AN INVESTIGATION OF THE EFFECT OF LISTENING INSTRUCTION UPON THE READING COMPREHENSION OF FIRST GRADE PUPILS

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Major professor

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ABSTRACT

AN INVESTIGATION OF THE EFFECT OF LISTENING INSTRUCTION UPON THE READING COMPREHENSION OF FIRST GRADE PUPILS

By

Bonnie Smith Schulwitz

It was the purpose of this study to determine the effect of specific instructional strategies in listening upon the reading comprehension of first grade pupils. Socio-economic status as defined by OEO specifications was also used as a factor for comparison.

Listening instruction was hypothesized to positively affect reading comprehension, subject to the empirical testing of the present study.

Subjects were the pupils in eighteen first grade classrooms in the Saginaw Public Schools, Saginaw, Michigan. A random assignment of classrooms within each of the three SES levels was made to the treatment groups: Treatment I: Specific listening instruction in which each class received daily three to five minute skill lessons in listening for specific purposes administered by the teacher to each total class unit. Treatment II:

Nonspecific listening in which each class experienced a comparable amount of time per week in listening without specific purposes administered by the teacher to each total class unit. Control: No special time allotted to listening activities.

The thirty-four item comprehension section of the Gates-MacGinitie Reading Test, Primary A, Form I, served as the pretest and covariate. The Gates-MacGinitie Reading Test, Primary A, Form II, served as the posttest.

A two-way analysis of covariance was the statistical test employed. Independent variables were treatment and SES.

The analysis of covariance revealed significant differences on the treatment main effect at the .05 level. The Scheffé post hoc test revealed significant differences on one contrast only: $T_1 + T_2 : C$ at the .10 level.

From these results it was concluded that:

(1) Some type of listening instruction appears superior to no listening instruction.

(2) Listening instruction produced significant gains in reading comprehension for all SES levels.

(3) It appears that a program of listening instruction within the elementary reading program may lead to increased reading comprehension abilities.

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By

Bonnie Smith Schulwitz

A DISSERTATION

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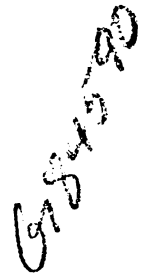

DEDICATION

TO MY PARENTS,

MR. AND MRS. E. J. SMITH,

for providing the vital, secure roots,

for sharing an intense interest in elementary education,

for giving me a large measure of my education,

and most of all,

for conveying their constant, unfailing faith in me,

this dissertation is dedicated

with infinite gratitude and love.

BONNIE SMITH SCHULWITZ
JULY, 1973

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Finally, I wish to thank my husband for the freedom to pursue this degree and his patience throughout this undertaking.

It has been a most memorable year. You have made it so.

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CHAPTER I

STATEMENT OF THE PROBLEM

Introduction

The attainment of reading competency commands a major priority among significant objectives for elementary education, for few abilities appear to hold more promise for the future successes of children than the ability to read. In 1969, Allen launced a massive right to read effort in stating ". . . there is no higher nationwide priority in the field of education than the provision of the right to read for all. . . ."[1] This declaration provided the genesis for the educational "moon target" of the 1970's--the intensive commitment to obliterate reading failures in the United States by 1980.

One plausible focus in the concerted effort to reach this target is the examination of instruction in listening skills and its effect upon improved reading competency. The similarities between the listening and

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[1]James E. Allen, Jr., "The Right to Read--Target for the 70's" (an address before the 1969 Annual Convention of the National Association of State Boards of Education, Los Angeles, California, 1969).

reading processes have stimulated much research since the 1950's, though research in listening dates back more than fifty years. Studies such as those by Kellogg,[1] Laurent,[2] Reddin,[3] and Reeves[4] have explored this relationship. An analysis of existing literature, however, reveals equivocal conclusions. The indecisive nature of these findings, with a lack of conclusive empirical verification, illuminates the need for additional research regarding the relationship between listening and reading.

Statement of the Problem

It was the purpose of this study to determine the effect of selected instructional strategies in listening upon the reading comprehension of first grade pupils. The study was based upon the premise that improved reading comprehension is a significant and primary goal within

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[1]R. E. Kellogg, "A Study of the Effect of a First Grade Listening Instructional Program Upon Achievement in Listening and Reading" (unpublished doctoral dissertation, University of California, Los Angeles, 1963).

[2]Marie-Jeanne Laurent, "The Construction and Evaluation of a Listening Curriculum for Grades Five and Six" (unpublished doctoral dissertation, University of Michigan, 1926).

[3]Estoy Reddin, "Informal Listening Instruction and Reading Improvement," The Reading Teacher, 22:742-743, 1969.

[4]Harriet R. Reeves, "The Effect of Training in Listening Upon Reading Achievement" (unpublished doctoral dissertation, The Florida State University, 1965).

any instructional reading program in the elementary school. Listening instruction was hypothesized to positively affect reading comprehension, subject to the empirical testing of the study.

In the effort to achieve a more explicit investigation of the effect of instruction in listening upon reading comprehension, the study was designed to differentiate between the effect of specific listening instruction and nonspecific listening instruction.

Significance of the Study

An examination of current literature concerning the total language arts realm reveals an increasing proliferation of writing dealing with the interrelationship of the language arts processes: listening, speaking, reading and writing in diverse combinations. This abundance suggests one indication of interest in and promise for the study of interrelated language arts abilities. In reflecting upon this past research for the formulation of directions for future research, David Russell[1] has urged fellow researchers to further explore the development of listening abilities and apply the findings to the structure and sequence of the language arts.

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[1]David Russell, "A Conspectus of Recent Research on Listening Abilities," Elementary English, 41:262, 1964.

Rationale for the focus on listening instruction in the present study is found in the fact that listening is utilized to a greater extent than any of the other communication skills, i.e., speaking, reading, and writing, although it is least emphasized in a formal way in elementary curricula. As early as 1926, Rankin[1] emphasized the preponderance of time spent in listening. Basing his study on the diaries of persons from varying walks of life, he reported that the average person spends sixty-eight per cent of his waking time in some form of communication. In further analysis, he found ten per cent spent in writing, eleven per cent in reading, eighteen per cent in speaking, and twenty-nine per cent in listening. Additional studies lend support to this conclusion. In an investigation of the demands made on pupils to listen in the classroom, Wilt[2] observed 568 elementary school pupils in 18 classes and found that they were required to spend substantially more time within the school day listening than teachers had previously estimated. The elementary teachers estimated the children listened twenty-five per

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[1]Paul T. Rankin, "The Measurement of the Ability to Understand Spoken Language" (unpublished doctoral dissertation, University of Michigan, 1926).

[2]Miriam E. Wilt, "A Study of Teacher Awareness in Listening as a Factor in Elementary Education" (unpublished doctoral dissertation, Pennsylvania State Collete, 1949).

cent of the school day. Wilt's study revealed that the children in these classes spent fifty-eight per cent of the day listening, over one-half of which was consumed listening to the teachers.

Moreover, it can be argued that the similarities between listening and reading provide logical rationale for a study of their relationship. It is reasonable to assume that since listening and reading are both receptive communication skills, they are comprised of some common skills. Verification is provided by Vineyard and Bailey[1] and Brown[2] who substantiate the relationship between listening and reading, even when other factors, such as intelligence and school achievement, were held constant. Duker[3] cites ten studies, utilizing children in grades four to six, which report coefficients of correlation between listening and reading ranging from .48 to .68.

The critical need to improve reading ability, specifically comprehension, the skill of gaining meaning from the printed page, offers further rationale for this

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[1]Edwin E. Vineyard and Robert B. Bailey, "Interrelationships of Reading Ability, Listening Skill, Intelligence and Scholastic Achievement," Journal of Developmental Reading, 14:175, 1960.

[2]Charles T. Brown, "Three Studies of the Listening of Children," Speech Monograph, 32:132, 1965.

[3]S. Duker, "Listening and Reading," Elementary School Journal, 65:321-329, 1965.

study, for it is predicated on the belief that comprehension is the very essence of reading. This belief is supported by many authorities in the field of reading today. For instance, Durr states:

> Reading is comprehending; unless the reader understands what he reads, he is not, in the truest sense of the word, reading. Although others may define reading as nothing more than pronouncing words on a printed page, the teacher cannot afford the luxury of such a loose definition. If our goal is to teach boys and girls to read, it must be clearly understood that we have not yet achieved that goal until we have taught them to understand the printed page.[1]

Harris concurs by stating that "the ultimate goal of reading instruction is to develop readers who can, and do, comprehend and react to what they read."[2]

These reading authorities agree that comprehension is the very heart of the reading process, which lends endorsement to the belief that the improvement of reading comprehension should be a goal which assumes a position of paramount importance in any instructional program in reading. Yet, evidence exists which demonstrates that this goal is not being effectively accomplished. In 1968, Bormuth conducted a study to ascertain students' ability to comprehend at different levels--

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[1]William K. Durr, Ed., Reading Instruction: Dimensions and Issues (Boston: Houghton Mifflin Company, 1967), p. 126.

[2]Albert J. Harris, Effective Teaching of Reading, Second Edition (New York: David McKay Company, Inc., 1971), p. 294.

primary, intermediate, junior high, and high school levels. He made the following statements in his conclusion.

> For many years reading experts and educators in general have maintained that the ultimate objective of reading instruction was to enable the child to understand what he read and not just to enable him to call the words on the page. And they have argued that this is the objective upon which we should expend our major efforts, since it is only through the child's use of these skills that he is able to acquire much of the knowledge he will need throughout his life. On the whole, this argument seems well reasoned. But when we examine how well this goal is being accomplished, we find a rather discouraging situation. Children are not being able to read their instructional materials well enough to gain much information from them. . . . A more detailed analysis of children's comprehension skills showed that in the fourth grade a great many of the children were unable to exhibit comprehension of even the simplest structures by which language signals information.[1]

In light of this evidence, it remains a challenge for educators to devise effective means for improving reading comprehension, exposing these techniques to the test of research for their validation.

Need for the Study

In recent years, the exigent efforts of educators to promote increased pupil competencies in reading have produced a plethora of instructional programs, strategies, and materials, all purported to successfully teach all

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[1]J. R. Bormuth, "The Effectiveness of Current Programs for Teaching Reading Comprehension" (paper presented at the Fifty-Eighth Annual Meeting of the National Council of Teachers of English, Milwaukee, 1968).

children to read. An examination of the published programs discloses that many stress the decoding aspect of the reading process to the minimization, or even the exclusion, of provisions for increasing the comprehension aspect. Although decoding skills are important, the development of the comprehension aspect should be a primary objective of any reading program. The present study was designed to focus upon the value of a particular instructional strategy, that of listening instruction, to promote this goal of increased reading comprehension. If such listening instruction does produce significant gains in reading comprehension, the study will provide the basis for establishing the necessity of incorporating listening strategies within reading programs.

Furthermore, the current practice of including listening skills exercises as a characteristic component of some reading programs, such as basal readers, suggests a need to determine their merit in functioning to enhance the reading abilities of elementary pupils. One probable reason for incorporating these exercises is the assumption that, due to the similarity of skills involved--i.e., both are receptive processes; both require decoding abilities; both necessitate interpretative skills--transfer of learning will occur. This custom, then, of including listening exercises is based on the hypothesis

that practice in developing listening will strengthen reading comprehension skills. It was the intent of this study to focus on an investigation of whether listening exercises do, in fact, increase reading comprehension, thereby examining the value of including them in elementary reading materials.

Methods and Procedures

This study was conducted in the Saginaw public school system, Saginaw, Michigan, from February 5, 1973, through March 30, 1973.

Students in eighteen intact first grade classrooms comprised the sample. Each of the classes was randomly assigned to one of three groups: specific listening, nonspecific listening, or control. Each of these groups contained six classes. The random assignment was made February 1, 1973. The listening exercises for the treatment groups were administered by the classroom teachers.

The Nonequivalent Control Group Design was used with the class considered to be the unit of analysis.

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[1]Donald T. Campbell and Julian C. Stanley, Experimental and Quasi-Experimental Designs for Research (Chicago: Rand McNally and Company, 1963), p. 13.

Instrumentation

The comprehension section of the Gates-MacGinitie Reading Test, Primary A, Form 1, was used as the pretest and was administered to each group on January 30, 1973. Primary A, Form 2, of the same test was the posttest. Each group was administered the posttest on April 3, 1973.

Definition of Terms

For the purpose of providing a common and consistent base of communication, the following terms are defined as employed in the study.

1. Listening with a specific purpose--exercises in specific listening skills developed by the researcher (refer to Appendix A) and presented to the class by the teacher in each experimental group.

   Example: Choosing an Appropriate Title (analogous to selecting main idea). The teacher reads a short selection to the children. They choose an appropriate title for the selection.

2. Listening without a specific purpose--exercises in generalized listening administered to the class by the teacher in each experimental$_2$ group.

   Example: The teacher will read a story to the class.

3. Reading comprehension--the ability to achieve mastery of reading comprehension skills as measured by the Gates MacGinitie Reading Test.

4. Treatment Group 1 (T_1)--those six classes that received exercises in listening with a specific purpose.

5. Treatment Group 2 (T_2)--those six classes that received exercises in listening without a specific purpose.

6. Control Group (C)--those six classes that did not receive instruction in listening.

7. High Socio-economic Neighborhood Schools (H)--those schools matching the criteria for the high SES category determined by the OEO.

8. Middle Socio-economic Neighborhood Schools (M)--those schools matching the criteria for the middle SES category determined by the OEO.

9. Low Socio-economic Neighborhood Schools (L)--those schools matching the criteria for the low SES category determined by the OEO.

10. T_1H--all classes contained in the groups defined by (4) and (7).

11. T_2H--all classes contained in the groups defined by (5) and (7).

12. CH--all classes contained in the groups defined by (6) and (7).

13. T_1M--all classes contained in the groups defined by (4) and (8).

14. T_2M--all classes contained in the groups defined by (5) and (8).

15. CM--all classes contained in the groups defined by (6) and (8).

16. T_1L--all classes contained in the groups defined by (4) and (9).

17. T_2L--all classes contained in the groups defined by (5) and (9).

18. CL--all classes contained in the groups defined by (6) and (9).

Hypotheses

H_1: There are no significant differences in the means of the specific listening (T_1), nonspecific listening (T_2), and the control (C) groups on the posttest.

H_2: There are no significant differences in the means of the specific listening-high (T_1H), specific listening-middle (T_1M), specific listening-low (T_1L), nonspecific listening-high (T_2H), nonspecific listening-middle (T_2M), nonspecific listening-low (T_2L), control-high (CH), control-middle (CM), and control-low (CL) groups on the posttest.

H_3: There are no significant differences in the means of the high SES group (H), the middle SES group (M), and the low SES group (L) on the posttest.

Analysis of Data

A two-way analysis of covariance was used to analyze the data. Class was used as the unit of analysis and the Scheffé test was employed in the post hoc analysis.

Delimitations

The proglems related to research in the public schools and the logistics of conducting this research

were major factors in the decision to restrict this study to one school district of moderate size. This decision to work with one school district placed limitations on the generalizability of the results.

Length of treatment and teacher differences were sources of limitations. The random assignment to treatments and the high degree of cooperation received by all those involved in the study helped to minimize these problems.

Overview of the Thesis

The purpose of Chapter I was to provide an introduction to the study, describe its purpose, and establish its need.

Chapter II will present a review of selected relevant literature. The review will include viewpoints and research results relative to listening and reading.

The research design and procedures are discussed in Chapter III. This explication includes a description of the sample, procedures for gathering the data, and methods of analysis.

Chapter IV contains the analyses of the data and an interpretation of the findings.

