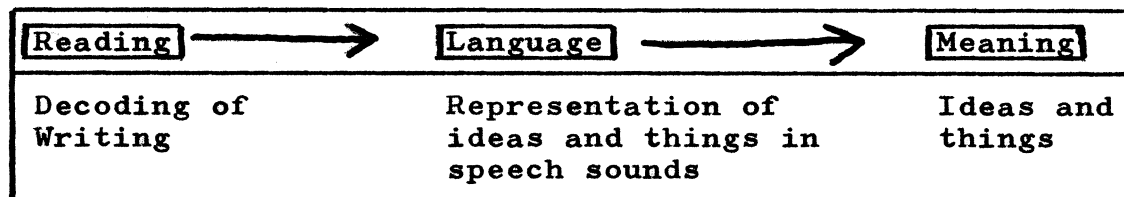
The Eclectic Method, which employs not one method but a combination of methods, is widely used in reading today. The best teachers of reading lay stress on the use of several methods and reading authorities also agree that no one method should be used exclusively.¹²

Linguistic

The linguistic method was summarized in three general principles in a previous section, but a more detailed discussion is necessary for a better understanding of its influence in the area of reading.

A linguist, in essence, studies human languages and is a scholar-scientist whose field of competence is human language. Linguistics, it would logically follow, is clearly and briefly defined as the scientific study of language.¹³

Reading is a language related process. The study of the science of language, which was defined as linguistics, has a contribution to make to reading. The linguistic view of reading as a decoding process is graphically portrayed below:



14

¹²Strang, op. cit., p. 18.

¹³Pei, op. cit., p. 18.

¹⁴Judson E. Newburg, Linguistics and the School Curriculum (Chicago, Illinois: Science Research Associates, Inc., 1967) p. 3.

There are many divisions in the field of linguistics such as historical linguistics, descriptive linguistics, and structural linguistics. Structural linguistics is the study of the characteristics of the structure of the English language. The three characteristics that are applicable to reading and reading instruction are (1) phoneme, (2) morpheme, and (3) syntax.

Phonemes are the smallest sound units in the English language. They do not necessarily occur as isolated sounds as in phonics but are found in larger patterns of words and word parts. Phonemes may be represented graphically by letters or combinations of letters. These graphic representations of phonemes are called graphemes.¹⁵

A second characteristic of structural linguistics is the morpheme, the smallest meaning bearing unit. Morphemes consist of words or word parts such as "oh," "oh". Morphemes may appear singularly, but usually they occur in larger patterns of phrases, clauses, and sentences. They are combinations of phonemes. An understanding of morphemes and their purposes are important in vocabulary development.¹⁶

Syntax is the grouping of morphemes in unified meaning-bearing sentences. These meaning bearing patterns are in turn basic units of reading. Syntax is derived from the Greek words syn (together) and tassien (arrange).¹⁷ Within the area of syntax are four subsystems:

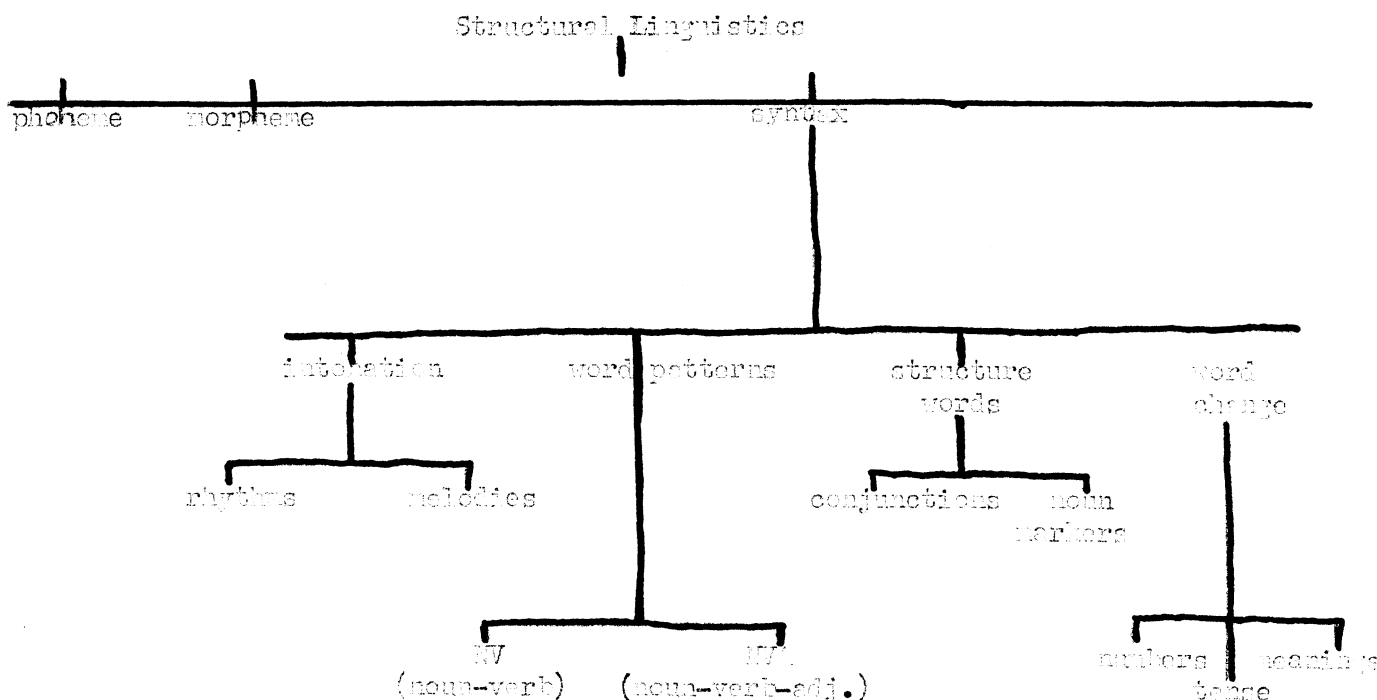
¹⁵Linguistics and Reading, op. cit., p. 3.

