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GRADUATE COLLEGE

THE EFFECTS OF DIRECTED AND NONDIRECTED READING ON SIXTH-GRADE STUDENTS' READING COMPREHENSION SKILLS

A DISSERTATION

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GARY LEE SHRECK

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1974

THE EFFECTS OF DIRECTED AND NONDIRECTED READING

ON SIXTH-GRADE STUDENTS' READING

COMPREHENSION SKILLS

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THE EFFECTS OF DIRECTED AND NONDIRECTED READING ON SIXTH-GRADE STUDENTS' READING COMPREHENSION SKILLS

CHAPTER I

INTRODUCTION

Most basal textbooks used in elementary school advocate directed reading in spite of the fact that few studies yield information on the usefulness of directed reading in the elementary school. A great amount of time and effort is spent designing basal texts with purpose-setting questions and motivational comments to be used by the teacher before students read the story. These questions and remarks are designed to help the students grasp the general content of what is being read. Harris makes the following comment in the teacher's manual about them:

> The Guide will present purpose-setting questions for each selection. The answers are to be handled orally in discussion. Appropriate answers and suggestions for discussion are also provided in the Guide. The purpose-setting questions give the child a direction as he reads the selection. They are designed to help him grasp the general content of what he is reading as well as to alert him to the fact that there are various purposes for reading.[1]

An investigation of manuals of other publishing companies reveals suggestions for teachers to use prior to having the students

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[1]Albert J. Harris, Teacher's Annotated Edition and Guide to Accompany Into New Worlds (New York: The Macmillan Company, 1970), p. 37.

read each story. Though some do not have specific questions they use comments to accomplish the direction. Weiss and Hunt stated, "Background information is given and interests are stimulated before silent reading is assigned."[2]

The assumption that this direction before the story helps the students is made by most, if not all authors of basal texts. Yet, when Goudey[3] used 300 fourth-graders in a study directing the reading of the experimental groups and not directing the reading of the control groups on one story, his results were those reading under nondirected conditions, scored significantly better than those under directed conditions.

Not only have those writing material made this assumption, but it is stressed in professional textbooks. Teachers in training are told this is the way to approach a selection which results in much time being spent using this approach. Yet, Goudey's study indicated that presenting questions before a selection is read slows the pupils' reading without increasing his comprehension.

One of the most recent books for those preparing to be teachers makes the type assumption that you find in most:

> Comprehension of the selection may be further increased by assuring that the children have sufficient background, vocabulary preparation, and motivation before they begin to read. Many teachers find that children's understanding of assigned

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[2]Bernard Weiss and Lyman C. Hunt, Teacher's Edition Take Off With Books (New York: Holt, Rinehart, and Winston, Inc., 1973), p. 5.

[3]Charles E. Goudey, "Reading-Directed or Not." Elementary School Journal, LXX, No. 5 (1970), 245.

> reading selections can be increased by following these four instructional steps: . . .
> . . . . . .
> 3. Provide specific purpose or motivations for reading the selection.[4]

This study investigated an assumption that has rarely been challenged. Should this study cast serious doubt on the value of the direction before reading a selection, adjustments in teaching method might be in order.

Statement of the Problem

The problem was to determine if there were significant differences in the comprehension scores of sixth-graders who were taught using oral directed, written directed, and nondirected approaches to basal text stories. It was also determined if the sex or home school of the student influenced the effectiveness of these approaches. The primary questions investigated in the present study were as follows.

(1) Does an oral directed or written directed method of introducing reading selections improve the students' reading comprehension more than a nondirected technique? (2) If so, does oral directed reading improve students' reading comprehension more than written directed reading? (3) If different methods of introducing basal text stories vary in their degree of effectiveness with sixth-grade students, does the effectiveness vary as it is used in different schools? (4) Are there differences in reading comprehension taught by the three teaching techniques for the male and female students?