A summary of the investigation, conclusions, and recommendations for further study are presented in Chapter V.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

In 1917, Thorndike theorized that "reading is thinking,"[1] stimulating educators to recognize the meaning or comprehension aspect of the reading process. Prior to this time, the corups of reading instruction was solely the teaching of word recognition.[2] The objectives in reading instruction during this phase were directed toward enabling the child to "call" written symbols by their correct names, as well as to have him pronounce and enunciate words clearly and distinctly.[3] Emphasis at this time was placed upon instruction for oral reading, with minimal attention, if any, to the

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[1]Edward L. Thorndike, "Reading as Reasoning: A Study of Mistakes in Paragraph Reading," Journal of Educational Psychology, VIII, June, 1917, pp. 323-332.

[2]Nila Banton Smith, "The Many Faces of Reading Comprehension," The Reading Teacher, 23:3, December, 1969, p. 253.

[3]Nila Banton Smith, American Reading Instruction (Delaware: International Reading Association, 1965), pp. 157-195.

skill of gaining meaning from the printed page.[1] Although mention was made by authors of reading texts that greater attention should be devoted to the meaning aspect of reading, few concrete efforts were focused upon incorporating methods to develop this aspect in teaching reading. Thorndike's proposal in 1917, and other developments in research at this time,[2] aroused concern for comprehension. Reading authorities, such as Gates and Gray, who were involved in the publishing of basal texts, began to incorporate strategies for developing comprehension skills within their instructional programs.[3]

A survey of twentieth century literature concerning reading since this time discloses consistent investigation of possible avenues for improving the reading comprehension abilities of children.[4] One such avenue has been the relationship of listening to reading

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[1] Ibid.

[2] Smith in American Reading Instruction, pp. 157-195, cites developments such as the publication of Gray's Oral Reading Paragraphs--the first standardized reading test; the discovery during World War I that thousands of American soldiers could not read or could not understand their reading even if they could "word call"; the publication of several NSSE Yearbooks; and the development of several silent reading tests.

[3] Ibid.

[4] Leo M. Schell, "Promising Possibilities for Improving Comprehension," Journal of Reading, 15:6, March, 1972, pp. 415-424.

comprehension with implications for the positive effect of instruction in listening upon reading comprehension. Recently, increased attention is being directed toward teaching listening skills systematically in order to improve reading comprehension skills. Evidence of this attention can be found by examining current basal reading programs which incorporate exercises in listening for the purpose of increasing children's reading comprehension abilities.[1]

The review of the literature contained in this chapter has been organized into three sections, relative to the major topics pertinent to this study: (1) the historical development and significance of comprehension in the reading process, (2) the relationship of listening and reading, and (3) the effect of listening instruction upon reading achievement, specifically reading comprehension. Pertinent research and professional opinions will be reviewed within each section. In addition, a summary statement for each section will be provided. Finally, the concluding paragraphs will present a summary of the chapter.

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[1]William K. Durr et al., The Houghton Mifflin Readers (Boston: Houghton Mifflin Company, 1971); Marianne Carus, Ed., Open Court Readers (LaSalle, Ill.: Open Court Publishing Company, 1971); David H. Russell et al., Ginn Basic Readers (Boston: Ginn and Company, 1960).

The Historical Development and the Significance of Comprehension in the Reading Process

Although Smith asserts that reading has been and continues to be the most important school subject in the history of the American educational system, diverse opinions exist as to the definition and nature of reading.[1]

Clymer[2] discusses this divergence of opinion, pointing out that current definitions of reading include simplified, limited definitions, detailed explanations of the process of reading (often involving concomitant association with a complex model), and specific lists of skills to be taught during reading instruction. Various conceptions of reading are enumerated in Clymer's chapter:

1. Decoding the printed visual symbol into a spoken word, understanding language, and the appreciation of great literature and the cultural heritage it represents.[3]
2. Talk written down.[4]

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[1]Smith, American Reading Instruction, p. vii.

[2]Theodore Clymer, "What Is 'Reading'?: Some Current Concepts," Innovation and Change in Reading Instruction, Sixty-Seventh Yearbook of the National Society for the Study of Education, Part II (Chicago: University of Chicago Press, 1968), pp. 7-29.

[3]Ibid., p. 9.

[4]Ibid.

3. A thinking process.[1]
4. Perception, comprehension, reaction, assimilation.[2]

These diverse interpretations indicate the absence of consensus in the definition of reading. Many reading authorities, however, do attain consensus in considering comprehension to be an essential aspect of reading:

> Any reading program must provide for the development of the basic comprehension abilities, that is to say for the the processes by which meanings become associated with symbols. That a reader should be able to pronounce words is not enough, for pronunciation of words without understanding what they mean is of little use to anyone who is trying to read.[3]

In recommending the development of comprehension in reading instruction at every grade level, Tinker and McCullough point out:

> The fundamental goal in seeking to produce mature readers is to have them able to comprehend whatever printed materials will serve their purpose, no matter how difficult these materials may be. The acquisition of a sight vocabulary and of skill in recognizing words, and of verbal facility in general, all are aimed at promoting the understanding and interpretation of the meanings embodied in printed symbols. The extent to which these meanings are clearly and accurately understood and interpreted by the reader represents the degree to which he is a good reader.[4]

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[1] Ibid., p. 11.

[2] Ibid., p. 23.

[3] Guy L. Bond and Miles A. Tinker, Reading Difficulties: Their Diagnosis and Correction, Second Edition (New York: Appleton-Century-Crofts, 1967), p. 267.

[4] Miles A. Tinker and Constance M. McCullough, Teaching Elementary Reading, Second Edition (New York: Appleton-Century-Crofts, 1962), p. 167.

Durr[1] and Harris[2] are in accord with the position that comprehension is an essential part of the reading process.

Historically, while reading authorities espoused the significance of the comprehension aspect of reading, few attempts were made to elucidate the term comprehension, or to detail its composition. Smith, referring to this issue, states:

> There are different types of meaning-getting skills, just as there are different types of word-identification skills. Meaning-getting skills may be distinguished from one another in terms of the thought processes that are involved. For many years, teachers had the misconception that all they had to do to teach children to get meaning in reading was to give them some comprehension questions and exercises--the word "comprehension" connoting one big skill to be taught as a "lump sum."[3]

Difficulties in defining comprehension, which have been evident over the past half century, attest to its complexity. Early attempts at a definition reflected the "lump sum" concept stated by Smith. Since 1900, increased attention has been given to more detailed explanations as well as to skill composition, teaching

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[1]Durr, Reading Instruction: Dimensions and Issues, p. 126.

[2]Albert J. Harris and Edward R. Sipay, Eds., Readings on Reading Instruction, Second Edition (New York: David McKay Company, Inc., 1972), p. 261.

[3]Smith, Reading Instruction for Today's Children, pp. 255-300.

methods, and relationships to higher level thinking processes. Yet, as late as 1952, Traxler indicated:

> Specialists in the reading field think of reading as anything from a set of more or less mechanical habits, to something akin to the thinking process itself. No one has yet been able to identify the components of reading comprehension. . . .[1]

Langsam[2] performed a factor analysis to determine the nature of underlying factors that affect performance on reading tests designed to determine skills of comprehension. Langsam found word meaning, noting details, seeing relationships, perception, and verbal ability were measured by these tests.

Davis'[3] research reported knowledge of word meanings, reasoning ability, identifying the author's viewpoint, noting details, and being cognizant of literary devides and techniques as components of comprehension.

In a more recent study, Hunt[4] examined the correlations between subtests of reading comprehension to

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[1]Arthur E. Traxler, "The Right to Read Rapidly," Atlantic Monthly, CXC (November, 1952), pp. 88-96.

[2]Rosalind S. Langsam, "A Factorial Analysis of Reading Ability," Journal of Experimental Education, X, September, 1941, pp. 57-63.

[3]Frederick B. Davis, "The Factorial Composition of Two Tests of Comprehension in Reading," Journal of Educational Psychology, XXXVII, November, 1946, pp. 481-486.

[4]L. C. Hunt, "Can We Measure Specific Factors Associated with Reading Comprehension?" Journal of Educational Research, 51, 1957, pp. 161-172.

determine if each of the measures of reading comprehension he developed were distinct and measurable skills. Hunt concluded that comprehension in reading involved two skills: word knowledge and paragraph comprehension. These results are consistent with Davis' findings that word knowledge and reasoning in reading account for virtually all of the variance of comprehension scores.[1]

Since most attempts to validly measure specific subskills of reading comprehension have not been consistent,[2] there is still a lack of understanding about the basic aspects of reading comprehension.

Further research contributed to a refinement in the definition of components of comprehension. Gans concluded in an investigation that comprehension is "a complex organization of patterns embracing evaluation, making judgments, being imaginative, and engaging in reasoning and problem solving."[3]

A doctoral dissertation emploring literal and critical reading in social studies, completed by Sochor,

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[1]Frederick B. Davis, "Research in Comprehension in Reading," Reading Research Quarterly, 3, 1968, p. 508.

[2]Roger Farr, Reading: What Can Be Measured? (Newark, Delaware: International Reading Association, 1969), p. 56.

[3]Roma Gans, A Study of Critical Reading Comprehension in the Intermediate Grades, Teachers College Contributions to Education, DCCCXI (New York: Bureau of Publications, Teachers College, 1940).

identified seven distinct comprehension abilities: (1) the ability to make inferences, (2) the ability to recognize a generalization, (3) the skill of applying information in problem solving, (4) the facility to see relationships, (5) the skill of determining idea relevancy, (6) the ability to identify story theme, and (7) the facility of being aware of semantic differences in words.[1]

Utilizing an interview technique, Piekarz[2] found that the better sixth grade readers in her study gave answers which could be divided into literal, interpretive, and evaluative meanings, while the answers of poorer readers were not so categorically distinct since literal responses were generally given. These results suggest several levels of comprehension skills and indicate the need for systematic instruction in developing comprehension skills.

While further research was aimed at specifying the skills of comprehension, concomitantly, significant investigations into children's thinking processes were being conducted. These efforts contributed to the

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[1]E. Elona Sochor, "Literal and Critical Reading in Social Studies" (unpublished doctoral disseration, Temple University, 1952).

[2]Josephine Piekarz, "Getting Meaning from Reading," Elementary English, LVI (March, 1956), pp. 303- 309.

development of conceptualization regarding reading comprehension.

Thorndike's[1] early research set the stage. Investigating students' mistakes in paragraph reading, he concluded the incorrect interpretations may be the result of: (1) wrong connections with single words, (2) the overpotency or underpotency of elements, or (3) failure to read the concepts produced by reading as provisional. He indicated that reading is reasoning, stating:

> Understanding a paragraph is like solving a problem in mathematics. It consiste in selecting the right elements of the situation and putting them together in the right relations, and also with the right amount of weight or influence of force for each. The mind is assailed, as it were, by every word in the paragraph. It must select, repress, soften, emphasize, correlate, and organize, all under the influence of the right mental set or purpose or demand.[2]

Piaget's model of mental growth, defining intellectual development in terms of stages of operations, contributed substantially to the understanding of human intellectual growth. The individual, Piaget asserted, normally develops symbolic and preconceptual thought from one to four years of age, intuitive thought from four to seven years, concrete operational thought from

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[1]Thorndike, Journal of Educational Psychology, pp. 323-332.

[2]Ibid., p. 329.

from seven to eleven years, and formal thought after age eleven or twelve.[1]

Also contributing to an understanding of thinking, Guilford's "structure of intellect" identified a system of intellectual abilities.[2] In relating the operations of intellect to reading comprehension development, Guilford made a major contribution to reading. According to Guilford, to comprehend, the reader must engage or be engaged in the intellectual operation of divergent production, convergent production, and evaluation.[3]

Other individuals such as Russell,[4] Taba,[5] and Bruner[6] have emphasized the critical role of the schools in enhancing the thinking abilities of children. These authorities illuminated the concept of comprehension by

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[1]Jean Piaget, The Psychology of Intelligence, translated by M. Piercy and D. E. Berlyne (New York: Harcourt, Brace and Company, 1950).

[2]J. P. Guilford, "Frontiers in Thinking That Teachers Should Know About," The Reading Teacher, 13, February, 1960, p. 176.

[3]Guilford, The Reading Teacher, pp. 179-181.

[4]David Russell, Children's Thinking (Boston: Ginn and Company, 1956).

[5]Hilda Taba, "The Teaching of Thinking," Elementary English, XLII, May, 1965, pp. 534-542.

[6]Jerome Bruner, The Process of Education (New York: Vintage Books, 1960).

relating it directly to thinking. However, this research concerning intellectual development previously cited was not applied to comprehension skill development until the 1960's.

The forerunner of this effort was the publication of the Taxonomy of Educational Objectives: Cognitive Domain by Bloom. The educational objectives contained in this taxonomy are organized into six major classes: (1) knowledge, (2) comprehension, (3) application, (4) analysis, (5) synthesis, and (6) evaluation.[1]

Bloom's taxonomy may have precipitated a more systematic categorization of reading comprehension skills, since this accomplishment was not then evident, though reading educators such as Smith,[2] A. Harris,[3] and Smith and Dechant[4] had enumerated comprehension skills lists.

Utilizing the work of Bloom and others, Barrett developed the "Barrett Taxonomy--Cognitive and Affective

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[1]Benjamin Bloom et al., Eds., Taxonomy of Educational Objectives: Cognitive Domain (New York: Longsman and Green, 1956), p. 12.

[2]Nila Banton Smith, "Levels of Discussion in Reading," Education, May, 1960, pp. 518-521.

[3]Albert J. Harris, Effective Teaching of Reading, First Edition (New York: David McKay Company, Inc., 1962), pp. 240-249.

[4]Henry P. Smith and Emerald V. Dechant, Psychology in Teaching Reading (Englewood Cliffs: Prentice-Hall, Inc., 1961), pp. 213-214.

Dimensions of Reading Comprehension." This taxonomy is divided into five major skill levels. Each level contains examples of specific types of tasks, in the form of reading purposes. The tasks in each category have been structured from easy to difficult. The taxonomy includes the following major divisions: (1) literal comprehension, (2) reorganization, (3) inferential comprehension, (4) evaluation, and (5) appreciation.[1]

Recent developments in linguistic research, specifically the work of Noam Chomsky, have provided broader insights into reading comprehension. One theory Chomsky has investigated is concerned with the structural relationships of sentences. Since reading comprehension involves the understanding of sentences and structural relations are germane to an understanding of sentences, ability to gain an understanding of the structure of sentences is important. Chomsky differentiates between surface meaning and deeper meaning, stating the recovery of deep structure is a necessary condition for sentence comprehension.[2] Although there may, as Chomsky states, be differences in the structure of spoken and written language which affect comprehension, the subjects in the

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[1]Clymer, Innovation and Change in Reading Instruction, p. 18.

[2]Noam Chomsky, Language and Mind (New York: Harcourt, Brace, and World, Inc., 1968), p. 25.

present study received as listening instruction written language presented orally. Therefore, this difference between spoken and written language and its resulting influences on comprehension would not be a factor.

While the basal reading series utilized by the schools in this study as the reading instructional program is not based explicitly upon any single research effort, many of the comprehension skills developed are similar to those identified and categorized by these researchers. For example, the beginning levels of the Houghton Mifflin Readers utilized as the basal for the classes involved in the present study contain the following comprehension skills to which the listening lessons corresponded:

1. Recognition of main idea
2. Noting details
3. Drawing a conclusion
4. Using context clues
5. Recognition of sequence
6. Interpreting word referents[1]

Listening exercises, developed by the researcher to correspond with these skills, were used to examine their effect upon children's reading comprehension. The skills approach to comprehension, reviewed by Simons, is the basis for this conception of comprehension.[2]

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[1]Durr et al., The Houghton Mifflin Readers, Levels 3A, 3B, 3C, 4 and 5.