¹⁶Ibid.

¹⁷Joe L. Frost, Issues and Innovations in the Teaching of Reading (Glenview, Illinois: Scott, Foresman and Company, 1967), p. 3.

1. Intonation refers to the systematic rhythms and melodies of English.
2. Sentence patterns are the order of words and parts of sentences.
3. Sentence words (or function words) are sentence joints that hold the sentence parts together.
4. Work form changes are grammatical inflections, derivational prefixes and suffixes.¹⁸

This general knowledge of structural linguistics will help to indicate how the linguist is becoming involved in the field of reading. The following chart will visually organize structural linguistics.



¹⁸Carl A. Lefevre, Linguistics and the Teaching of Reading (New York: McGraw-Hill Book Company, 1962), p. xv.

Analysis of Two Linguistic Reading Programs

Although there are major contrasts between linguistic materials and traditional materials, many linguistic principles are followed in traditional programs but are not labeled as such. Goodman quite accurately notes that "good teachers ...have always instinctively used certain linguistic principles."¹⁹ A teacher has used a linguistic principle of intonation when she has instructed students to read a sentence as they would say it to a friend on the playground. However, she is usually not aware of the fact that this teaching suggestion is a linguistic technique. The label linguistics causes the majority of the apprehension felt by teachers. They assume they lack the necessary background in linguistics to use it effectively.

The contrasts that exist between linguistic reading materials and traditional reading materials are also balanced by similarities. An analysis will be made to discover the different linguistic characteristics.

Many major publishing companies have incorporated linguistic principles into their reading series. Several of the series available are cited in the following list.

1. Barnhart, Clarence L. Let's Read Series. New York: Clarence Barnhart, 1964.

This series includes books one through nine and each book has an accompanying workbook. The children's textbooks are prepared on the basis of the approaches discussed in Let's Read by Leonard Bloomfield and Clarence L. Barnhart.

¹⁹Frost, op. cit., p. 199.

2. Buchanan, Cynthia. Sullivan Programmed Reading Series. New York: McGraw-Hill Book Company, 1963

Included in this series are textbooks one through four. The series combines what Cynthia Buchanan calls a linguistic approach with programmed material designed for use in the first grade and in remedial programs.

3. Fries, Charles C., Fries, Agnes C., Wilson, Rosemary, and Rudolph, Mildred. Merrill Linguistic Readers. Columbus, Ohio: Charles E. Merrill Publishing Company, 1966.

This series includes six books and workbooks for use in the primary grades. The six-book series is designed to be used one year with gifted children, two years with average children, and three years with disadvantaged children.

4. Rasmussen, Donald, and Goldberg, Lynn. SRA Linguistic Readers. Chicago, Illinois: Science Research Associates, Inc., 1965.

The basic reading series from SRA includes an Alphabet Book, six reading books, six corresponding workbooks, and six related texts. This series is the first part of SRA's new comprehensive reading program for grades one through six.

5. Richardson, Jack, Smith, Henry Lee, Jr., and Weiss, Bernard. Evanston, Illinois: Harper and Row Publisher, 1965.

This series includes a primer, Six in a Mix, and a first reader, It Happened on a Ranch, for the primary program.

6. Robinett, Ralph F., Rohas, Pauline, and staff. Miami Linguistic Readers. Miami, Florida: Ford Foundation Project, Dade County Public Schools Board of Public Instruction, 1964.

These materials are designed to teach beginning reading to pupils whose preschool language was other than English.

7. Stratemeyer, Clara G., and Smith, Henry Lee, Jr. Linguistic Science Readers. Evanston, Illinois: Harper and Row Publishers, 1963.

This is the preprimer program which includes three paperback booklets (1) Frog Fun, (2) Tuggy, (3) Pepper. The series cited in point five is a continuation of this program by Harper and Row Publishers.²⁰

Two linguistic programs were selected from the series cited above for the analytical purpose of noting the similarities and differences that exist between a traditional reading series and linguistic readers. Of the series mentioned above, those done by Dr. and Mrs. Fries and their associates, Mrs. Wilson and Mrs. Rudolph, are among the most broadly presented and fully developed. This was the criterion used to select it as one of the series to be analyzed. The SRA Linguistic Program was selected because it is the most recently developed linguistically oriented reading series. If any changes have occurred in the linguistic techniques, they should be evident in this series.

Merrill Linguistic Readers.--The following outline and brief description will present the primary features of the Merrill Linguistic Readers. The outline will deal with the following features of this series (1) principles, (2) authors, (3) description of materials, (4) basic teaching procedures. A brief description of these features will develop a general concept of this linguistically oriented reading series.

²⁰Lamb, op. cit., p. 58.

1. The guidelines of this program are stated, in the form of the underlying principles. These principles have been shaped by observations of teachers and by pupil reactions during the four year experimental use.

- A. The linguistic approach to reading begins with and builds upon the oral language control already achieved by the pupil.
- B. Both the vocabulary and the grammatical structures presented in this series are within the oral experience of the child and keep pace with the widening of that experience.
- C. Instant recognition and discrimination of the alphabet in any sequence is provided for in the readiness preparation.
- D. The spelling-sound pattern presentation will govern the words on the vocabulary pages and in the reading material throughout the series.
- E. The method of teaching word recognition is an emphasis on the minimum contrasts in a pattern of words.
- F. Pictures have been excluded in order to focus the child's²¹ attention upon the reading materials presented.