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[4]Frank B. May, To Help Children Read, Mastery Performance Modules for Teachers in Training (Columbus, Ohio: Charles E. Merrill, 1973), p. 224.

Purpose of the Study

The purpose of the study was to determine the effects of three different methods of introducing stories in basal texts on the reading comprehension skills of elementary school students. By comparing gains in reading comprehension skills it was determined which of the three techniques, if any, of introducing stories was the most effective during the time period involved and with the sixth-grade students included in the experiment. The study was conducted so that the results might verify or question the value of direction before stories.

Hypothesis

In order to be able to make definitive statements and arrive at defensible conclusions, it was necessary to state and statistically test a null hypothesis. The general null hypothesis tested was as follows:

> There are no statistically significant differences among the posttest scores from the reading comprehension subtest of the Gates-MacGinitie Reading Test (Survey D: Form 2M) as recorded for both sexes of sixth-grade students from four elementary schools in Putnam City, after they had been taught either by oral directed reading, written directed reading, or nondirected reading.

The general null hypothesis stated above was reduced to several sub-hypotheses as follows:

1. There is no statistically significant difference between posttest scores in reading comprehension of those students taught by oral directed reading and students taught by written directed reading.

2. There is no statistically significant difference between posttest scores in reading comprehension of those students taught by oral directed reading and students taught by non-directed reading.
3. There is no statistically significant difference between posttest scores in reading comprehension of those students taught by nondirected reading and students taught by written directed reading.
4. There is no statistically significant difference between post-test scores in reading comprehension of boys taught by oral directed reading and girls taught by oral directed reading.
5. There is no statistically significant difference between post-test scores in reading comprehension of boys taught by written directed reading and girls taught by written directed reading.
6. There is no statistically significant difference between post-test scores in reading comprehension of boys taught by nondirected reading and girls taught by nondirected reading.
7. There is no statistically significant difference between post-test scores in reading comprehension of those boys taught by oral directed reading and boys taught by written directed reading.
8. There is no statistically significant difference between post-test scores in reading comprehension of those boys taught by nondirected reading and boys taught by written directed reading.

9. There is no statistically significant difference between posttest scores in reading comprehension of those boys taught by oral directed reading and boys taught by nondirected reading.
10. There is no statistically significant difference between posttest scores in reading comprehension of those girls taught by oral reading and girls taught by written directed reading.
11. There is no statistically significant difference between posttest scores in reading comprehension of those girls taught by oral directed reading and girls taught by nondirected reading.
12. There is no statistically significant difference between posttest scores in reading comprehension of those girls taught by nondirected reading and girls taught by written directed reading.
13. There is no statistically significant difference between posttest scores in reading comprehension of those students of school A taught by oral directed reading and students of school B taught by oral directed reading.
14. There is no statistically significant difference between posttest scores in reading comprehension of those students of school A taught by written directed reading and students of school B taught by written directed reading.
15. There is no statistically significant difference between posttest scores in reading comprehension of those students of school A taught by nondirected reading and students of school B taught by nondirected reading.

16. There is no statistically significant difference between posttest scores in reading comprehension of those students of school A taught by oral reading and students of school C taught by oral directed reading.
17. There is no statistically significant difference between posttest scores in reading comprehension of those students of school A taught by written directed reading and students of school C taught by written directed reading.
18. There is no statistically significant difference between posttest scores in reading comprehension of those students of school A taught by nondirected reading and students of school C taught by nondirected reading.
19. There is no statistically significant difference between posttest scores in reading comprehension of those students of school A taught by oral directed reading and students of school D taught by oral directed reading.
20. There is no statistically significant difference between posttest scores in reading comprehension of those students of school A taught by written directed reading and students of school D taught by written directed reading.
21. There is no statistically significant difference between posttest scores in reading comprehension of those students of school A taught by nondirected reading and students of school D taught by nondirected reading.
22. There is no statistically significant difference between posttest scores in reading comprehension of those students

of school B taught by oral directed reading and students of school C taught by oral directed reading.