[2]Herbert D. Simons, "Reading Comprehension: The Need for a New Perspective," Reading Research Quarterly, Vol. VI, No. 3, Spring, 1971, pp. 342-346.

In the preceding section the writer discussed the significance of comprehension in the reading process by tracing the development of this aspect of reading and by describing the nature of comprehension elucidated by contributions of researchers. In the section which follows, the relationship of listening to reading will be established.

The Relationship of Listening to Reading

This investigation of the relationship between listening and reading commences by examining the similarities of these two language arts processes. Devine[1] calls attention to the fact that language is the common base for both, and further, that similar word and sentence patterns comprise this common base. Weintraub[2] asserts that receptive processes of communication are involved in both listening and reading; that each seems to be a complex of related skills components; and that the same higher mental processes appear to underlie both. Lundsteen concurs in stating: "The child's thinking process

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[1]Thomas G. Devine, "Reading and Listening: New Research Findings," Elementary English, XLV, No. 2, March, 1968, p. 346.

[2]Samuel Weintraub, "What Research Says to the Reading Teacher," The Reading Teacher, 20, April, 1967, p. 639.

both while listening and while reading is probably the same. . . ."[1]

A number of authors enumerate parallel skills in listening and reading. Citing an example of such a parallel skill, Burns states ". . . as we must teach pupils to read for main points, we must also teach them to listen for main points."[2] Pratt specifically identifies parallel skills as follows:

I. Word perception
   A. Recall of word meaning
   B. Deduction of meaning of unknown words
II. Comprehension
   A. Noting details
   B. Following directions
   C. Organizing into main and subordinate ideas
   D. Selecting information pertinent to a specific topic
   E. Detecting clues that show the speaker's trend of thought
III. Using ideas to build understandings
   A. Evaluating an expressed point of view or fact in relation to previous learning.
   B. Making justifiable inference.[3]

Recognizing that these skills can be common to both listening and reading, language arts authorities

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[1]Sara W. Lundsteen, "Critical Reading and Listening," Reading and Inquiry, Proceedings of the Annual Convention, Vol. 10 (Newark, Delaware: International Reading Association), p. 306.

[2]Paul C. Burns, "Teaching Listening in Elementary Schools," Elementary English, 38, January, 1961, p. 13.

[3]L. E. Pratt, "The Experimental Evaluation of a Program for the Improvement of Listening in the Elementary School" (unpublished doctoral dissertation, State University of Iowa, 1953).

frequently recommend instruction in the skills of one process to aid or strengthen the skills of the other. Proponents of this position include Horrworth,[1] McKee,[2] Bond and Tinker,[3] and Anderson.[4] Dow[5] and Hildreth[6] concur in suggesting that improvement in either reading or listening may result in improvement in the other.

In an investigation exploring the relationship between listening and reading, Plessas conducted a study to determine the differences good and poor readers show in the reading skills of word recognition, vocabulary, and comprehension. Plessas found significant relationships between listening ability and these reading skills,

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[1]Gloria L. Horrworth, "Listening: A Facet of Oral Language," Research in Oral Language (Champaign, Illinois: National Council of Teachers of English, 1967), p. 42.

[2]Paul McKee, Reading: A Program of Instruction for the Elementary School (Boston: Houghton Mifflin Company, 1966), p. 27.

[3]Bond and Tinker, Reading Difficulties: Their Diagnosis and Correction, p. 271.

[4]Paul Anderson, Language Skills in Elementary Education, Second Edition (New York: The MacMillan Company, 1972), p. 76.

[5]Clyde W. Dow, "Integrating the Teaching of Reading and Listening Comprehension," Journal of Communication, Vol. 8, Autumn, 1958, pp. 118-126.

[6]Gertrude Hildreth, "Interrelationships Among the Language Arts," Elementary School Journal, Vol. 48, June, 1948, pp. 538-539.

concluding ". . . that perhaps the development of a specific comprehension skill in one mode of learning (listening or reading) may contribute to a corresponding growth in the same skill in the other mode."[1]

The preceding review of the literature concerning the relationship of listening and reading suggests the two processes involve some common factors. Further substantiation can be found in the correlational studies.

Although researchers acknowledge the relationship of listening to reading, the degree of relationship varies. Many studies report a positive correlation between listening and reading achievement. Young[2] found a correlation of .80; Larsen and Feder[3] .82; Goldstein[4] .78

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[1]Gus P. Plessas, "Reading Abilities of High and Low Anders," Elementary School Journal, Vol. 63, January, 1963, p. 226.

[2]William E. Young, "The Relationship of Reading Comprehension and Retention to Hearing Comprehension and Retention," Journal of Experimental Education, Vol. 5, September, 1936, pp. 30-39.

[3]Robert P. Larsen and D. D. Feder, "Common and Differential Factors in Reading and Hearing Comprehension," Journal of Educational Psychology, Vol. 31, April, 1940, pp. 241-252.

[4]Harry Goldstein, Reading and Listening Comprehension at Various Controlled Rates, Columbia University Contributions to Education, No. 821 (New York: Bureau of Publications, Columbia University, 1940).

(.50 when intelligence was held constant); Pratt[1] .64; Canfield[2] .64; Vineland and Bailey[3] .41; Lundsteen[4] .47; and Hollow[5] .55. Coefficients of .82, .76, and .78 were found by Brown[6] when studies were conducted at various grade levels.

The results of these correlational studies, though they have yielded varying coefficients, indicate the existence of a positive correlation between listening and reading. These differences in statistical correlation may be due to the variation in the age, number, and type of population tested as well as the utilization of different tests in each study.

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[1]Edward Pratt, "Experimental Evaluation of a Program for the Improvement of Listening," Elementary School Journal, Vol. 56, March, 1956, p. 319.

[2]Robert G. Canfield, "How Useful Are Lessons on Listening?" Elementary School Journal, Vol. 62, December, 1961, pp. 147-151.

[3]Vineyard and Bailey, Journal of Developmental Reading, pp. 174-178.

[4]Sara W. Lundsteen, "Teaching Ability in Critical Listening in the Fifth and Sixth Grades" (unpublished doctoral dissertation, University of California at Berkeley, 1963).

[5]Sister Mary Kevin Hollow, "Listening Comprehension at the Intermediate Grade Level," The Elementary School Journal, 56, December, 1955, pp. 158-161.

[6]Brown, "Three Studies of the Listening of Children," pp. 129-138.

Building upon the relationship revealed by the correlational studies, some researchers examined the listening factor as a predictor of reading potential. In a study of forty-six students in grades two through four, Barbe and Carr[1] suggested that listening ability may be a better predictor of reading potential than mental age.

Toussaint[2] found a test of listening to be the best measure of reading potential when compared with measures of arithmetic and intelligence.

Comparing the predictive value of an oral vocabulary test with either a written vocabulary test or an intelligence test, Schultz[3] found the oral vocabulary test to be more significant in predicting reading potential.

Owen's[4] study supports these results, suggesting the best prognosis for reading potential could be obtained

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[1]Walter Barbe and Jack A. Carr, "Research Report: Listening Comprehension as a Measure of Potential Reading Ability," Reading in Action, International Reading Association Conference Proceedings, Volume 2, Part III, Chapter 8, pp. 120-122.

[2]Isabella H. Toussaint, "Interrelationships of Reading, Listening, Arithmetic, and Intelligence and Their Implications" (unpublished doctoral dissertation, University of Pittsburgh, 1961).

[3]Jennye F. Schultz, "Potentialities of an Oral Vocabulary Test" (unpublished doctoral dissertation, University of Maryland, 1958).

[4]Jason C. Owen, "A Study of the Prognostic Value of Certain Measures of Intelligence and Listening Comprehension with a Selected Group of Elementary Pupils" (unpublished doctoral dissertation, University of Missouri, 1957).

by using the results of both listening and intelligence tests. This study of 110 children in grades two through four found a closer relationship between reading test results and measures of listening than between either listening or reading scores and intelligence test results.

These studies, examining the correlation of listening to reading and the predictive value of listening and reading, have been cited to corroborate the relationship of listening to reading. The final section will review studies dealing with the effect of listening instruction upon reading.

The Effect of Listening Instruction on Reading

Various investigators have studied the effect of listening instruction upon reading, relating equivocal conclusions. For example, Marsden[1] conducted a study with fifth and sixth grade pupils. The experimental group was instructed in one lesson per week in listening for a purpose. The experimental and control groups had been matched on the basis of sex and achievement on Form One of

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[1]W. W. Marsden, "A Study of the Value of Training in Listening to Achievement in Reading and Listening" (unpublished doctoral field study, Colorado State College, 1951).

the Gates Basic Reading Test. At the conclusion of the experiment, both groups were given Form Two of the same reading test. Analysis of data for the 116 pairs completing the experiment revealed significant gains made by the experimental group in reading to identify main ideas, to note details, and to draw conclusions as well as on total reading scores.

Lewis, in a similar study, examined three aspects of listening:

> (1) obtaining the general significance of a passage,
> (2) noting details presented on a topic by a passage, and
> (3) predicting the outcomes from a passage.[1]

Lewis measured the effect of training in these three purposes upon the ability of intermediate pupils to read for the same purposes. The sample of 357 intermediate grade pupils was divided into two groups, matched according to scores obtained on a mental test and a reading test. Thirty listening lessons, designed for a fifteen minute time segment, were taught to the experimental group over a period of six weeks. At the end of the six weeks, the results showed training in listening in the three aspects mentioned above seemed to have a statistically significant effect upon the ability of intermediate grade pupils to read for these purposes.

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[1]Maurice S. Lewis, "The Effect of Training in Listening Upon Reading," Journal of Communication, Vol. 3, November, 1955, pp. 115-116.

Lubershane reported an investigation concerning the effect of a program to improve listening upon reading achievement for fifth grade pupils. An experimental group of thirty-five pupils and a control group of thirty-seven pupils were matched for chronological age, mental age, subject matter achievement, and reading achievement. Lubershane concluded:

> Although there is not a strong statistical result to demonstrate the value of the exercise in improving reading ability, the generally greater growth in reading ability by the experimental group suggests strongly the auditory exercises have a positive effect on reading growth.[1]

Kelty[2] studied two groups of ninety-four pupils each to determine the effects of training in listening on reading skills of fourth grade pupils. Experimental pupils received thirty daily practice periods on the listening skills of determining main idea, getting details on a topic, and drawing conclusions. Analysis of the scores obtained on the posttest showed overall gains made by the experimental group to be generally greater than those of the control group, though not statistically significant. The difference between the two groups on the

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[1]Melvin Lubershane, "Can Training in Listening Improve Reading Ability?" Chicago Schools Journal, Vol. 43, March, 1962, p. 281.

[2]Annette P. Kelty, "An Experimental Study to Determine the Effect of Listening for Three Purposes" (unpublished doctoral field study, Colorado State College, 1953).

reading to note details skill was statistically significant in favor of the experimental group.

In another study dealing with the intermediate grade level, Merson[1] sought to determine the effect of a definite program of planned listening lessons on the listening comprehension, reading comprehension, and reading vocabulary of pupils in grade four. To measure achievement before and after the listening instruction, the Iowa Test of Basic Skills was used. The null hypothesis of no differences between the experimental and control groups in reading comprehension and vocabulary could not be rejected at the .01 level.

Utilizing 381 intermediate grade pupils, Reddin[2] also experimented with instruction in specific listening, observing its effect upon the development of reading skills, and critical thinking. The results indicated the listening skills lessons were not effective in improving reading for main ideas and details with fourth grade pupils but were effective in developing reading for details for sixty grade pupils.

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[1]Edna May Merson, "The Influence of Definite Listening Lessons on the Improvement of Listening and Reading Comprehension and Reading Vocabulary" (unpublished doctoral dissertation, University of Maryland, 1961).

[2]Estoy Reddin, The Reading Teacher, 22:742-743, 1969.

In Reeves'[1] study, twenty fourth grade classrooms were divided into two groups--ten classes who received fifteen weeks of training in listening comprehension and ten classes who did not receive special training in listening comprehension. The results revealed that the experimental group performed slightly better on the post-treatment reading test. However, the mean gain of this group was not found to be statistically significant at the .05 level.

Examining the possibility of increasing "competence in the process of learning by listening," Madden[2] considered the question as to whether there is "an intermodal transfer effect, from readint to listening and from listening to reading." A series of skill development exercises, prepared by the investigator from the content of a fourth grade science book, was used as reading material by one experimental group and as listening material by the other experimental group. A third group served as the control. All three groups were then tested with the "STEP Listening and Reading Tests, Level 4."

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[1]Harriet R. Reeves, "The Effect of Training in Listening Upon Reading Achievement."

[2]J. M. Madden, "The Effect of Instruction and Practice in Certain Skills Through the Media of Reading and Listening Upon Various Aspects of Proficiency in Reading and Listening" (unpublished doctoral dissertation, University of Arizona, 1959).

On the basis of the data analysis, Madden stated that

> . . . the results are not definite. The reading group probably improved in reading ability, but there was no improvement in listening ability. The listening group did not improve in listening but there is a suggestion that it may have improved reading ability.

Investigating the effect of listening instruction with junior high school pupils, Hollingsworth[1] conducted a study which used 291 eighth graders in Tempe, Arizona, divided into three equal groups, two experimental and one control. A "Modified Educational Development Laboratories Listening Program" was used with one experimental group and a "Modified Science Research Associates Listening Skill Builders Program" was used with the other experimental group. One taped lesson of approximately fifteen minutes was given each week for a period of ten weeks. No significant differences were found beyond those expected by chance in the reading achievement of the three groups.

Investigating the same question at the college level, Lewis'[2] doctoral study involved a sample consisting

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[1]Paul M. Hollingsworth, "The Effect of Two Listening Programs on Reading and Listening," Journal of Communication, Vol. 14, March, 1964, pp. 19-21.

[2]Robert Lewis, "Complementing Instruction in Reading Improvement of College Students with Instruction in Auding" (unpublished doctoral dissertation, Auburn University, 1963).

of 167 students enrolled in reading improvement courses. These students were divided into two groups. One group of eighty-five subjects was given nine weeks of training in listening while the other group of eighty-two subjects served as the control group. He found no significant difference in listening or reading at the conclusion of the experiment.

These studies involving the intermediate to college level students yield no clear consensus. Likewise, there is no consensus in the findings of investigations involving primary age children.

Kellogg[1] analyzed the effect of a first grade instructional program in listening upon achievement in listening and reading. First grade boys in the structured listening program made greater achievement in listening and reading than did boys in the traditional method of unstructured literature listening, but there were no differences between the girls in the two programs.

The conclusion of Nye's[2] study was that instruction in which second grade children listened to tapes

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[1]R. E. Kellogg, "A Study of the Effect of a First Grade Listening Instructional Program. . . ."

[2]Marilyn L. Nye, "The Effects of a Listening-Reading Program Upon the Reading of Second Grade Pupils" (unpublished doctoral dissertation, University of California, Berkeley, 1969).

produced greater gains in reading comprehension than did the reading of stories alone.

Exploring the socio-economic dimension, Van Valkenburg[1] noted that with a program which increased listening and reading comprehension, students of lower socio-economic status gained more from the listening experiences than did the high socio-economic students.

Can training in listening improve reading? Studies by Marsden, Maurice Lewis, Lubershane, Kelty, Reddin, Maddin, Kellogg, Nyes, and Van Valkenburg appear to indicate an affirmative answer. Yet, Reeves, Hollingsworth, Robert Lewis, and Kellogg submit indeterminate findings.

Summary

This chapter presented a review of literature addressing three major topics: (1) the historical development and significance of comprehension in the reading process, (2) the relationship of listening and reading, and (3) the effect of listening instruction upon reading achievement.