2. The preparation of the materials is credited to the listed authors of this linguistic reading series. However, many people contributed to the refinement of the theory of this approach.

- A. Charles Carpenter Fries is a Professor of English and the Director of the English Language Institute at the University of Michigan. He was one of three delegates to the International Congress of Linguistics. He is the author of many books. One particularly worth noting is Linguistics and Reading.

²¹Charles Carpenter Fries, Rosemary Green Wilson, and Mildred K. Rudolph, Merrill Linguistic Readers Teacher's Edition (Columbus, Ohio: Charles E. Merrill Books, Inc., 1966), p. 5.

- B. Rosemary Green Wilson is the Assistant Director of Reading in the Department of Curriculum Development of the School District of Philadelphia and is on the Board of Directors of the National Council of Teachers of English. She has also served as a consultant in linguistics for a project supported by the U.S. Office of Education dealing with the achievement of a first grade taught by a linguistic approach and a basal reader approach.
- C. Mildred K. Rudolph is a consultant teacher in the Department of Curriculum Development in Philadelphia. She has served as a supervisor of a U.S. Office of Education Reading Research Project since 1964.

3. This program is developed from the basic materials prepared for use by Charles E. Merrill Books, Inc. The brief description of the Merrill Linguistic Program will include (A) the readiness materials, (B) readers and workbooks, (C) supplementary materials.

- A. A presupposition of the Merrill Linguistic Series is that the teacher will make use of all of her usual resources, materials, and techniques in insuring the development of readiness. The areas of particular importance in the readiness program, according to linguists, are mastery of the alphabet and recognition of words in seperable units.
- B. This series consists of three softback books and three hardback books. A consumable skillbook accompanies each reader.
- C. Suggestions are made of appropriate supplementary materials; however, not until the pupil has achieved security in the vital stages of the series, is he ready for supplementary activities. These activities should be introduced only after completion of the first three readers to insure security in the beginning reading stages according to the authors.

4. The basic teaching procedures of the Merrill Linguistic Readers include (A) the chalkboard presentation which includes two procedures: first the presentation of sets of words in

minimum contrast that are examples of consistent spelling patterns and second the given sight words, followed by (B) the presentation of the same words in a printed form in the Readers, and (c) the reading of stories that use these words in sentences having normal grammatical structure and cumulative meaning.²²

Scope and Sequence of the Merrill Linguistic Readers.--

The progression of the average student through this program is presented in the following chart. Some of the significant results from the use of the Merrill Linguistic Readers according to the authors are:

1. High achieving children, who finish the series in one year, can be expected to move into Books 3-1 or 3-2 in the conventional basal reading program.

2. Children who take two or more years to finish this program will make the transition into traditional materials at a higher instructional levels than previously encountered.

3. All children seem to experience marked feelings of security and success in reading.

4. The writing and spelling abilities of children taught to read by this method are also higher.²³

²²Ibid., 3-17.

²³Merrill Linguistic Readers (Columbus, Ohio: Charles E. Merrill Books, Inc., 1966) p. 4.

Scope and Sequence of Merrill Linguistic Readers

Designation of Reader	Approximate Grade Equivalent	Focus of Readers
<u>Alphabet Book</u> Reader 1 Reader 2	Readiness and Grade 1	With a few exceptions the words introduced in the first four Readers in the series belong to the first major set of spelling patterns: consonant-letter (s); vowel-letter (s); consonant-letter (s).
Reader 3 Reader 4	Grade 2	
Reader 5 Reader 6	Grade 3	High achieving children who finish the series in one year can be expected to move into Books 3-1 3-2 in the conventional basal-reading series. Children who take two or more years to finish will make the transition into materials at higher instructional levels than previously encountered.

24

SRA Linguistic Reading Program.--The components of the SRA Linguistic Program will be presented in the following outline (1) premises, (2) authors, (3) description of materials, (4) basic teaching procedures.

1. Eight years ago, Donald Rasmussen and Lynn Goldberg concluded that children in their school system were not learning to read efficiently. Their combined efforts led to the development of the new linguistic basic reading series from SRA based on these premises.

²⁴Ibid.

- A. The teaching of reading is much more complex than it needs to be.
- B. Teaching children to read should simply be a matter of helping the child recognize words in printed form which they already use and understand in speech.
- C. While no single approach can cure the multiple problems in learning to read, write, and speak correctly,²⁵ the linguistic approach has much to offer.

2. The preparation of the SRA Basic Reading Series could not possibly represent the work of only two people. Many contributed to the refinement of the theory, to the writing of materials, and to the testing of the program with thousands of pupils. The two authors, however, had to pass judgment on every detail and are accountable for the final results. Donald Rasmussen is director of teacher education materials for Science Research Associates. He has spent four years researching the subject of reading and serving as project editor for the SRA Linguistic Reading Program. Lynn Goldberg, co-author of the program, worked with Donald Rasmussen in researching the subject of reading and linguistics. She had previously been a principal and first grade teacher at Miquon School in Pennsylvania.²⁶

3. Six reading books, six workbooks, the Alphabet Book, tests, and auxiliary materials are the components of the SRA Reading Series.

- A. Each reading book constitutes a level and each level introduces a new sound-spelling pattern. Students begin with Level A and move through Levels B, C, D, E, and F. The first two levels

²⁵Donald Rasmussen and Lynn Goldberg, Science Research Associates Basic Reading Series Teacher's Edition (Chicago, Illinois: Science Research Associates, Inc., 1965) p. 1.