The first section was designed to establish a perspective for the topic by tracing the historical

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[1]J. Van Valkenburg, "Learning Through Listening: Implications for Reading" (unpublished doctoral dissertation, University of Rochester, 1968).

development of comprehension in the reading process and by discussing its significance. While the term comprehension has eluded precise, universal definition, reading authorities have identified specific skills components. Precursory research in intellectual development contributed to the formulation of these skills components.

The discussion of the relationship of listening and reading found in the second section included the review of correlational and predictive studies. Correlations between listening and reading have been found to range from .41 to .82. The predictive studies of Barbe and Carr, Schultz, and Owen indicated the value of the listening ability factor in predicting reading success.

In the final section, causal studies were reviewed. Investigating the effect of listening instruction upon reading achievement of intermediate age children, Marsden, Maurice Lewis, Lubershane, Kelty, Reddin, and Madden found significant positive effects. Merson and Reeves, also studying this question at the same level, did not obtain significant results. Hollingsworth and Robert Lewis' results did not indicate a positive effect of listening instruction upon the reading comprehension of secondary students. At the primary level, Kellogg concluded that boys improved in reading as a result of listening instruction but no differences were found in the

girls' reading gains. Nye and Van Valkenburg support the positive effect of listening upon reading at this level.

This review of existing literature reveals inconclusive findings as some causal studies support the value of listening instruction and other studies are not supportive. The need for further research, particularly on the primary level, is evident. The study conducted by this researcher investigates the effect of listening instruction upon reading comprehension at the first grade level. The procedures used in this study are presented in Chapter III.

CHAPTER III

METHODS AND PROCEDURES

Introduction

It is the purpose of this chapter to detail the specific methods and procedures utilized to conduct this study. The chapter includes a description of the sample, the design of the experiment, treatments administered, instrumentation, and the procedures adopted in analyzing the data.

Sample

Eighteen first grade classrooms within the public schools of the city of Saginaw, Michigan, comprised the sample for the study. Saginaw, population 91,849,[1] is primarily an industrial city, located in the east-central portion of the lower peninsula.

The Saginaw Public Schools' student population numbers 21,034. There are twenty-nine elementary schools in the system with a student population of 11,512.

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[1]Greater Saginaw Chamber of Commerce, Saginaw, Michigan (Chicago: Windsor Publications, 1972), p. 6.

Racial composition of these schools is fifty-two per cent White, thirty-eight per cent Black, and ten per cent Chicano.

In an effort to control the variable of the type of reading instructional program to which the sample had been exposed, the eighteen first grade classrooms were chosen because they were utilizing one common basal reading program, "The Houghton Mifflin Readers."

In addition to the listening treatment factor, the socio-economic status factor (SES) was examined. The Saginaw elementary schools are classified as high, middle, or low SES categories according to OEO specifications (see Appendix A). The eighteen classrooms comprising the sample included three high SES schools, nine middle SES schools, and six low SES schools. Within these SES categories there was no reason to believe the class groupings were homogeneous relative to any other criterion variable. The classrooms within each SES group were randomly assigned to each of the three experimental groups: specific listening (T_1), nonspecific listening (T_2), and control (C). This assignment took place on January 10, 1973.

Design

The Nonequivalent Control Group Design was used in the study with the class as the unit of analysis. This

quasi-experimental design makes use of intact groups and can be diagrammed as follows:[1]

$$\begin{array}{ccc} O_1 & X & O_2 \\ - - & - & - - \\ O_3 & & O_4 \end{array}$$

Treatment

One treatment group, "T_1," received instruction in specific listening on a daily basis of three to five minutes for eight weeks. These lessons were developed by the researcher (see Appendix B). The lessons correspond to the reading comprehension skills of 1) recognizing the main idea, 2) noting details, 3) drawing a conclusion, 4) using context clues, 5) recognizing sequence and 6) interpreting word referents, which are the reading comprehension skills set out to be developed at this level by the reading program, "The Houghton Mifflin Readers," utilized by the children in the study.

Forty lessons were written so that a different one was taught each day. The lessons were grouped into two-week segments and delivered every two weeks to each teacher. This enabled the researcher to visit every teacher on a bi-monthly basis to answer questions that

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[1]Campbell and Stanley, Experimental and Quasi-Experimental Designs for Research, p. 13.

may have developed as well as to supervise the progress of the study.

A meeting with the teachers of each school was held in January prior to the commencement of the study. At this time specific instructions were given to the teachers directing each to teach one three to five minute lesson per day to the total class following the sequence indicated on each lesson. The teachers were asked to abstain from teaching the listening lessons included in the Houghton Mifflin Teacher's Edition during the study. Detailed instructions are found in Appendix C.

There were six classes in the T_1 group. One of the classes was in the high SES group, three were in the middle SES group, and two were in the low SES group. The lessons were taught by the classroom teacher.

The other treatment group, "T_2," was directed to provide a comparable amount of time on a daily basis for nonspecific listening. Activities such as listening to a brief story, to poetry, recordings, songs, tape recordings, conversations, or reports were suggested to each teacher. These classrooms were visited bi-monthly to answer questions the teachers had as well as to supervise the progress of the study. These teachers were directed to provide a three to five minute time segment per day or a total of fifteen to twenty-five minutes per week for

nonspecific listening for the total class. The teachers were asked to abstain from teaching the listening lessons included in the Houghton Mifflin Teacher's Edition during the study. Detailed instructions are found in Appendix C.

There were six classes in the T_2 group. One of the classes was in the high SES group, three were in the middle SES group, and two were in the low SES group. Again these activities were conducted by the classroom teacher.

The control group, "C," did not receive special instruction in either specific or nonspecific listening. These classrooms were also visited bi-monthly. These teachers were directed to abstain from providing any time for specific or nonspecific listening and to abstain from teaching the listening lessons included in the Houghton Mifflin Teacher's Edition during the study. Detailed instructions are found in Appendix C.

There were six classes in the C group. One of the classes was in the high SES group, three were in the middle SES group, and two were in the low SES group.

Figure 3.1 summarizes the calendar followed throughout the study.

Date	Event
December 4, 1972	Meeting with Assistant Superintendent-Elementary Education to discuss research procedures.
January 4, 1973	Meeting with elementary principals of schools involved in study.
January 10, 1973	Random assignment to treatment groups.
January 11-25, 1973	Meetings with teachers in each school involved.
January 30, 1973	Pretest administered.
January 31, 1973	Pretest make-up date.
February 5-March 30, 1973	Treatments administered.
April 3, 1973	Posttest administered.
April 4, 1973	Posttest make-up date.

Figure 3.1.--Calendar for Research Procedures.

Instrumentation

The Gates-MacGinitie Reading Test was selected to serve as the instrument for measuring reading comprehension abilities of children at this level. The GMRT, Primary A, Form 1, served as the pretest. The posttest was Form 2 of this test.

The test authors describe the GMRT, Comprehension Section, in greater detail:

> The Comprehension Test measures the child's ability to read and understand whole sentences and paragraphs. This ability includes many skills not involved in the mere ability to recognize words. The child must grasp the total thought clearly if he is to answer correctly. The test contains thirty-four passages of increasing length and difficulty. Each passage is accompanied by a panel of four pictures. The child's task is to mark the picture that best illustrates the meaning of the passage or that answers the question in the passage.[1]

Items for the Gates-MacGinitie Reading Tests were selected on the basis of a nationwide tryout which involved more than 25,000 pupils. On the basis of the item analysis, only the most effective items were retained for use in the final forms. Norms for the tests were developed by administering the tests to a new nationwide sample of approximately 40,000 pupils in thirty-eight communities. The norms for the first grade were established in January, 1965. Alternate form reliability for comprehension is .83. The split-half reliability is .94 for comprehension. Validity was obtained by correlation between subtests of the Gates-MacGinitie Reading Test. Grade one vocabulary and comprehension correlated at .67.[2]

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[1]Arthur I. Gates and Walter H. MacGinitie, Gates-MacGinitie Reading Tests, Primary A, Forms 1 and 2 Teacher's Manual (New York: Teachers College Press, Columbia University, 1965), p. 1.

[2]Arthur I. Gates and Walter H. MacGinitie, Technical Manual for the Gates-MacGinitie Reading Tests (New York: Teachers College Press, Columbia University, 1965).

The pretest (GMRT, Primary A, Form 1) was administered on January 30. The posttest (GMRT, Primary A, Form 2) was administered to all classes on April 3.

Analysis of Data

To analyze the data, a two-way analysis of covariance was used with the class as the unit of analysis.

With the exception of one class, all classes were given the pretest. Due to an unexpected special problem, one class was not administered the pretest. This class had experienced a loss of two teachers during the semester immediately previous to the research. As a result, on the scheduled pretest date, the new teacher judged the pupils to be sufficiently behind in word recognition abilities to justify not administering the test.

Because pretest data were necessary for this class in the statistical analyses, a pretest score was calculated according to a procedure recommended by Winer.[1] The detailed calculation of this score can be found in Appendix D.

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[1]B. J. Winer, Statistical Procedures in Experimental Design (New York: McGraw Hill Book Company, 1962), pp. 281-283.

Table 3.1 is a summary of the numerical data collected and shows the factors, factor levels, and standard deviations within parentheses.

The Scheffé test was used as a post hoc procedure to analyze the data where the difference between the means was significant for $p < .05$.

Summary

This study investigated the effect on reading comprehension of instruction in specific and nonspecific listening. To this end, the study utilized eighteen classrooms in nine elementary schools in Saginaw, Michigan.

Classes were randomly assigned to each of three experimental groups within three socio-economic levels. Six classes received instruction in specific listening, six experienced a comparable amount of time in nonspecific listening, and six classes served as a control group. All classes were pre- and post-tested using the Gates-MacGinitie Reading Test, Primary A.

A two-way analysis of covariance was used to determine whether significant differences existed between treatment groups within SES levels and between treatment groups exclusive of SES levels. The results of these analyses are reported in Chapter IV.

Table 3.1.--Summary of Data.

SES Levels	Treatment Groups					
	T_1		T_2		C	
	Pre	Post	Pre	Post	Pre	Post
H	19.85 (5.03)	30.48 (3.20)	6.75 (2.99)	16.04 (4.01)	11.42 (9.27)	19.18 (5.87)
M	8.65 (6.26)	17.81 (5.29)	10.28 (3.54)	15.83 (3.67)	10.65 (4.91)	16.42 (3.78)
	9.92 (3.37)	25.04 (5.67)	10.73 (4.55)	14.63 (5.00)	12.54 (5.97)	19.12 (4.22)
	8.83 (2.23)	13.00 (6.11)	12.78 (6.06)	19.62 (3.56)	11.67 (7.00)	15.48 (5.81)
L	11.60 (3.89)	28.95 (5.01)	8.41 (3.46)	14.96 (4.45)	9.79 (*)	6.31 (4.75)
	9.35 (2.40)	15.05 (3.46)	15.96 (4.15)	23.73 (5.02)	13.55 (2.68)	10.40 (2.55)

* Mean calculated according to Winer. See Appendix D. No standard deviation for this class.

CHAPTER IV

ANALYSES OF THE DATA

Introduction

Analyses of the data collected during the study are presented in this chapter. The chapter is divided into three sections. The first section presents the results of the analyses of covariance on the three hypotheses tested. The results of the application of the Scheffé test are described in the second section. A discussion of the results of the study in the third section concludes Chapter IV.

Analyses of Covariance

This section will present and discuss the results of the statistical analyses applied to the hypotheses stated in Chapter I. These discussions will be followed by a summary table.

Analysis of covariance was selected for the statistical procedure because:

> Simply stated, the analysis of covariance is a statistical technique which tests the significant differences between two or more groups after initial differences between the groups are

> statistically eliminated. The advantage of the analysis of covariance is that . . . should there be any initial random error between groups, this can be eliminated statistically.[1]

Thus, by reducing the error variance, this procedure provides a more sensitive test of between-group differences.

Hypothesis I

H_1: There are no significant differences in the means of the specific listening (T_1), nonspecific listening (T_2), and the control (C) groups on the posttest.

A testing of this hypothesis will indicate whether one or both of the treatments produced significant gains in reading comprehension for those pupils involved in each group.

The analysis of covariance for this hypothesis, with two degrees of freedom, produced an F ratio of 5.7131. The probability of these results occurring by chance was less than .0288 ($p < .0288$) and therefore the hypothesis was rejected at the .05 level of significance.

The rejection of this hypothesis signifies that differences exist at the .05 level between the means of at least two of these groups. This analysis thus indicates

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[1]Gilbert Sax, Empirical Foundations of Educational Research (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1968), p. 35.

significant results relative to the treatment main effect. It does not, however, indicate precisely where that difference exists. In order to isolate the differences it will be necessary to apply the Scheffé post hoc analyses. These results will be examined and discussed in the second section of this chapter.

Hypothesis II

H_2: There are no significant differences in the means of the specific listening-high (T_1H), specific listening-middle (T_1M), specific listening-low (T_1L), nonspecific listening-high (T_2H), nonspecific listening-middle (T_2M), nonspecific listening-low (T_2L), control-high (CH), control-middle (CM), and control-low (CL) groups on the posttest.

A testing of this hypothesis will indicate whether significant differences in reading comprehension exist between all groups when both independent variables are included in the analysis:treatment and SES (interaction effect).

The analysis of covariance for this hypothesis with four degrees of freedom produced an F value of 1.9349. The probability of these results occurring by chance was

less than .1981 ($p < .1981$) and therefore the hypothesis could not be rejected at the .05 level of significance.

The fact that this hypothesis could not be rejected indicates the absence of an interaction effect. There was not a significant interaction effect on the variables of treatment x SES.

Hypothesis III

H_3: There are no significant differences in the means of the high SES group (H), the middle SES group (M), and the low SES group (L) on the posttest.

A testing of this hypothesis will indicate whether significant differences in reading comprehension exist between the three SES level groups.

The analysis of covariance for this hypothesis with two degrees of freedom produced an F value of .8555. The probability of these results occurring by chance was less than .4606 ($p < .4606$) and therefore the hypothesis could not be rejected at the .05 level of significance.

The fact that this hypothesis could not be rejected indicates that differences in reading comprehension were not significant across SES levels.

Table 4.1 summarizes these results for Hypotheses I, II, and III.

Table 4.1.--Summary of Analyses of Covariance.

Source	ss	df	MS	F	p <
Treatment	171.6594	2	85.8297	5.7131	.0288*
SES Level	25.7042	2	12.8521	.8555	.4606
Interaction	116.2760	4	29.0690	1.9349	.1981

*significant at the .05 level.

Scheffé Post Hoc Analyses

Having obtained significant results on the analysis of covariance for the treatment main effect, it was necessary to attempt to identify the contrast which produce significant differences. That is, to determine if the significant differences existed between those pupils receiving the specific listening instruction versus those receiving nonspecific listening (T_1:T_2) and/or between those pupils receiving nonspecific listening versus those receiving no instruction in listening (T_2:C) and/or those pupils receiving specific listening instruction versus those receiving no instruction in listening (T_1:C) and/or those receiving specific listening instruction and those receiving nonspecific listening versus those receiving no instruction in listening ($T_1 + T_2$:C).

The Scheffé test was chosen for the post hoc analyses because of generality and greater sensitivity

when complex combinations of sample means are being estimated.[1] Four contrasts, as elaborated above, were examined utilizing the Scheffé test: T_1:T_2, T_2:C, T_1:C, and T_1+T_2:C.

Contrast T_1:T_2

The quotient of the estimated population parameter to its standard error was .4472. In order to obtain significance at the .05 level, this quotient must be greater than 2.9856. Thus the equality of means hypthesis for the T_1 and T_2 groups could not be rejected at the .05 level.

It appeared that from these results the group that had specific listening instruction did not perform significantly better on the posttest than the group that was given nonspecific listening activities.

Contrast T_2:C

The quotient of the estimated population parameter to its standard error was 1.8661 for this comparison. Since this quotient must be greater than 2.9856 to obtain significance at the .05 level, the equality of means

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[1]Gene V. Glass and Julian C. Stanley, Statistical Methods in Education and Psychology (Englewood Cliffs: Prentice-Hall, 1970), p. 395.

hypothesis for the T_2 and C groups could not be rejected at the .05 level.

It appeared from these results the group that had nonspecific listening activities did not perform significantly better on the posttest than the group that did not receive any special listening instruction.

Contrast T_1:C

The quotient of the estimated population parameter to its standard error was 2.3614 for this comparison. Since this must be greater than 2.9856 to be significant, the equality of means hypothesis for the T_1 and C groups could not be rejected at the .05 level.

The implication of this rejection is that children receiving specific listening instruction did not achieve significantly higher in reading comprehension on the posttest than the children who did not receive any special listening instruction.

Contrast T_1+T_2:C

The quotient of the estimated population parameter to its standard error was 2.5954. Because this quotient is not greater than 2.9856 to be significant, the equality of means hypothesis for the T_1+T_2:C groups could not be rejected at the .05 level.

These results indicated that the performance of the combined groups on the posttest was not significantly better than that of the control group.

Table 4.2 summarizes these results for the Scheffé post hoc analyses at the .05 level.

Because of the conservative nature of the Scheffé tests the contrasts were examined at the .10 level of significance. Table 4.3 summarizes the results of this examination.

At the .10 level of significance for the Scheffé test, differences were detected when both experimental groups were pooled and contrasted with the control group. Considering these results at the .10 level, significant results were found when the specific and nonspecific listening treatment groups were compared to the control group, indicating some support for listening instruction.

Summary of Results

The analysis of covariance, applied to test the three hypotheses with which the study was concerned, yielded significant results on Hypothesis I, the treatment main effect, at the .05 level of significance. No significant results were found when the analysis of covariance was applied to either Hypothesis II, the interaction effect, or to Hypothesis III, the SES main effect.

Table 4.2.--Summary of Scheffé Post Hoc Analyses at the .05 Level.

Hypothesis Being Tested	PSI (Estimated Population Parameter)	Estimated Standard Error of PSI	Ratio of PSI to Its Standard Error	Test Statistic	Hypothesis That PSI = 0	95% Confidence Interval
$\bar{X}_{T_1} - \bar{X}_{T_2} = 0$	4.0893	9.1439	.4472	2.9856	Cannot be rejected	-23.2106 to 31.3892
$\bar{X}_{T_2} - \bar{X}_{C} = 0$	14.6406	7.8457	1.8661	2.9856	Cannot be rejected	-8.7834 to 38.0646
$\bar{X}_{T_1} - \bar{X}_{C} = 0$	18.7299	7.9316	2.3614	2.9856	Cannot be rejected	-4.9506 to 42.4104
$\bar{X}_{Aug(T_1+T_2)} - \bar{X}_{C} = 0$	33.3705	12.8577	2.5954	2.9856	Cannot be rejected	-5.0171 to 71.7582

Table 4.3.--Summary of Scheffé Post Hoc Analyses at the .10 Level.

Hypothesis Being Tested	PSI (Estimated Population Parameter)	Estimated Standard Error of PSI	Ratio of PSI to Its Standard Error	Test Statistic	Hypothesis That PSI = 0	90% Confidence Interval
$\bar{X}_{T_1} - \bar{X}_{T_2} = 0$	4.0893	9.1439	.4472	2.4951	Cannot be rejected	-18.7260 to 26.9046
$\bar{X}_{T_2} - \bar{X}_{C} = 0$	14.6406	7.8457	1.8661	2.4951	Cannot be rejected	-4.9355 to 34.2168
$\bar{X}_{T_1} - \bar{X}_{C} = 0$	18.7299	7.9316	2.3614	2.4951	Cannot be rejected	-1.0606 to 38.5204
$\bar{X}_{Aug(T_1+T_2)} - \bar{X}_{C} = 0$	33.3705	12.8577	2.5954*	2.4951	Can be rejected	1.2888 to 65.4523

*significant at the .10 level.

Using the Scheffé test, the post hoc analyses isolated the significance in the contrast of T_1+T_2:C at the .10 level. This significance indicates some support for the effect of listening instruction investigated in this study. On the other three contrasts investigated by application of the Scheffé test, no significant results were found at the .10 level.

The next chapter will discuss these results and offer specific recommendations for further study.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

This concluding chapter begins with a summary of the study, reporting the results. The conclusions of the investigation will then be discussed and recommendations for future research will be made.

Summary

This investigation was undertaken to explore the effect of listening instruction upon the reading comprehension of first grade pupils. Socio-economic status (SES) was also a factor. The effects of both specific listening instruction and nonspecific listening upon reading comprehension were explored across three SES levels: high, middle, and low. To accomplish this objective, a sample of eighteen classrooms within the Saginaw Public Schools was randomly assigned within each SES level to three groups: specific listening instruction, nonspecific listening instruction, and control, so

that six classes comprised each group. The six classes comprising the specific listening instruction group received one lesson per day in listening for a specific purpose. The six classes comprising the nonspecific listening group received a comparable amount of time per week in nonspecific listening activities. The six classes comprising the control group did not receive special instruction in listening during the study.

All classes were pretested utilizing the Gates-MacGinitie Reading Test, Primary A, Form I. This pretest was the covariate. The treatment period of eight weeks was followed by posttesting utilizing the GMRT, Primary A, Form II.

Analysis of covariance was the statistical test applied to the data to determine whether significant differences existed on the main effects of treatment and/or SES and/or the interaction effect. The Scheffé post hoc technique was then employed.

Results

The analysis of covariance when the three major hypotheses were tested indicated that significant differences did exist among the three groups on the treatment main effect. The gains were significant at the .05 level. No significant effect was found on the SES

factor or the interaction effect of treatment X SES level.

Since the analysis of covariance indicated significant differences at the .05 level between the groups on the treatment main effect, the Scheffé post hoc test was applied to determine where the significance existed. Four contrasts were examined: specific listening versus nonspecific listening (T_1:T_2), nonspecific listening versus control (T_2:C), specific listening versus control (T_1:C), and specific listening plus nonspecific listening versus control (T_1+T_2:C). Significant gains at the .10 level were found on the fourth contrast only (T_1+T_2:C).

Conclusions

The conclusions reported herein are based upon the results of this investigation, considering this particular sample. Generalization beyond this sample is not intended unless it would be possible to identify a population with similar characteristics to the one under study in this investigation.

From the results gained in this study it may be concluded that:

1) Listening instruction appears to produce significantly better reading comprehension abilities since the combined treatment groups achieved

gains in reading comprehension significant at the .10 level when compared with the group that did not receive special listening instruction.

2) The significant differences in reading comprehension of those receiving listening instruction existed regardless of SES level. Therefore, listening instruction appears to produce gains in reading comprehension for children of all SES levels.

3) The findings are inconclusive on the single group comparisons: Specific listening versus nonspecific (T_1:T_2), nonspecific listening versus control (T_2:C), and specific listening versus control (T_1:C). These results indicate the study failed to isolate the type of listening instruction which produces significant gains in reading comprehension, if indeed the type of listening instruction is a significant factor in achieving gains in reading comprehension. However, the reason for the absence of significant results might be a function of the test and not the listening instruction.

4) The study lends further support to the studies which demonstrate the value of listening instruction on reading comprehension reviewed in Chapter II.

5) Since, under the conditions of this study, listening instruction had a significant effect upon reading comprehension, this study provides rationale for the inclusion of listening instruction within instructional programs in reading. Because significant gains were found on the treatment main effect across the three SES levels, it would appear worthwhile to include listening instruction in elementary schools whose populations reflect varying SES levels.

Recommendations for Future Research

The recommendations suggested herein concern three major directions: 1) Replications of the present study varying specific aspects; 2) Refinement in research efforts designed to explore the types of listening instruction which effectively isolate optimal gains in reading comprehension; and 3) Longitudinal studies related to listening and reading comprehension.

Replications of This Study

1) This study should be replicated with other populations. The present investigation assessed the effects of listening instruction in a single school system with

a select school population. Replication of the study should be carried out to determine the effect of the experimental treatment on other populations.

2) A replication of this study might be structured so the experimental treatments are administered to individual children in order to more effectively control the teacher variable and to be able to consider each individual child as the unit of analysis.

3) Replication of this study could be organized with experimental treatments administered for a longer duration of time. That is, since significant gains at the .10 significance level were found on the treatment main effect when the experimental period was two months, it appears to this researcher that a longer treatment period might have resulted in greater gains. As in the case with most standardized tests of reading achievement, the Gates-MacGinitie Reading Test could measure gains achieved over a longer period of time with more precision.

Refinement in Research and Listening and Reading Comprehension

1) Other instructional programs in listening should be developed and their effectiveness compared with that of the one used in this study.

2) Further research should be aimed toward identifying the type of listening instruction most effective in

improving reading comprehension. For example, a specific listening instructional treatment correlated with comprehension skills might be compared with another specific instructional treatment in listening that is not correlated with comprehension skills.

Longitudinal Studies

1) A longitudinal study could be developed to assess the permanence of reading comprehension gains produced after listening instruction.

2) Another type of longitudinal study could determine the optimal periods in the elementary school years for positive effects of listening instruction.

In summary, while this study has demonstrated listening instruction can enhance children's reading comprehension, additional research is needed to clarify more definitively the type of listening instruction which is most likely to produce significant gains in reading comprehension.

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APPENDICES

APPENDIX A

OEO DATA FOR SCHOOL CLASSIFICATIONS

MASTER LIST OF SCHOOL NEEDS: AFDC, OEO, RACIAL

School	SES Class	Total No. PK-6	AFDC	%	Rank
Edith Baillie		(487)	183	37.4	3
C. C. Coulter		(291)	173	59.4	2
Emerson	L	(545)	79	14.5	14
Fuerbringer	M	(312)	6	1.9	28
Nelle Haley	M	(557)	56	10.0	16
Handley		(400)	6	1.5	29
Heavenrich		(523)	144	27.5	7
Herig	H	(327)	8	2.4	23
Houghton		(623)	181	29.0	5
Jerome		(328)	53	16.1	13
Jewett		(131)	3	2.3	24
Jones		(563)	144	25.6	8
Kempton	H	(295)	8	2.7	22
Liberty		(137)	4	2.9	21
Longfellow		(551)	110	20.0	11
Martha Longstreet		(274)	57	20.8	10
Jessie Loomis		(581)	123	21.2	9
Merrill Park		(501)	52	10.4	15
Chester Miller		(300)	5	1.7	26.5
John Moore		(350)	32	9.1	17
Morley	L	(515)	148	28.7	6
North		(173)	8	4.6	20
Potter		(446)	266	59.6	1
Jessie Rouse	L	(405)	132	32.6	4
Salina		(347)	62	17.9	12
South		(230)	5	2.2	25
Stone	M	(446)	27	6.0	19
Webber	M	(522)	42	8.0	18
Zilwaukee		(345)	6	1.7	26.5

MASTER LIST OF SCHOOL NEEDS:
AFDC, OEO, RACIAL (continued)

OEO	%	Rank	Black			Spanish Surname		
			No.	%	Rank	No.	%	Rank
15	3.1	17	464	95.3	1	21	4.3	19
7	2.4	18	78	26.8	12	23	7.9	13
83	15.2	5	311	57.1	9	106	19.4	3
2	0.6	24	0	0.0	26.5	1	0.3	28
22	3.9	14	26	4.7	15	78	14.0	8
4	1.0	22	15	3.8	16	6	1.5	24
0	0.0	26.5	466	89.1	5	42	8.0	12
14	1.2	19.5	5	1.5	18	4	1.2	25
20	3.2	16	531	85.2	7	87	14.0	8
17	5.2	12	1	0.3	22.5	38	11.6	10
12	9.2	9	0	0.0	26.5	4	3.0	22
82	14.6	6	481	85.4	6	79	14.0	8
0	0.0	26.5	5	1.7	17	0	0.0	29
7	5.1	13	0	0.0	26.5	1	0.7	26.5
77	14.0	7	214	38.8	11	97	17.6	5
3	1.1	21	252	92.0	4	21	7.7	14
112	19.3	3	262	45.1	10	106	18.2	4
0	0.0	26.5	7	1.4	19	34	6.8	16
16	5.3	11	1	0.3	22.5	2	0.7	26.5
1	0.3	25	4	1.1	20	12	3.4	21
4	0.8	23	475	92.2	3	53	6.4	17
0	0.0	26.5	1	0.6	21	17	9.8	11
99	22.2	2	419	93.9	2	27	6.1	18
67	16.5	4	84	20.7	13	177	43.7	1
127	36.6	1	282	81.2	8	56	16.1	6
14	6.1	10	0	0.0	26.5	8	3.5	20
58	13.0	8	0	0.0	26.5	31	7.0	15
20	3.8	15	37	7.1	14	116	22.2	2
4	1.2	19.5	0	0.0	26.5	9	2.6	23

U.S. DEPARTMENT OF LABOR

MANPOWER ADMINISTRATION
300 SOUTH WACKER DRIVE, 16TH FLOOR

CHICAGO, ILLINOIS 60606

February 13, 1973 5 MGEB

REGION V MANPOWER ADMINISTRATION LETTER NO. 93

SUBJECT: Revised Poverty Level Income Criteria and Definition of the Term Disadvantaged Individual

TO: All Manpower Administration Contractors

Purpose: To provide guidelines for uniform application and interpretation of the term "Disadvantaged Individual."

Rescissions: Rescinds Region V Manpower Administration Letter No. 61 dated June 15, 1972

In August 1967, OEO issued uniform income guidelines for all programs funded under the Economic Opportunity Act. These guidelines were based on poverty thresholds derived from a definition of poverty developed for statistical purposes by the Social Security Administration in 1964. OEO revises its income guidelines from time to time in order to reflect substantial increases in the cost of living as measured by the Consumer Price Index. The new income levels listed below are effective immediately.

OEO Poverty Guidelines for All States Except Alaska and Hawaii:

Family Size	Nonfarm Family	Farm Family
1	$2,100	$1,800
2	2,725	2,325
3	3,450	2,950
4	4,200	3,575
5	4,925	4,200
6	5,550	4,725
7	6,200	5,275

For families with more than seven members, add $650 for each additional member in a nonfarm family and $550 for each additional member in a farm family.

The definition of disadvantaged individual will not affect the statutory eligibility requirements of the various programs. For example, Title I, Part B Sec. 125(a) of the EOA states "participants in programs under this part must be unemployed or low-income persons."

Persons who do not meet the definition of disadvantaged are not necessarily ineligible for enrollment in MDTA projects. Individual MDTA projects designed for the disadvantaged may enroll some individuals who are not disadvantaged.

Participant eligibility standards for specific programs such as JOBS or DMP-4 may differ slightly from the definition.