²⁶Ibid., p. ii.

present words that illustrate simple sound-spelling patterns in whole words. Subsequent levels present patterns in which two or more letters represent a sound. The sequence of levels progresses in other ways. Most of the words in the first two levels consist of three letters; later words consist of many letters. One syllable words appear first, multisyllabic words later. Sentences increase in length and complexity. The selection also increases in length and appeal.²⁷

- B. Each workbook level consists of exercises based on sound-spelling patterns introduced in the corresponding reader. Workbooks supplement the readers for children by providing additional experiences to help them discover patterns introduced in the corresponding reader.
- C. The other auxiliary materials are not as extensively developed in this series but those available and suggested²⁸ correlate with the readiness program.

4. Five exercises are included in the teaching activities of the SRA Basic Reading Program. The activities are (A) chalkboard exercises; (B) word list exercises; (C) workbook exercises; (D) sentence, story, and verse exercises; (E) test exercises.

- A. The reading period should begin with a chalkboard lesson when using the SRA Reading Series. Unlike a list of words in a book or a page of sentences, the chalkboard lesson can disclose one word or one sentence at a time. The lesson can be paced to meet the needs of the class.
- B. The word list exercise is essentially the same as the chalkboard exercise except that the words are listed or arranged in a chart form. The teacher and student study the word list together.
- C. Workbooks in this series provide opportunities for the children to exercise their reading skills. The tasks and materials in the workbooks are keyed to sections in the readers rather than to a story.

²⁷Ibid., p. 21.

²⁸Ibid., p. 22.

- D. Children make discoveries and see relationships but a steady diet of discovery cannot satisfy them. They want to use their new powers and knowledge. They have an opportunity to do this when they read meaningful, enjoyable sentences, stories and verses.
- E. Occasionally the teacher should be more formal in her evaluation techniques. She should attempt to determine the child's strengths and weaknesses in decoding specific patterns. The tests accompanying the series provide a formal method of evaluation.²⁹

Scope and Sequence of the SRA Linguistic Program.--A

concise summary of the SRA Linguistic Program's overall structure and focus is provided in the following chart. The program is divided into two distinct phases (1) emphasis on decoding skills at Levels A through F and (2) emphasis on comprehension and related skills at Levels G through L. Every level consists of one teacher's manual, one student reader, and one workbook. For Levels A through F, various supplementary materials, such as alphabet charts and cards and additional reading selections are available.

The analysis of these two linguistic series has attempted to identify the main components of the SRA Linguistic Program and the Merrill Linguistic Readers. Both of the series depart in method from the traditional reading materials but the authors suggest following the teacher's manual closely in order to use the materials correctly and effectively.

These series are just two examples of the linguistic influence developing in the field of reading. In recent months, recommendations of linguists have been added to the

²⁹Ibid., p. 23.

Scope and Sequence of the SRA Reading Program

	Designation Of Level	Approximate Grade Equivalent*	Focus of Levels
Basic Reading Series (BRS)	Alphabet Book	Grade 1	Decoding Skills Levels A-F concentrate on the decoding process. Selections in the readers are based on a carefully controlled vocabulary of familiar words, giving the child an orderly, sequenced exposure to the sound-spelling patterns of the English language. By Level F, most children have become independent readers--capable of applying their understanding of the relationships between spelling and sound in order to decode words he has never before seen in print. High-interest stories and poems develop elementary comprehension skills and familiarize the child with the basic conventions of punctuation and capitalization, plurals, possessives, and compound words. Workbook exercises reinforce both decoding and comprehension skills.
	Level A		
	Level B		
	Level C		
	Level D		
	Level E	First half of Grade 2	
Level F			

* The grade equivalents shown here are based on typical usage; but the use of a given level at a given grade may vary, depending on children's abilities.

Scope and Sequence of the SRA Reading Program (continued)

	Designation of Level	Approximate Grade Equivalent*	Focus of Levels
Comprehensive Reading Series (CRS)	Level G	Second half of Grade 2	<p>Comprehension Skills</p> <p>Levels G-L assume an independent reader—either one who has successfully completed levels A-F, or one who has achieved independence in some other program. While reinforcing decoding skills through linguistic word attack, these levels concentrate on comprehension, language growth, and language versatility. Selections in the readers greatly expand the child's vocabulary and concepts and develop his ability to understand, analyze, interpret, and evaluate matters of content and style. Language versatility and awareness are developed in the workbooks. Research and reference skills and creative writing activities are presented through the teachers' manuals.</p>
	Level H	Grade 3	
	Level I		
	Level J	Grade 4	
	Level K	Grade 5	
	Level L	Grade 6	

*

The grade equivalents shown here are based on typical usage; but the use of a given level at a given grade may vary, depending on children's abilities.³⁰

³⁰ Learning to Read Should Be Exciting (Chicago, Illinois: Science Research Associates, Inc., 1966), p. 2.

recommendations of others who advocate change and reform of traditional reading methods. To many who have devoted themselves to the field of reading, it must certainly appear that linguistics has literally burst on the reading scene. Sessions are dedicated to the subject at meetings of the International Reading Association and the National Council of English, books are appearing, and journal and magazine articles are multiplying. Publishers seem to be tripping over one another in a race to be the first out with a reading series containing a linguistic label. In no sense should this sudden flood of materials be accepted as a guarantee to solve our reading problems overnight.

Some of the claims of the publishers of linguistic materials are that these materials attempt to help children become independent readers at an earlier stage of their reading careers. Our language does not have a one-to-one relation between letters and sounds but the linguistic materials present consistent sound-spelling patterns first. The task of learning to read is simplified according to the linguist when the organization leads the child to discover similarities in word patterns. Many teachers are beginning to balance their reading programs with some linguistic principles since the sudden invasion of linguistics into the reading area.

As with any new reading technique, the apprehension the teacher may feel is due to lack of understanding as to what exactly linguistics is in reading. However, linguistics is not as unfamiliar to teachers as they think. Teachers who

encourage oral language expression, who build experience charts based on the child's own language, who type stories dictated by children for use as reading materials, may be totally ignorant of linguistics but these teachers have discovered for themselves some of its basic principles.

Unique Features of Linguistic Reading Series

The following statements summarize some of the significant contrasts at the present time between accepted traditional reading materials and linguistic reading materials.

1. The definition of the reading process. "Linguists insist that we have confused the reading process with the use of what is read, that meaning is not exclusively the province of interpreting printed symbols, and that reading is in essence a process of transferring what the child already knows about speech and auditory signals to reading."³¹ This definition indicates that the linguist is less concerned with meaningful content at the beginning of reading.

2. The alphabet and beginning reading. "Linguists are in general agreement that the child should be able to recognize the letters of the alphabet and to associate a sound with each letter prior to reading."³² In some of the more traditional basal programs, the children learn the alphabet in a more incidental manner, and knowledge of the alphabet is not critical to success in beginning reading.

3. Content of beginning reading programs. Almost all

³¹Lamb, op. cit., p. 48.

³²Ibid., p. 49.

linguistic programs concentrate on words which follow a fairly consistent pattern of consonant-vowel-consonant.

4. Use of pictures. The linguistic programs vary in the use of pictures. Many linguistic reading specialists decry the inclusion of pictures which aid the reader in interpreting the text. If they are included in linguistic materials at all, they are obliques or abstract and, although attractive, do nothing to add to the story in a content sense.³³

5. Implications of linguistics for middle and upper grade reading programs. The linguists have concentrated their efforts at the beginning level of reading. Success at reading during the primary grades enables a child to read with ease in the later grades linguists claim.

6. Intonation and oral reading. Linguists place emphasis on speech and at the primary level oral reading plays a major role. Reading aloud serves to reinforce the spoken word and written symbol relationship which linguists consider important. There is no emphasis on reading for meaning and practically no story content until the child grasps the symbol-sound correspondence.

7. Sentence structure. The linguist suggests using a variety of sentence patterns and a more natural way of portraying the speech of story characters. However, he is open to criticism in this area because this concept of using a variety of sentence patterns and a more natural way of portraying the speech of story characters has been violated in the children's materials they have prepared.³⁴

³³Ibid., 58.

³⁴Ibid.

The significant contrast between the linguistic series and the traditional reading series is in content. The consistent word patterns develop content that is different. The majority of the criticism aimed at linguistics is in reference to this point. The differences between the reading vocabularies of linguistic materials and traditional materials are quite marked but the vocabulary of beginning reading linguistic materials follows a definite pattern and varies little from one program to another. Words, whether in isolation or in stories, are usually one-syllable following a C-V-C (consonant-vowel-consonant) pattern. This appears to be a contradiction to the linguist's recommendation regarding the use of varied and interesting sentence patterns and the inclusion of sentences which lend themselves to a variety of intonation patterns. When forced to choose, linguists generally choose the regularity of spelling patterns first, hoping that other goals will be achieved later.

It follows from their definition of reading that linguists do not place such emphasis on meaning at the beginning stages in reading. "Pat a fat cat," and "Nan can fan Dan," can hardly be considered rich, fruitful sentences. The materials for any approach to reading are built on a vocabulary that is gradual. With adult standards of taste, we wonder how children can be motivated through the beginning stages of any reading series when the vocabulary is small and especially when children are approached with man, fan, and Dan. However, it has been found that the thrill of reading, of being able

to say meaningful sounds consistent with written symbols, carries children through the very early stages. By the time the motivation from the source begins to wane, the vocabulary is large enough to compose stories and poems with a stimulating content.

CHAPTER III

RESULTS WITH THE LINGUISTIC APPROACH

This question may now be asked: How successfully have linguists utilized the concepts they hold in writing textbooks and reading programs? The answer may not yet be available. Many educators find themselves in general agreement with Albert Marchwardt, who observed that "linguistically oriented textbooks for the teaching of reading are fairly recent in their development and cannot be said to have much more than initial trials."³⁵

The main objective of the investigation conducted in September, 1964, by J. Wesley Schneyer was to compare the reading achievement of first grade children (at above average, average, and below average ability levels) taught by a basal reader approach with the reading achievement of first grade children (at above average, average, and below average ability levels) taught by a linguistic reading series.

Described in the study are (1) the materials, (2) approaches used in the two groups, (3) the sample (including pupils and teacher), (4) the testing program, and (5) the treatment data.

The linguistic approach was based upon principles presented by Fries in a basic reading series developed from linguistic principles. The basal reader materials used in the investigation were the new basic readers developed by Scott, Foresman, and Company.

³⁵Lamb, op. cit., 69.

The original sample was selected from among schools in which principals and teachers volunteered to participate in the experiment. First grade classes were randomly assigned to one of the two experimental groups. Of the twelve classes, four were assigned to each of the three ability levels. Six hundred and forty-seven students were available for the experiment in which three hundred and forty-seven were in twelve classes taught by the linguistic approach and three hundred and twenty-seven were in twelve classes taught by the basal approach.

The major finding of the experiment is that when two separate groups are considered as a whole neither approach resulted in significantly higher reading achievement than the other. One conclusion that might be drawn from the data reported is that pupils tend to obtain better results on measures that employ vocabulary similar to vocabulary of which they are accustomed.³⁶

The Reading and Language Arts Center at Syracuse University also conducted its research of linguistic materials in September, 1964, under the direction of William D. Sheldon and Donald R. Lashinger.

Twenty-one schools, with a total of 469 children, were selected to teach reading using basal readers, modified linguistics materials and linguistic readers. Children in seven classrooms were taught to read using the Ginn Basal Series.

³⁶J. Wesley Schneyer, "Reading Achievement of First Grade Children Taught by a Linguistic Approach and a Basal Reader Approach," Reading Teacher, (May, 1967), 647-651.