1. Statement of Policy. The term "disadvantaged individual" as used in connection with all programs under the jurisdiction of the Manpower Administration is defined as follows:

a. Definition

A DISADVANTAGED INDIVIDUAL, FOR MANPOWER PROGRAM PURPOSES, IS A POOR PERSON WHO DOES NOT HAVE SUITABLE EMPLOYMENT AND WHO IS EITHER (1) A SCHOOL DROPOUT, (2) A MEMBER OF A MINORITY, (3) UNDER 22 YEARS OF AGE, (4) 45 YEARS OF AGE OR OVER, OR (5) HANDICAPPED.

b. Criteria

The test to determine if an individual is disadvantaged is:

(1) Member of poor family, and
(2) Unemployed, underemployed, or hindered from seeking work, and
(3) Has one or more of the following characteristics:

(a) School Dropout
(b) Member of a minority
(c) Under 22 years of age
(d) 45 years of age or over
(e) Handicapped

c. Combinations

The five basic combinations of the definition are:

(1) Poor school dropout without suitable employment
(2) Poor youth without suitable employment
(3) Poor minority group worker without suitable employment
(4) Poor older worker without suitable employment
(5) Poor handicapped worker without suitable employment

Clearly, any one individual might meet several of the tests at once; e.g., the poor unemployed, handicapped, teenage dropout.

2. Meaning of Terms in Definition

a. Member of Poor Family

A person will be deemed "poor" for purposes of the definition of disadvantaged if he (she) is a member of a family (1) which receives cash welfare payments, or (2) whose annual income in relation to family size and location does not exceed the income criteria.

b. Family

A family consistes of one or more persons living in a single household who are related to each other by blood, marriage, or adoption. All persons living in one household who are related to each other are regarded as one family; except that an unmarried member of a household shall not be considered a member of the family,

(1) Who is 18 or older (or over 21 if in school), and

(2) Who contributes less than 50 percent of the maintenance of any other member of the family, and

(3) Who receives less than 50 percent of his maintenance from the family.

Such individuals shall be considered to be residing alone or in group quarters. An individual living alone or in group quarters is considered a family.

c. Family Income

Family income is the annual sum of all money received by a family, from all sources, except for specific exclusions indicated below. It refers to the sum of amounts reported separately for wage or salary income, self-employment income, and other income.

(1) Inclusions

Family income includes:

(a) Gross Wages or Salary. The total money earnings received for work performed as an employee. It represents the amount paid before deductions for income taxes, social security, bond purchases, union dues, etc.; and

(b) Self-Employment Income. Net money income (gross receipts minus operating expenses) from a business firm, farm, or other enterprise in which a person is engaged on his own account; and

(c) Other Income. Money income received from such sources as net rents, social security benefits, pensions, and periodic income from insurance policy annuities.

If a family's only source of income was from wage and salary payments, family income would be equal to gross wages or salary received.

(2) Exclusions

Family income specifically excludes:

(a) Non-cash income, such as wages received in the form of food or housing.
(b) Imputed value of owner-occupied property.
(c) Cash welfare payments (Recipients of cash welfare payments are included in the definition as "poor.")
(d) Veterans' service-connected disability compensation.
(e) Payments made to enrollees under manpower programs, including training, transportation and dependency allowances.

NOTE: Wages and salaries received by individuals through programs funded under the Emergency Employment Act of 1971 shall be included in income computations.

(f) Capital gains and losses.
(g) One-time unearned income, such as the following examples (not intended to be an all-inclusive listing, but designed to illustrate the conceptual framework of one-time unearned income):

1. Payments received for a limited fixed term under income maintenance programs such as unemployment insurance programs and supplemental unemployment benefit plans.

2. One-time (or fixed term) scholarship and fellowship grants.

3. Accident, health, and casualty insurance proceeds.

4. Disability and death payments, including fixed term (but not lifetime) life insurance annuities and death benefits.

5. One-time awards and gifts.

6. Inheritances, including fixed-term annuities.

7. Fixed term workmens compensation awards.

8. Mustering-out pay.

9. Fixed term "veterans" (and survivors') educational benefit payments.

10. Soil bank payments.

11. Agriculture crop stabilization payments.

NOTE: As used in the above examples, "fixed term" is interpreted to mean 36 consecutive months or less in duration.

d. Definition of farm

Farm or nonfarm family income will be determined by location of residence as determined by the 1970 Census definition. Farm is the location category of individuals living in rural territory (outside the corporate limits of a city of 2,500 or more, or outside of an urbanized area contiguous to such a city) on places of 10 or more acres from which annual sales of farm products amounted to $50 or more or on places of less than 10 acres from which annual sales of farm products amounted to $250 or more. Generally, the acreage/sales criteria will be satisfied by determining if the individual considers his residence to be an operating farm being worked by him or by members of his family.

e. Computation of income

Family income may be determined by either one of the two methods outlined below:

(1) The income may be determined by adding up the income from the various sources during the 12-month period preceding the date of the interview when a person is considered for classification as a disadvantaged individual. In instances where the head of the family has been unemployed for a period in excess of 15 weeks prior to the date of the individual's application, any income from wages earned by the family head prior to unemployment should not be counted to determine the family income. If, however, the unemployment is the result of a seasonal occupation and the family head intends to return to work in the occupation when the employment season begins, the income of the family may be determined in accordance with the family income of the preceding calendar year in which the person applies for enrollment.

(2) The income may be determined by annualizing, at the time an individual is considered for enrollment, the income of all family members for the immediately preceding months.

It is not expected that sponsors or local offices will conduct investigations as to the validity of income reported by potential enrollees or HRD applicants. Family income shall be obtained by requiring that the enrollee, at the time of referral to a training program, indicate size of the family, amount of family

income, its source and the occupation(s) of the income-producing member(s) of the family. Data on income of the family should appear reasonably reliable. Cases where the income data are of doubtful validity should be carefully examined before certification.

As a minimum, local offices and sponsors should require that a written statement be completed that would certify that the data provided by the individual being referred are accurate to the best of his or her knowledge. If the individual being referred is a youth, a countersignature by the head of the household should be required.

A person will not be considered "poor" if his lack of income results from his refusal, without good cause, to seek or accept employment commensurate with his health, age, education, and ability. Commonly accepted standards of the Unemployment Insurance Service may serve as guidelines.

f. Persons Who Do Not Have Suitable Employment. Individuals who do not have suitable employment are (1) the unemployed, (2) the underemployed, and (3) persons hindered from seeking work.

(1) Unemployed. Unemployed individuals are those civilians (no age limit) who have no employment and are available for work, and

(a) Had engaged in any specific job-seeking activity within the past 4 weeks.

Principal activities include: Registering at a public or private employment office; meeting with prospective employers; checking with friends or relatives; placing or answering advertisements; writing letters of application; or being on a union or professional register.

(b) Were waiting to be called back to a job from which they have been laid off, or

(c) Were waiting to report to a new wage or salary job scheduled to start within the following 30 days.

NOTE: Persons under (b) and (c) would not normally be considered "without suitable employment" depending upon the job and the conditions of return.

Individuals registering through a component of any manpower program will be deemed to be engaged in job-seeking activity, even though the application may be for training rather than an immediate job.

Workers in farm families with less than $1,200 annual net family income shall be considered unemployed (Sec. 202a of MDTA).

(2) Underemployed. Underemployed individuals are those working below their skill capacity, or those who are (or have received notice that they will be) working less than full time in their industries or occupations, or those who have received notice they will be unemployed because their skills are becoming obsolete. Underemployment also includes persons working at part-time jobs who desire full-time work and individuals who involuntarily worked less than a full year during the preceding 12 months. Persons working essentially full-time in occupations which pay less than poverty level incomes may be considered to be working at less than their skill capacity if they are deemed capable, on the basis of mental and/or physical capacity, of performing at a higher skill level. Specifically to be included as underemployed are servicemen about to be discharged who have no apparent civilian job in sight.

(3) Persons Hindered from Seeking Work. This category recognizes that there are some individuals who are not seeking work but who would enter the labor force if given appropriate assistance in overcoming barriers to employment. Whether individuals should be considered potential labor force participants depends in part on their attitudes toward labor force participation and in part on whether or not overcoming the hindrances from which they suffer is a part of current manpower policy. Examples of persons who would fall into this category are individuals who would be working or looking for a job if they thought jobs, transportation, or child care facilities were available. Also included in this category would be persons, not otherwise handicapped, who do not seek employment because of their attitudes or motivational problems. Not included in this category would be persons who do not require employment assistance because they are over the retirement age, are too severely handicapped, or are fully occupied homemakers.

g. Characteristics of Individuals. To be classified as disadvantaged, an individual must be one of the following (in addition to being poor and not having suitable employment): (1) a school dropout, (2) a member of a minority, (3) under 22 years of age, (4) 45 years of age or over, or (5) handicapped.

(1) School Dropout. A school dropout is a person who has not graduated from a high school nor obtained a high school equivalency diploma. In nearly all high schools, graduates have completed 12 years of school. However, before World War II a few Southern schools graduated students after 11 years. For statistical purposes, then, a dropout is one who has completed less than 12 grades of education, except in those schools mentioned above.

(2) Member of Minority. Members of the minority are: Negroes, American Indians, Japanese, Chinese, Filipinos, Koreans, Polynesians, Indonesians, Hawaiians, Aleuts, Eskimos, Mexican-Americans, Puerto Ricans and other people with Spanish surnames.

(3) Under 22 Years of Age. Individuals under 22 years of age are called "youth." People are classified as "youth" until they reach their 22nd birthday.

(4) 45 Years of Age or Over. Individuals 45 years of age or over are called "older workers." People are classified as "older workers" starting from the date of their 45th birthday.

(5) Handicapped. A handicapped worker is one who has a physical, mental, or emotional impairment or chronic condition which could limit work activities. Existing Employment Service guidelines on identification of handicapped individuals will be applicable.

DAVID O. WILLIAMS
Regional Manpower Administrator

APPENDIX B

LISTENING LESSONS

LESSON # 1

DATE: February 5, 1973

DIRECTING ATTENTION

"Boys and girls, let's all close our eyes and listen very carefully to the sounds around us." (Teacher: Allow time for the children to concentrate before these questions.)

What do you hear?

How does it sound?

Can you hear something soft? What does this sound like?

Can you hear something loud? What does this sound like?

"Now let's play a game. Keep your eyes closed. I will make a sound. See if you can guess what it is." (Teacher: Make five different sounds with time between each for the children to tell you what they are.)

Examples:

1. Knock on something
2. Tap your foot
3. Click your tongue
4. Rustle paper
5. Close a book

LESSON # 2

DATE: February 6, 1973

AUDITORY MEMORY

"Today, let's see if you can remember the sounds you hear. I will clap sounds and you will tell me how many claps you hear. Close your eyes and listen carefully." (Teacher: Clap at a steady rhythm first, varying only the number.)

Examples:

1. Clap 2 times;
   Clap 1 time;
   Clap 4 times;
   Clap 6 times.

2. (Teacher: Vary rhythm and number now.)

   Example: Clap 1 time, pause, clap 2 times quickly.
   (Make up other variations)

Have several children, one at a time, come up to clap while the others close their eyes to listen and count.

LESSON # 3

DATE: February 7, 1973

CONTEXT
(Similarities)

"Listen as I read you some words. Listen for the one that does not belong with the others." (Teacher: Use the first as an example, discussing why car does not fit.)

hat, coat, gloves, car

dog, cat, chair, horse

red, green, blue, top

truck, boy, car, train

spoon, knife, yellow, fork

school, milk, water, orange juice

apple, chair, orange, banana

jump, skip, hop, table

mouse, bench, seat, stool

radio, boots, T.V., stereo

man, boy, Mr. Smith, kitten

David, Mary, Linda, Susan

LESSON # 4

DATE: February 8, 1973

DRAWING A CONCLUSION

"Listen to this riddle. Then guess what the boys are making."

One day Jimmy and his friend decided to make something for Jimmy's pet. They gathered some wood, a saw, a hammer, and some nails. They sawed the boards for the sides, nailed them together, then found a large piece of heavy cardboard for the top. Next they made a doorway in front. can you guess what they made?

"Listen again while I read. Guess what the children are doing."

The children were anxious to go out to play in the snow after school. They dressed in their warm clothes and went out into the yard. Some of the children began to roll a snowball on the ground. The snowball gathered more and more snow around it until it became very large. On top of this big ball of snow they put another one just a little smaller. Finally, they put a third ball of snow on top of the other two. Someone decorated the top ball of snow to look like a face. They found an old hat to place at the very top.

"What were the children doing?"

LESSON #5

DATE: February 9, 1973

MAIN IDEA

"Listen while I read a short story to you. As I read, decide what the story is about. Then I will give you titles for the story and you may choose the best one."

Just as our own tongues help us when eating or speaking, animals have tongues which help them to do many things. A cat, for example, has a very rough tongue which is used for cleaning its body as well as for licking meat from bones.

A dog has a long flat tongue which can be curled up to lift water into its mouth. A dog's tongue is long enough to reach out to clean its lips and paws.

Another animal which is more unusual, the anteater, has a very long, sticky tongue. The anteater can use it to catch ants for food by pushing its tongue into anthills.

"Which of these story titles best tells what this story is about?"

How Animals Use Their Tongues*

Using Your Tongue

* Denotes correct title.

LESSON # 6

DATE: February 12, 1973

CONTEXT
(Initial Words)

"Listen as I read some sentences to you, boys and girls. Choose a word at the beginning of the sentence so the sentence makes sense." (Teacher: Use the first as an example.)

A dog, man, lady barked at the little black cat.

Swimming, hiking, eating is fun to do in a swimming pool.

Tom, Mary, David wore a pretty dress to school.

Deer, camels, giraffes are animals with horns.

Reading, talking, shouting is something you should do with a book.

Mr. White, Mr. Jones, Mrs. Bates lost her purse.

Horses, pigs, rabbits have long tails.

Red, gray, black is a bright color.

A rabbit, a turtle, an elephant can run fastest.

Carrots, peas, tomatoes grow under the ground.

January, March, May begins a new year.

Earthworms, goldfish, mosquitos crawl.

LESSON # 7

DATE: February 13, 1973

CONTEXT

"Listen as I read some sentences to you. The sentences tell about children playing on a cold winter day at the park. As I read a sentence I will leave a word out. Then listen as I read words that may be used to finish the sentence. Choose the best word--the word that makes the most sense."

The children are having fun on the frozen ice pond in the park. The children are swimming, skating, reading, riding bicycles.

Mother told Bill not to forget to take something to the park for skating: his book, bathing suit, skates, umbrella.

Bill put on something to keep his head warm: a hat, boots, a book, mittens.

When Bill got to the park he saw children sliding down a hill. They were sliding on boots, sleds, trucks, donkeys.

Some boys were skating and playing a game with sticks and a puck. They were playing hockey, football, baseball, marbles.

Bill saw children making something from large balls of snow. They made a snowman, car, truck, boots.

Suddenly as Bill skated along very fast, he fell. The ice felt hot, soft, warm, cold.

His hands did not get wet when he fell because he was wearing mittens, boots, skates, shoes.

Bill saw two boys making snowballs. They were making them to eat, throw, kick, drink.

Bill told them not to throw the snowballs at people because throwing them is safe, quiet, restful, dangerous.

LESSON # 8

DATE: February 14, 1973

CONTEXT

"Listen as I read some sentences to you. The sentences tell about something Nancy and Tom did after school to have fun. This time when I read the sentences I will leave a word out but you will have to think of a word to finish the sentence that makes sense."

(TO TEACHER: Accept any word that follows the context and makes sense. There are many possible answers. Words given are merely examples.)

One day after school Nancy and Tom wanted to play a game outdoors. Mother told them to stay in the yard away from cars and not to play in the _____ (street).

The reason Nancy and Tom should not play in the street is that playing in the street is _____ (dangerous).

Nancy and Tom took a bat and ball outdoors. They wanted to play _____ (baseball).

Nancy and Tom walked down the sidewalk to find more children so they could make two _____ (teams).

They found enough children to play. Tom's team batted first. Tom stepped up to bat. He hit the ball so far that he ran all around the bases and back to homeplate to score a _____ (homerun, point).

After Tom ran all around the bases to homeplate, he felt very _____ (excited, tired, out of breath).