Seven other classrooms of children used the Structural Reading Series of modified linguistics. The remaining seven classes used the Leonard Bloomfield and Clarence L. Barnhart linguistic readers.

Following the pre-experiment testing during September and October, 1964, a 140 day instructional period began, during which each teacher used for instruction only the series to which she had been assigned. At the end of the instructional period in May, 1965, measures on the following areas were obtained from all the children: (1) Stanford Achievement Test, (2) San Diego Pupil Attitude Inventory, (3) Writing sample, (4) Allyn and Bacon First Reader Test.

An examination of the data reveals that no significant differences between experimental groups were found on the pretest measures of: (1) mental age, (2) chronological age, (3) readiness test scores.

Studies of the available data are still taking place. The data has revealed a wide range of mean scores for the posttests within each group. On many of the tests the scores are significant. A statistical analysis of these differences is now being carried out.

The data has indicated interesting results related to the performance of the boys. While an analysis of the significance of these differences is not available, it seems reasonable to assume that boys did not score differently from the girls in their achievement in reading.³⁷

³⁷William D. Sheldon and Donald R. Lahinger, "Effect of First Grade Instruction Using Basal Readers, Modified Linguistic Materials, and Linguistic Readers," Reading Teacher (May, 1967), 576-579.

Ruth Strickland points out in her article three fallacies which cause the problems in teaching children to read accurately and objectively. In the first place, the linguists tell us that any attempt to teach reading by trying to correlate written words directly with real-life meanings, without going through the spoken linguistic forms which the written shapes symbolize, is fundamentally erroneous and is doomed to failure. A second fallacy relates to our teaching of phonics. Letters represent sounds and not the other way around. A third question arises out of the findings regarding the structure of children's language. Children are using at the age of six all of the kinds of sentences adults use. In fact, almost the only kind they seem not to use is the kind found in the preprimers and primers. It is possible that material presented in the kinds of language patterns children use might be easier for them to learn to read than the materials in our present books. Research is asking the question: "Is it possible that some scheme of systematic progression in the difficulty of sentences might improve the teaching of reading and also help children to understand the structure of English sentences?"³⁸

Certain basic controversies exist in the area of research in reading. It should be clear to anyone interested in the history of reading and its teachings that the methods used for the beginning steps have changed from time to time, and

³⁸Ruth Strickland "Implications of Research in Linguistics for Elementary Teaching," Elementary English, 40 (February, 1963), 168-171.

The major purpose of this investigation was to study and to determine the relative effectiveness of each of the ten approaches or programs for teaching beginning reading. Eight of the programs were the latest (new or revised) programs of various publishers, as follows:

1. (AM): ABC Betts Basic Readers
2. (EC): Phonetic Keys to Reading
3. (GI): Ginn Basic Readers
4. (HO): Reading for Meaning Series
5. (LI): Basic Reading

6. (MC): Programmed Reading
7. (SC): The New Basic Readers
8. (SI): Structural Reading Series
9. (IN): Individualized approach
10. (IS): Individualized approach supplemented

The pupils involved in this study were from twenty classrooms in four of the twenty elementary schools in the public schools of a suburban Virginia city.

When the means of the synthetic programs (HO, LI, SI, EC, MC) are compared with those of the analytical program groups (IN, IS, GI, AM, SC), a great preponderance of differences among the means is found to be significantly in favor of the synthetic group. The analytic groups were out-performed; the synthetic programs did better, in other words, the children had higher achievement after using those series. Three-fourths of the time there were significant differences that favored the synthetic programs according to the means derived.

A criticism frequently made of the synthetic programs is that the rather close attention given to word elements may lead to inadequate development of comprehension skills.

However, in this study there was only one instance in which the scores favored an analytic program.

This study has offered a unique opportunity to compare and analyze "methods" rather than merely or only specific publisher materials.⁴¹

The other large scale demonstration project is in its seventh month of use in the Detroit schools. Funded under Titles I and II of ESEA, the operation provides for long-term testing of six very different reading programs. More than 2,200 children and about 70 teachers already have been involved in the program.

The reading methods being tried include both traditional and more experimental approaches: Ginn's basal reader; Pitman's i/t/a; Harper & Row's linguistics; Lippincott's phonics; McGraw-Hill's programmed reading; and Western Publishing's Unifon. Each is being used in first-grade classrooms in three schools in the city.

But the demonstration project is more than a device to find out which systems turn out the best readers. Detroit educators view it as a unique opportunity to identify what teachers need to know to make reading lessons take, no matter what kind of instructional program is being used.

Summaries of the components of each of the six systems under study were presented. One of the series under study

⁴¹Emery P. Bliesmer and Betty H. Yarborough "A Comparison of Ten Different Beginning Reading Programs in First Grade," Phi Delta Kappan, (June, 1965), 500-504.

was Harper & Row's linguistic program. The chief writers of this program maintain words do not go from the printed page to meaning in a reader's mind. They argue that in between there is a step of translating the printed words into their oral counterparts.

Despite the emphasis on sound written word relationships the program differs significantly from the typical phonetic approach. In the linguistic approach the teachers are advised to avoid presenting a letter sound apart from the word in which it appears.

An unusual feature of the Linguistic Readers is that the dialogue is presented in the form of a play. This, the authors say, facilitates role-playing and postpones the introduction of artificial phrases.

In the beginning books, new vocabulary words often make use of known elements. Word-forming methods include: (1) Graph elimination - the known word "still," provides the basis for learning such words as "till" and "ill." (2) Graph-annexation - from "in," children can move to words like "pin" and "inch." (3) Graph substitution - "nest" may lead to words like "best" and "neck."

Any real evaluation of the various systems and techniques being employed will have to wait until this study has been operating a while longer. Meanwhile, the results of such evaluations are being eagerly awaited by reading experts everywhere.⁴²

⁴²"A Long, Hard Look At Reading," Grade Teacher, (September, 1966), 110-114.

The research discussed thus far dealt generally with the topic of linguistics and reading. The following research relates specifically to the Merrill Linguistic Readers and the SRA Linguistic Program.

More recently, Charles Fries, Henry Lee Smith, Jr., and Paul Roberts have produced materials based on linguistic principles. The Merrill Linguistic Series is the result of work by Fries-Wilson-Rudolph. Two experimental programs were conducted in Lansdowne and Philadelphia, Pennsylvania, in 1965.

The experimental edition of the Merrill Linguistic Readers was made available in September to four first grade teachers in the Lansdowne-Alden Joint School System. A total of 86 pupils took part in the program. By May 1, 74% of the children were working in the latter half of the program, while 56% of the students were working in the last third of the materials. At the conclusion of the study, the final test results showed a median gain of one full grade in word recognition and comprehension.

The other experimental program using Merrill Linguistic Readers was conducted in Philadelphia, Pennsylvania in 1965. More than 300 pupils of three different ability levels were used in a test situation for twelve months of reading instruction. All of the 126 high achievers in this twelve month period exceeded the third grade reading levels. In the low achiever group, almost one half of the first year pupils reached or exceeded first grade reading level.

The students showed a greater independence in creative writing as well as an excellent grasp of spelling skills. Also, the research indicated that use of the Merrill Linguistic Readers resulted in pupils gaining a feeling of security and success in their reading.⁴³

A limited amount of research has been conducted using the SRA linguistic materials. Many research authorities feel that the development of SRA materials based on linguistic concepts are so recent that it is too soon to make a judgment about them.

The latter part of the SRA Linguistic Program was just completed in August of 1967. No research has been conducted at Levels G through L. However, during 1966 the Country Club Hills School District agreed to participate in pilot study of linguistic based SRA Reading Program, published by the Science Research Associates, Inc.

The linguistic approach bypassed many of the problems found in other reading methods. Two significant observations of this linguistic method are (1) it is more systematic, (2) it assumes that children already know how to pronounce words.⁴⁴

⁴³Merrill Linguistic Readers (Columbus, Ohio: Charles E. Merrill Books, Inc., 1966), p. 5.

⁴⁴Audrey Hartshorne, "Linguistic Principles in Grades 1 and 2," Reproduced from Chicago Daily News, by SRA, Inc., 1966.

CHAPTER IV

SUMMARY

It was the goal of this paper to attempt to answer questions that have arisen among educators as to what linguistic materials are, how they differ from other materials, and what contributions they are making to reading instruction.

The inconsistency in words of our English language is one of the significant problems in decoding the written language to learn to read. The linguistic materials attempt to deal with the inconsistencies in a more effective manner. However, in the historical overview it was indicated that many methods have been used over the years in reading instruction. Of course, some have been more successful and longer lasting than others.

In general the characteristics of structural linguistics which influence the process of reading are phonemes, morphemes, and syntax. Two series were examined to note the application of linguistic principles in the teaching of reading. As a result of the examination the unique features of linguistic materials could be noted. The one area of significant difference between the linguistic approach and the traditional reading approach is in content.

The research presented the results of the teaching of reading with a linguistic approach. The evidence attempted to indicate whether or not children taught with the linguistic

method progressed more rapidly and experienced more success than children taught with other methods. However, the main shortcoming of the research studies was that linguistic programs have been just initially tried. Any real evaluation of the various methods of linguistics being employed will have to wait until the studies have been operating a while longer. Thus still remaining to be answered is whether or not the ultimate achievement of a child taught by the linguistic approach, indicates enough significant advancement to justify the added expense of specially printed linguistic books and materials.

Though linguistics may not be called revolutionary or the only way of teaching reading, it does open the door to a fascinating process of language learning and language acquisition.

A bit of interesting irony will conclude this paper on linguistic instruction. The reader is asked to note the lesson copied from McGuffey's Eclectic Reader (copyright 1839) and compare it with the lesson from Reader 1 of Merrill Linguistic Readers (copyright 1966).

Lesson II - McGuffey's 1st Reader

Is the cat on the mat?

The cat is on the mat.

Reader 1 - Merrill Linguistic Reader 1

Nat is a cat.

Nat is fat.

Nat is a fat cat.⁴⁵

⁴⁵Lamb, op. cit., 33.

Observing these two selections, the elementary teacher might have a difficult time answering the question, "What is new in reading instruction?"

Conclusions

1. An early step in teaching children to read is to teach him to crack the written language code.
2. The linguistic materials present unique techniques for use in the teaching of reading. They attempt to control the inconsistency in words.
3. Many methods have been tried and used over the years in teaching reading.
4. Many reading authorities agree that no one method should be used exclusively.
5. Teachers have used certain linguistic principles without being aware of it.
6. There has been a sudden flood of linguistic materials but they should not be accepted as a guarantee to solve our reading problems overnight.
7. One of the significant contrasts between linguistic materials and traditional reading materials is in content.
8. Linguistic materials are relatively recent in their development and cannot be said to have much more than initial trials.
9. Well-trained teachers versed in many reading approaches may be the important factor in teaching beginning reading instruction rather than the materials used.

Recommendations

1. Teachers should rely on a variety of methods and techniques to meet individual instructional needs in reading.

2. More research is necessary in order to determine if linguistic materials can perhaps benefit one group of children more than another.

3. Also more adequate research regarding the success of the linguistic programs with children of many types and from a variety of backgrounds should be conducted.

4. Educators should await further experimental results before encouraging widespread use of linguistic materials. It is possible that the final results may reveal no significant advantage for the child taught through use of linguistic materials. The amount of research conducted to date indicates this possibility.