Then Tom's team got three outs. Next it was Mary's team's turn to _____ (bat).

No one on Mary's team scored a run so Tom's team _____ _____ (won).

All the children had lots of fun playing _____ (the game, baseball).

It began to get dark so they went home to _____ (eat dinner).

LESSON # 9

DATE: February 15, 1973

CONTEXT
(Initial Words)

"Listen, boys and girls, as I read some sentences to you. Choose the best word at the beginning of the sentence so the sentence will make sense." (Teacher: Use the first as an example.)

Saturday, Friday, Monday is the first school day of each week.

Peaches, cucumbers, peas are fruit.

Feathers, dishes, sticks are soft.

A dwarf, a giant, a baby is tall.

A cookie, a candy bar, a lemon is sour.

Snow, ice, rain is hard.

Four, nine, ten is less than eight.

A banana, an orange, a pear is shaped most like a baseball.

A cake, a pretzel, a doughnut is salty.

Ice skating, sledriding, hiking is fun outside in the summer.

Five, two, one is more than four.

Talking, running, crying is fun for ponies.

LESSON # 10

DATE: February 16, 1973

CONTEXT

"When you read, you know that many words have more than one meaning. For example, if you read the sentence, 'Mrs. Walters put the jar on the table,' the word 'jar' means a small container. But if you read, 'As Jane walked down the aisle of the bus, she felt it jar her,' the word 'jar' means to be bumped or shaken. Listen to the word which has two different meanings. I will read two sentences. Tell me the different meaning of the same word." (Teacher: Read the word at left first. Use the first one as an example.)

turn	Turn the page, Mary. Wait for your turn.
escape	The lion wanted to escape. The fire escape was outside the side door.
walk	The little dog went down the walk. Always walk in the hall.
base	The base of the lamp was broken. Tom ran to first base.
hand	Dad asked Jim to give him a hand. Show me your right hand.
punch	Aunt Mary made some punch for the party. Did you see David punch Mark?
treat	Since this is Ann's birthday, we will have a treat. I try to remember to treat others with kindness.
slide	We can slide down the hill in the park when there is snow. I love to use the slide.
back	Did you ever ride on the back of a snowmobile? Dad hurt his back.
bat	Tom got a new bat for Christmas. A bat is able to fly at night.

LESSON # 11

DATE: February 19, 1973

NOTING DETAILS

"Listen while I read to you about Carlos and Juanita. Listen for all the things each wanted to take with them when they visited their grandmother."

One Saturday Carlos and Juanita were going to visit their grandmother. They wanted to take some things over to her house with them so they could play there. Mother told them they could take some toys or games but not their pet kitten. Carlos decided to take his racing cars and his football game. Juanita took her new doll, with its little case of doll clothes, and a coloring book.

1. "What did Carlos take?"

2. "What did Juanita decide to take?"

LESSON # 12

DATE: February 20, 1973

MAIN IDEA

"Listen to the story. Decide what it is about."

In some places in northern Michigan dog sled races are held each winter. The owners of dog sled teams come to the racing site from many different cities in Michigan. The most popular breed of dog for racing is the Siberian Husky. Teams of these dogs are hitched up to a sled with one man riding. The teams race on a snow-covered trail through the woods while crowds of people line up along the trail to cheer them on. The winner of the race is the team that covers the trail in the fastest time. Many families travel great distances to watch the fun and excitement of these races.

"Which of these best tells what this story is about?"

A Race Dog Named Husky

Dog Sled Races in Michigan*

* Denotes correct title.

LESSON # 13

DATE: February 21, 1973

CONTEXT
(Middle Words)

"Listen as I read some sentences to you with a word to choose. Choose the word that makes sense."

The boys are playing, rowing, sinking the game.

Sally dressed her truck, dog, hat for the pet show.

All the children brought blankets, bricks, presents to the birthday party.

After the snowstorm Tom and Mike made candy, snowballs, pictures in the yard.

Mother baked a lake, cake, rake for John's birthday.

When the stop sign, policeman, stop light turned green, the truck drove away.

Mr. Walters took a book, car, sandwich from the shelf to read.

My brother likes to sleep, share, swim in the lake.

Mrs. Smith drove her horse, nail, car to pick the children up at school.

Jane is twisting, ringing, catching the doorbell.

In the spring the farmer picked, uncovered, planted the seeds.

Mother rang the door, doorbell, letter because she wanted someone to let her into the house.

LESSON # 14

DATE: February 22, 1973

DRAWING A CONCLUSION

(Teachers: Please accept any answers that logically can be correct.) "Listen while I read a riddle to you. The riddle will tell you clues about something Dick wants. After you have heard the clues, decide what Dick wants."

Dick would like to have an animal for a pet. Many families have this kind of animal for a pet. It is furry, soft, and has whiskers. It can be different shades of colors. It has four legs and a long tail. Dick does not want a dog. What animal does Dick want?

"Here's another riddle. After you have heard the clues, decide what Gary and his father are going to do."

One Saturday Gary's father said he would take Gary out for some fun. Father said they would drive to a lake. They took some long rods, hooks, and two pails. Along the way father stopped to buy some bait. What do you think they were going to do?

LESSON # 15

DATE: February 23, 1973

MAIN IDEA

"Listen to this story. Decide what the story is about."

Many people enjoy having pets. People have pets for many different reasons. Pets can help you by being a friend or by protecting you. Dogs, for example, can bark to warn you that a stranger is coming. You can play with pets and take some pets for a walk with you. Pets must be fed every day and kept clean. Each pet likes to have a special place of its own in which to stay. A bird likes to have its own cage, a fish likes to have a bowl or aquarium, and a dog likes to have a bed or even its own doghouse. Pets are lots of fun.

"Tell me what this story is about using one sentence."

LESSON # 16

DATE: February 26, 1973

CONTEXT
(Middle Words)

"Listen to these sentences and choose the best word to make the sentence make sense."

Frogs barked, croaked, grunted in the pond.

Mother stopped at the dress shop, store, gas station to buy milk.

Leaves fluttered, jumped, skipped in the breeze.

The raindrops melted, dripped, floated down the windowpane.

All day long the monkeys were chattering, singing, whispering to one another.

Father took his lawn mower, saw, truck to the gas station garage for repairs.

Firemen blow, light, smother fires.

Rockets slide, blast, twirl into the sky.

The clowns were juggling, breaking, bending the balls.

Policemen direct, push, hunt the traffic.

The snow crashed, poured, drifted softly across the street.

The fire truck siren squealed, whispered, shouted as the truck raced down the street.

LESSON # 17

DATE: February 27, 1973

NOTING DETAILS

"Listen while I read about Sandy's dog. Listen for all the things that tell about the dog."

Sandy has a pet dog named Chipper. Chipper is a beagle and is black, brown, and white. Chipper was born on a farm out in the country. Chipper likes to follow Sandy wherever she goes. One warm spring day Sandy and a friend decided to pack lunches and ride their bikes into the woods for a picnic. They rode a long way down the street and into the woods when suddenly Sandy turned around to look behind her. Who do you think she saw? Yes, her special friend Chipper!

1. "What is Sandy's dog called?"

2. "What does Chipper look like?"

3. "Why did Chipper always follow Sandy?"

LESSON # 18

DATE: February 28, 1973

CONTEXT

"You will have another chance to listen to sentences in which one word has different meanings. Listen and then tell me the different meanings of the same word." (Teacher: Read the word at left first. Use the first one as an example.)

bark	My dog does not bark very often. On the way to school, David found a piece of bark.
rattle	Her baby sister sometimes plays with a rattle. He heard the train rattle along the tracks.
report	My brother had to write a report for school. A teacher must report the names of children who are absent.
tires	Mr. Spence bought new snow tires. Because my grandmother is very old, she tires easily.
coat	In this cold weather everyone should wear a warm coat. Dad painted another coat onto the house.
pitcher	At the party Mom poured our drinks from a pitcher. The pitcher threw the ball to the first man to bat.
watch	Julie got a new watch for her birthday. The sign said, "Watch your step."
trip	If you are not careful, you might trip on the cord. This summer we will take a trip to Detroit.
cheer	I heard the crowd cheer after the touchdown. When someone is sick we often try to bring them cheer.
cold	Last fall my uncle had a very bad cold. Winter air often feels cold.
clown	I always see a funny clown at the circus. Mother told me not to clown at dinner time.
cup	I have a special cup at home. Can you cup your hands?

LESSON # 19

DATE: March 1, 1973

MAIN IDEA

"Listen to the story. Decide what it is about."

Have you ever stopped to think about the different kinds of houses our animal friends live in? Birds build homes which are nests made of mud, twigs, leaves, and grass. They like to live high above the ground in the branches of trees. Squirrels and raccoons also like to live in trees but make their homes in the hollows of trunks, branches, or stumps. Some animals do not like to live in such high places. They prefer the ground. Such an animal is the prairie dog who digs holes and tunnels underground for a home.

"Tell me what this story is about using one sentence."

LESSON # 20

DATE: March 2, 1973

DRAWING A CONCLUSION

"Boys and girls, today I will read some questions to you. Listen and think carefully about each one. Then answer 'yes' or 'no'."

Have you ever heard a pet dog talk?

Are you as old as your mother?

If you have one book and your sister has many, does she have more than you?

If you are six years old, will you be seven on your next birthday?

If you wanted to go on a hike, would you ask your father to take you on the hike in the car?

If you never ride to school, do you walk to get there?

If your friend is chasing you, are you running in front of him?

Are you the same age as your father?

If your mother got into her car, would she be on the outside of the car?

Would you say goodbye to greet your aunt who had just come in the door to visit you?

LESSON # 21

DATE: March 5, 1973

SEQUENCE--FOLLOWING DIRECTIONS

1. "Let's play a listening-doing game. Listen carefully to these directions. I will read them only once. If you can remember them in order, don't say them, just do what I said. Here is the first one. Let's see who's listening very carefully today."

2. Walk to the door,
   Knock 2 times on the door.

3. Stand up,
   Turn around one time,
   Sit down.

4. Touch your nose,
   Shake your head,
   Stamp your feet.

5. Clap your hands two times,
   Touch your head,
   Blink your eyes.

6. Stand up,
   Jump two times,
   Walk around in a little circle on your tiptoes.
   Stretch up high.

LESSON # 22

DATE: March 6, 1973

DRAWING CONCLUSIONS
(Logical Thought)

(Teacher: A variety of answers are acceptable as long as the child utilizes logical thought.) "In this listening lesson I will ask you some questions. Think as you are listening about how you would answer the question."

When a cat sees a dog, what do you think the cat might do?

If your mother goes to the store to buy something and forgets her money, what do you think she would do?

If you forget to take your lunch to school one day, what would you do?

If you are a bus rider, what would you do if you missed the school bus?

If mother forgot to call you to get up in the morning, what would you do?

If you wanted to buy a game for $2.00 and you had only $1.00, what could you do?

If you and your sister want to play a game that needs four players, what would you do?

If you wanted to go to a movie and couldn't go by yourself, what would you do?

If another child hit you on the way to school, what would you do?

If your father wants to use his car and it won't start, what could he do?

LESSON # 23

DATE: March 7, 1973

CONTEXT
(Initial Words)

"Here are more sentences to which you must listen and then choose the best word to make the sentence make sense."

Oceans, countries, islands are bodies of water.

Peaches, cucumbers, peas are fruit.

Sticks, dishes, feathers are soft.

A baby, a giant, a dwarf is tall.

A lemon, a cookie, a candy bar is sour.

Snow, concrete, mud is hard.

Nine, four, ten is less than eight.

A banana, an orange, a pear has the same shape as a baseball.

A cake, a doughnut, a pretzel is salty.

Hiking, ice skating, sled riding is fun outside in the summer.

Five, two, one is more than four.

A sandwich, a desk, a parade is fun to watch.

LESSON # 24

DATE: March 8, 1973

INTERPRETING WORD REFERENTS

"Today I will tell you a story about another class."

One day Mrs. Cummings said to her class, "We are going to have fun today. Later this afternoon we will have a party." (Who did she mean when she said "we"?) Sally said, "Oh, Mrs. Cummings, that sounds like fun!" (What did Sally mean when she said "that"?) "You are right, Sally," said Mrs. Cummings. "A party always means lots of fun." (Who did Mrs. Cummings mean by the word "you"?) "Let's work hard to finish our work for today so we can have our special fun later."

LESSON # 25

DATE: March 9, 1973

NOTING DETAILS
(Recall)

"Listen to these sentences that tell the special jobs the children have at school."

Mrs. Reynolds chose new room helpers today. Maria is the girls' leader. Tony is the boys' leader. John collects the milk money and Janie passes out our papers.

"What does Maria do to help?"

"Who is the boys' leader?"

"Who collects the milk money?"

"Who passes out papers?"

LESSON # 26

DATE: March 12, 1973

NOTING DETAILS
(Recall, Evaluation)

When an animal gets hurt or becomes sick, there is a place you can take it called an animal hospital. The doctor who works there is a veterinarian. These doctors have gone to special schools to learn how to care for animals who are injured or sick. A veterinarian can give medicine to animals, he can inject drugs, or perform surgery on animals when they may need it. Sick animals can stay at the animal hospital until they are well enough to go back to their homes.

What is the place called that treats sick animals?

What do you call an animal doctor?

Why do animals go to a veterinarian?

What is a good name for this story?

Spot Visits a Veterinarian

or

Helping Sick Animals

What kind of a story is this?

A true story

or

A fairy tale

LESSON # 27

DATE: March 13, 1973

DRAWING A CONCLUSION

"Listen while I read a short story to you. Decide what Mary's family is planning to do."

Mary's mother is packing a basket with sandwiches she has made, hot dogs to roast, cupcakes she has baked, apples, oranges, marshmallows for roasting, and many other good things to eat. Mary is helping by filling a large jug with lemonade. Mary's father is packing things into the car: games, a grill for cooking, and a camera. It is a warm summer day. Mary and her brother and sister are very excited. Can you tell where Mary's family is planning to go?

"Listen to this story about a special day. After you have listened, decide what the special day was."

Friday was a special day at school. Jose could hardly wait! All the children in his room were going to bring costumes to school for a special holiday party. Some children were going to dress up to be funny clowns, some would be scary creatures, some would be wild animals. Sometime after school many of the children will be visiting homes in the neighborhood.

"What special holiday was on Friday?"

LESSON # 28

DATE: March 14, 1973

NOTING DETAILS

"Listen to this story about Jerry. Listen also for all the things that tell why Wednesday was a lucky day for him."

Wednesday was really a lucky day for Jerry. While he was waiting for the school bus, he found a quarter by the edge of the sidewalk. At school his teacher gave back his writing paper and "Very Good" was written at the top. When he got home from school, his puppy was waiting for him. On Tuesday the puppy had run away and Jerry thought he was lost forever. Jerry's father came home and told Jerry they would go to a football game. Jerry certainly felt very lucky!

1. Name the things that made Wednesday a lucky day for Jerry.

2. Where did Jerry find the quarter?

3. What did Jerry's teacher write on his paper?

4. Why do you think Jerry liked what his teacher wrote?

5. How did Jerry feel on Wednesday?

LESSON # 29

DATE: March 15, 1973

CONTEXT
(Final Words)

"Listen to each sentence. Choose the best ending word for each sentence."

After the hen sat on the eggs, they hatched, marched, jumped.

The fierce wind sang, howled, laughed.

When Ann's favorite doll broke, she laughed, cried, danced.

Astronauts have landed on the stars, Mars, moon.

When the band stopped, the marchers skipped, halted, fell.

Running fast makes you laugh, sing, pant.

When water was thrown over the fire, it blazed, rumbled, sizzled.

Church steeples are short, round, pointed.

After the sun came out, the snowman jumped, melted, skated.