BIBLIOGRAPHY

BIBLIOGRAPHY

Books

- Archibald, A. Hill. Introduction to Linguistic Structure. New York: Harcourt, Brace, and World, 1958.
- Barbe, Walter B. Teaching Reading: Selected Materials. New York: Oxford Press, 1965.
- Bloomfield, Leonard and Clarence L. Barnhart. Let's Read. Detroit: Wayne State University Press, 1961.
- Carroll, John B. The Study of Linguistics and Related Disciplines. Cambridge, Massachusetts: Harvard University Press, 1959.
- Fries, Charles C. Linguistics and Reading. New York: Holt, Rinehart, and Winston, Inc., 1963.
- Fries, Charles, Wilson, Rosemary, and Rudolph, Mildred. Merrill Linguistic Readers Teacher's Edition. Columbus, Ohio: Charles E. Merrill Books, Inc., 1966.
- Frost, Joe L. Issues and Innovations in the Teaching of Reading. Chicago, Illinois: Scott, Foresman, and Company, 1967.
- Gleason H. A. Jr. Linguistics and English Grammar. New York: Holt, Rinehart, and Winston, Inc., 1965.
- Green, Harry A. and Petty, Walter T. Developing Language Skills in the Elementary School. Boston: Allyn and Bacon, Inc., 1967.
- Laird, Charlton. Miracle of Language. Cleveland, Ohio: The World Publishing Co., 1953.
- Lamb, Pose. Linguistics in Proper Perspective. New York: Columbia University, 1967.

- Lefevre, Carl A. Linguistics and the Teaching of Reading. New York: McGraw Hill Book Company, 1962.
- Ornstein, Jacob and Gage, William W. The A B C's of Language and Linguistics. Philadelphia: Chilton Books, 1964.
- Pei, Mario. A Dictionary of Linguistics. New York: Columbia University, 1954.
- Pei, Mario. The Story of English. Philadelphia: J. B. Lippincott Company, 1953.
- Pei, Mario. Glossary of Linguistic Terminology. New York: Columbia University, 1966.
- Postman, Neil and Weingartner, Charles. Linguistics: A Revolution in Teaching. New York: Dell Publishing Co., Inc., 1966.
- Rasmussen, Donald and Goldberg, Lynn. SRA Teacher's Handbook. Chicago: Science Research Associates, Inc., 1965.
- Robinson H. Alan. Recent Developments in Reading. Chicago: The University of Chicago Press, 1965.
- Robinson H. Alan. Reading and the Language Arts. Chicago: The University of Chicago Press, 1963.
- Smith, Nila Banton. Reading Instruction for Today's Child. New York: Prentice Hall, Inc., 1963.
- Spache, George D. Reading in the Elementary School. Boston: Allyn and Bacon, Inc., 1964.

Articles and Periodicals

- Bartkowiak, Dennis. "Linguistics and Reading: Four Views," Elementary English, Vol. 44 (April, 1967), 386-391.
- Bliesmer, Emery P. and Yarborough, Betty H. "A Comparison of Ten Different Beginning Reading Programs in the First Grade," Phi Delta Kappan, (June, 1965), 500-504.
- Burns, Paul C. "Linguistics: A Brief Guide for Principals," The National Elementary Principal, Vol. 45 (September, 1965), 37-42.
- Evertts, Eldonna L. "Linguistics and the Elementary Teacher," Instructor, Vol. 76 (December, 1966), 21.

Fishbein, Justin M. "Reading and Linguistics," Instructor,
Vol. 77 (November, 1967), 23-25.

Lefevre, Carl "The Contributions of Linguistics," Instructor,
Vol. 74 (March, 1965), 74-76.

"Long Hard Look at Reading," Grade Teacher, (September, 1966),
110-114.

Schneyer J. Wesley. "Reading Achievement of First Grade Children
Taught by a Linguistic Approach and a Basal Reader Approach,"
Reading Teacher, (May, 1966), 647-651.

Sheldon, William A. and Lashinger, Donald R. "Effect of the First
Grade Instruction Using Basal Readers, Modified Linguistic
Materials, and Linguistic Materials," Reading Teacher,
(May, 1966), 576-579.

Pamphlets and Bulletins

Fries, Charles C. "Advances in Linguistics," Linguistics-
Current Issues NCTE, (1967), 1-37.

Hartshorne, Audrey. "Linguistic Principles in Grades 1 and 2,"
reprinted from the Chicago Daily News, a Science Research
Associates, Inc. Bulletin, Chicago: Science Research
Associates, Inc., 1967. pp. 1.

"Impact of Linguistics," a Science Research Associates Pamphlet,
Chicago: Science Research Associates, Inc., 1967, 1-5.

"Learning to Read Should Be Exciting," Science Research Associates
Service Bulletin, Chicago: Science Research Associates, Inc.,
1-30.

"Linguistics in the Elementary Classroom," Los Angeles County
Superintendent of Schools Office, 1965, 3-4.

"Linguistics and Reading," Science Research Associates Service
Bulletin, Chicago: Science Research Associates, Inc., 1967.
1-5.

Newburg, Judson E. "Linguistics and the School Curriculum,"
Department of Information-Science Research Associates, Inc.,
1967, 1-4.

Paul, Dortha Noble. "Teaching Beginning Reading with Materials
Based on Linguistic Principles: A Report. Trends in Teaching
(1966-1967), 1-23.

. SRA Reading Program Content Analysis: Scope
and Sequence of Skills. Science Research Associates, Inc.,
1967.

Film

Smith Jr., Henry Lee. "Linguistics and the Science of Reading."
Bloomington, Indiana: Audio Visual Center Indiana University,
1965.