As soon as the kitten saw the big dog, it looked sad, frightened, pretty.

LESSON # 30

DATE: March 18, 1973

NOTING DETAILS

One day at recess time I saw six men working out in the street by the playground. They were digging a huge hole in the street. One man was driving a steam shovel. The steam shovel loaded dirt onto a dump truck so it could be hauled away. Another man used a machine to break up the concrete. We stopped to watch them work.

1. When did the children see the men digging?

2. What did the steam shovel do?

3. How many men were working?

LESSON # 31

DATE: March 19, 1973

INTERPRETING WORD REFERENTS

"This is a story about Tony's family and their visit to the Saginaw Children's Zoo."

One warm day last summer Tony's family went to visit the Children's Zoo. There were many interesting animals to see. As they walked across the little bridge to enter the zoo, the first animals they saw were the monkeys. (Who did I mean when I said "they"?) Some were hanging by their tails, chattering to each other. (Who did I mean by "some"?) Tony tried to call one over to him. (When I said "one," who did I mean?) The monkey quickly jumped across the cage toward Tony. Tony gave the monkey some popcorn. The monkey ate it quickly. (What does "it" mean?)

Then Tony's father asked him if he wanted to ride the train that takes people around the zoo. Tony said he wanted to do that next. (What did Tony mean by "that"?) So Tony's father bought the train tickets for their ride. After it was over, they visited the other animals. Tony thought the visit to the zoo was lots of fun.

LESSON # 32

DATE: March 20, 1973

DRAWING A CONCLUSION

"Boys and girls, today I will read some questions to you. Listen and think carefully about each one. Then answer the question with 'yes' or 'no.'"

Is it always warm outdoors when the sun is shining?

Does Monday come before Wednesday?

Does the moon always look the same shape?

If you saved enough money for a new doll, would you be able to pay for it?

If a dog wags his tail, is he always friendly?

If your mother gave you a nickel and your brother five pennies, do each of you have the same amount of money?

If your friend is in sixth grade, is your friend older than you are?

If your sister goes through the door before you, is she in front of you?

If you arrive at school and you are too early, has school begun yet?

If mother always cooks dinner at 5:00, does she cook dinner at the same time every day?

If you were building a snow fort and you had almost enough snow for it, would you need more?

If you always get up at 7 o'clock, do you get up at the same time every day?

LESSON # 33

DATE: March 21, 1973

MAIN IDEA

"Listen as I read a short story. Decide what it is about."

Living next door to us is a family called the Russells. Mr. Russell is a policeman. One of his jobs is to visit schools to help children understand safety at home, at school, or going to and from school. Mrs. Russell is a nurse and works at the hospital. There are three children in the Russell family. Joe is the oldest. Joe goes to school at Saginaw High School. He plays football there. Milly is in sixth grade. Milly has a pet turtle. Sue is seven years old so she is in my grade at school. We are good friends. The Russells are nice neighbors.

"Tell me what this story is about using one sentence."

LESSON # 34

DATE: March 22, 1973

CONTEXT
(Dissonant Words)

"Listen, class, to another story in which there is something funny that doesn't make sense in the story. As soon as you hear a word that doesn't belong, raise your hand." (Teacher: Discuss why the words are inappropriate and have children substitute more appropriate ones.)

Last summer on a warm, sunny day, Joe's family was going swimming at a pool nearby. Mother said, "Don't forget to take your snowsuit, Joe." Joe and his brothers could hardly wait to go to the swimming hill. As soon as everyone was ready, they got into the car and drove to the swimming pool. Inside the building beside the pool, they all changed their closets. Soon Joe's family was already to drive off the divingboard into the cool water. They played games and swam around all afternoon before going home. On the way home, Joe asked mother if they could all go skating again soon. Mother said they could because she thought the afternoon was lots of fun too.

LESSON # 35

DATE: March 23, 1973

DRAWING A CONCLUSION

"Listen while I read something to you. After you have listened, decide what special day this is."

Today is a very special day for Carol. Her mother has invited six of her friends to her house. Carol's mother has baked a cake for her and bought her a present. Carol's friends will bring presents. They will play games and eat cake and ice cream. What day is this for Carol?

"Listen again. After listening, decide why Mr. Jones was unhappy." (More than one logical answer is possible.)

One day Mr. Jones decided he was going hunting. He dressed in very warm clothes. He found his warm boots and put them on. He took a lunch his wife had packed and his rifle for hunting. He went out to the street to get into his car. All at once he noticed the car was leaning to one side. He looked at all the tires and noticed one had all the air out. Why was Mr. Jones unhappy?

LESSON # 36

DATE: March 26, 1973

SEQUENCE

1. "Listen for the first, next, and last things that Mother did as she set the table."

   When Mother set the table for dinner, first she put the spoons, knives, and forks on the table; next the dishes; and then the napkins.

   "What did Mother do first, next, and last?"

2. "Listen for the first, next, and last things Debbie saw the squirrel do."

   As Debbie watched the little brown squirrel, first it ran across the grass, next it found a berry, and then it quickly scampered up a big tree.

   "What did the squirrel do first, next, and last?"

3. "Listen for the things Steve did first, next, and last."

   One day when Steve was walking home from school, he stopped to pick up a nickel he found on the walk; then he went into a store to buy some milk for his mother; and then he stopped to pet his friend's dog.

   "What did Steve do first, next, and last on his way home from school?"

LESSON # 37

DATE: March 27, 1973

DRAWING A CONCLUSION

"Listen again to these questions. Answer 'yes' or 'no.'"

If you are late for a movie, have you missed seeing some of it?

If you have almost enough players for a baseball team, do you still need more?

If John is following you, is he behind you?

If you have a younger sister, was she born before you?

Do both Jerry and Jeff have some candy if they each have a piece?

If you had two shoes, would they always be a pair?

If you are going on a picnic tomorrow, have you gone yet?

If a jet ran out of fuel, could it stop at a gas station to refuel?

If the toys were in the back of a store, would you pass them as you went in the front door?

If a car is going 60 MPH and a truck is going 20 MPH, is the truck going faster than the car?

If your phonograph record broke yesterday, could you play it today?

If your bedroom is on the first floor and your sister's bedroom is upstairs, is her bedroom above yours?

LESSON # 38

DATE: March 28, 1973

MAIN IDEA

"Listen and decide what this story is about."

Every September I am anxious to begin school. The first day of school I am very excited. I am excited to find my new room and to see the new teacher I will have, as well as the children who will be in my room. There are always different things in the room to look at and do. There are new and fun things to learn. Last September on the first day of school this year, my dog, Max, tried to follow me as I walked to school. I had to chase him back home. When I got to school the bell was ringing so I knew it was time to go into my new room. When I went to my room, I found my friend Susan there and a very nice teacher too!

"What is this story about? Tell me, using one sentence."

LESSON # 39

DATE: March 29, 1973

CONTEXT
(Dissonant Words)

"Today I will read a story in which there is something funny. Listen carefully and raise your hand when you hear something funny that doesn't make sense in the story." (Teacher: Discuss why the words are inappropriate and have children substitute more appropriate ones.)

One day five boys went to school. Their names were Tony, Joe, Dick, Debbie, and Billy. They were all seven years old so they were in the same class. Their teacher was Mrs. Sad. When the boys arrived at school, they worked very hard learning their math and reading. Soon it was time to put on their pajamas and go to gym class. After gym, they came back to their room. It was almost time for lunch so their teacher said they could draw some milk. In the afternoon they studied spelling, writing, and science. Soon the last bell rang and it was time to go home. A fire truck came to pick them up.

LESSON # 40

DATE: March 30, 1973

DRAWING A CONCLUSION

(Teachers please note: There are many answers that are logically appropriate. Accept any conclusion that is sensible.) "Today I will read you only the beginning parts of sentences. You must listen carefully, then think of a way to finish the sentence."

One day it rained so hard all day that I was not able to . . .

Juanita was sick and couldn't go to the party so she . . .

John threw the ball so far that he couldn't . . .

Mother wanted to go to the store but . . .

When my brother did not come after he was called for dinner . . .

Last night Terry and I wanted to play outdoors, but it was dark so we . . .

Yesterday while I was eating dinner I spilled my milk so I had to . . .

Because our class was very noisy in school, our teacher . . .

Daddy came home so late that he missed dinner with us so he . . .

When I was painting at school, I got some paint on my clothes so . . .

APPENDIX C

INSTRUCTIONS TO TEACHERS

LISTENING RESEARCH STUDY

INSTRUCTIONS FOR TEACHERS OF SPECIFIC LISTENING

PLEASE FOLLOW THIS PROCEDURE DURING THE EIGHT-WEEK STUDY

FEBRUARY 5 - MARCH 30:

1. Teach one lesson per day following the sequence and date indicated on each lesson. Each lesson is designed for a 3 to 5 minute regular time segment and is to be taught to the total class at once.

2. During the course of the study, please do not teach any of the listening lessons printed in the Houghton Mifflin Teacher's Edition Manual on the pages listed in the Index under "Listening Skills."

THANK YOU FOR YOUR COOPERATION. I WILL VISIT YOUR CLASSROOM THROUGHOUT THE COURSE OF THE STUDY TO DELIVER THE SUBSEQUENT LESSONS TO YOU.

Bonnie Schulwitz
Saginaw phone: 793-8989 (Mondays and Thursdays)
East Lansing phone: 355-3846

LISTENING RESEARCH STUDY

INSTRUCTIONS FOR TEACHERS OF NONSPECIFIC LISTENING

PLEASE FOLLOW THIS PROCEDURE DURING THE EIGHT-WEEK STUDY

FEBRUARY 5 - MARCH 30:

1. Provide a 3 to 5 minute time segment OR combine the daily time to total 15 to 25 minutes per week for nonspecific listening for your total class. Choose from the following:

   Listening to a story, a folktale, a fable, or fairytale
   Listening to poetry
   Listening to a recording
   Listening to a song (voice or instrument)
   Listening to tape recordings
   Listening to conversations
   Listening to reports

   PLEASE NOTE: These listening experiences are "nonspecific" in that we are not asking the children to listen for any specific purpose. This will be your guideline for determining possible listening experiences.

2. During the course of the study, please do not teach any of the listening lessons printed in the Houghton Mifflin Teacher's Edition Manual on the pages listed in the Index under "Listening Skills." Example: Page 73, Lions Teachers Edition, "Comprehension Practice."

THANK YOU FOR YOUR COOPERATION. I WILL VISIT YOUR CLASSROOM THROUGHOUT THE COURSE OF THE STUDY TO ANSWER ANY QUESTIONS WHICH MAY ARISE.

Bonnie Schulwitz
Saginaw phone: 793-8989 (Mondays and Thursdays)
East Lansing phone: 355-3846

LISTENING RESEARCH STUDY

INSTRUCTIONS FOR TEACHERS OF CONTROL CLASSROOMS

PLEASE FOLLOW THIS PROCEDURE DURING THE EIGHT-WEEK STUDY

FEBRUARY 5 - MARCH 30:

1. During the course of the study, please do not teach any of the listening lessons printed in the Houghton Mifflin Teacher's Edition Manual on the pages listed in the Index under "Listening Skills."

THANK YOU FOR YOUR COOPERATION. I WILL VISIT YOUR CLASSROOM THROUGHOUT THE COURSE OF THE STUDY TO ANSWER ANY QUESTIONS WHICH MAY ARISE.

Bonnie Schulwitz
Saginaw phone: 793-8989 (Mondays and Thursdays)
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APPENDIX D

WINER CALCULATION

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WINER CALCULATION

Before the analysis of covariance could be performed, a score had to be estimated for the class that was not administered the pretest. The method described by Winer was used to obtain this estimate.

Assuming a score is missing in the ij^{th} cell, an estimate of the mean of this cell is calculated in the following way:

$$\bar{X}_{ij} = \bar{X}_{\cdot j} + \bar{X}_{i\cdot} - \bar{X}$$

In this computation

$\bar{X}_{\cdot j}$ is the mean of the scores in the j^{th} column (excluding values in the ij^{th} cell)

$\bar{X}_{i\cdot}$ is the mean of the scores in the i^{th} row (excluding values in the ij^{th} cell)

$\bar{X}$ is the grand mean of the scores from all cells except those in the ij^{th} cell.

Once an estimate has been obtained for the mean of the cell, the missing score, b, is calculated in the following way:

$$b = 2\,\bar{X}_{ij} - b_{ij}$$

where b_{ij} is the known pretest value in the ij^{th} cell.

Table D-1 shows the pretest scores from which the value for b was obtained.

Table D-1.--Pretest Scores.

	T_1	T_2	C
H	19.84	6.75	11.42
M	8.65 8.83 9.92	12.78 10.28 10.73	11.67 12.54 10.65
L	11.60 9.34	8.41 15.90	13.55 b

For the data in this study i = 3 and j = 3. The following is a summary of the computation of b:

$$\bar{X}_{.3} = 11.57$$

$$\bar{X}_{3.} = 11.31$$

$$\bar{X} = 11.21$$

$$\bar{X}_{ij} = 11.57 + 11.31 - 11.21 = 11.67$$

$$b = 2(11.67) - 13.55 = 9.79$$

APPENDIX E

LETTERS OF TRANSMITTAL

November 15, 1972

Dr. William Kritzmire
Assistant Superintendent--Elementary Education
Saginaw Public Schools
550 Millard Street
Saginaw, Michigan 48601

Dear Dr. Kritzmire:

As you know, I am presently on leave from Central Michigan University for the purpose of completing requirements for my Ph.D. Degree in Elementary Education (Reading and Language Arts) at Michigan State University.

The proposal for my dissertation has been approved by my doctoral committee. After a careful consideration of possible populations for the research, I am writing to inquire as to the feasibility of utilizing the Saginaw elementary schools.

I am certain that any request of this nature must not receive perfunctory treatment. Therefore, I am enclosing a complete copy of my proposal for your examination.

The study has been designed to fit into the normal school day. The direct listening activities prepared for the teachers require only an average of 3 to 5 minutes per day. Since these lessons will be prepared in detail for the teachers, they will not be making a major time commitment. There are two tests to be administered, a pretest and a posttest, that require approximately 30 minutes each.

As you realize, in order for any type of research to have an impact, an adequate size sample is necessary. For this study, nine to eighteen classes of second grade children would be necessary.

I will be willing to meet with teachers to explain the total program as well as visit schools during the duration of the study.

I am looking forward to answering any further questions at our scheduled meeting on December 4. Thank you very much for your time and consideration.

Most sincerely,

Bonnie Schulwitz

December 12, 1972

Dear Principal:

As a doctoral candidate in Elementary Education at Michigan State University, I am presently planning a research study which forms the basis of my dissertation, entitled "An Investigation of the Effect of Instruction in Listening Upon the Reading Comprehension of First Grade Pupils." After having conferred initially with Dr. Kritzmire about utilizing a number of the Saginaw elementary schools, I am writing to seek your cooperation in this research.

The following serves as a brief synopsis of my proposed study. The purpose is to determine the effect of listening instruction upon the reading comprehension of first grade children. The design involves the utilization of approximately eighteen classrooms within three categories: instruction in listening for a purpose, instruction in listening without a specific purpose, and control. A random assignment of classrooms will be made to these categories.

The entire design has been conceived to fit into the regular school day without any disruption of each teacher's normal teaching pattern. The direct listening activities, prepared for the teachers, require only an average of three to five minutes per day. Since these lessons will be prepared in detail for the teachers, they will not be making a major time commitment. There are two tests to be administered, a pretest and a posttest, that require approximately thirty minutes each.

I am looking forward to meeting you on January 4 to explain the study in greater detail and to answer any specific questions you may have.

Sincerely yours,

Bonnie Schulwitz