23. There is no statistically significant difference between posttest scores in reading comprehension of those students of school B taught by written directed reading and students of school C taught by written directed reading.
24. There is no statistically significant difference between posttest scores in reading comprehension of those students of school B taught by nondirected reading and students of school C taught by nondirected reading.
25. There is no statistically significant difference between posttest scores in reading comprehension of those students of school B taught by oral directed reading and students of school D taught by oral directed reading.
26. There is no statistically significant difference between posttest scores in reading comprehension of those students of school B taught by written directed reading and students of school D taught by written directed reading.
27. There is no statistically significant difference between posttest scores in reading comprehension of those students of school B taught by nondirected reading and students of school D taught by nondirected reading.
28. There is no statistically significant difference between posttest scores in reading comprehension of those students of school C taught by oral directed reading and students of school C taught by oral directed reading.

29. There is no statistically significant difference between posttest scores in reading comprehension of those students of school C taught by written directed reading and students of school D taught by written directed reading.
30. There is no statistically significant difference between posttest scores in reading comprehension of those students of school C taught by nondirected reading and students of school D taught by nondirected reading.

Definition of Terms

There are several terms which have been operationally defined in order to clarify any misconceptions and avoid multiple interpretations in the narrative of the study. The terms defined and their definitions as they are being used in the study are as follows:

1. Reading Comprehension/Reading Comprehension Skills: The understanding of materials read as measured by the comprehension subtest of the Gates-MacGinitie Reading Test (Survey D: Forms 1M and 2M).
2. Basal Reader/Basal Reading Test: In the study the basal reader was the Keys to Reading series published by the Economy Company. Lavender Skywriters is the title of the sixth-grade book in this series.
3. Written Directed Reading (Method 1): A technique for teaching reading whereby the teacher wrote on a chalkboard or overhead projector the "purpose-setting" questions and made comments suggested by the teacher's manual immediately preceding the reading of a selection in the basal reading text.

4. Oral Directed Reading (Method 2): A technique for teaching reading whereby the teacher asked students the "purpose-setting" questions and made comments suggested by the teacher's manual immediately preceding the reading of a selection in the basal reading text.
5. Nondirected Reading (Method 3): A technique for teaching reading whereby the teacher completely omitted the "purpose-setting" questions and comments suggested by the teacher's manual preceding each reading selection in the basal reading text.

Assumptions

1. The test scores obtained on the Gates-MacGinitie Reading Test were valid for each of the subjects.
2. The subjects were representative of sixth-grade students attending the Putnam City Public Schools.
3. The "purpose-setting" questions and the comments suggested by the teacher's manual of Lavender Skywriters are representative of direction given before reading stories in basal texts.

Limitations of the Study

1. The data collected were obtained from sixth-grade students in an urban area attending the Putnam City Public Schools.
2. Only students in the schools selected according to the criteria established were included in the study.

CHAPTER II

REVIEW OF THE LITERATURE

The purpose of this chapter is to present the views of reading authorities and the findings of research that concentrate upon giving direction before reading and its effect on the comprehension of the material. Sex differences in reading are also discussed giving justification for designing the study to compare boys and girls separately.

A brief discussion of the opinions of reading authorities is given to illustrate the importance placed upon directing reading. Second, selected studies in which directing the reading of students has been used as the major variable are cited. Then studies related to sex differences in reading are presented.

Opinions of Reading Authorities

Many authorities suggest that direction be given before a story is read. This direction may be in the form of a general motive question or comment or it may be in the form of specific purposes and questions. Such authorities as Dechant,[1] Russell,[2] and Stauffer[3]

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[1]Emerald V. Dechant, Improving the Teaching of Reading (2nd ed.; Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1970), pp. 401-02.

[2]David H. Russell, Children Learn to Read (2nd ed.; Boston: Ginn and Co., 1961), p. 326.

[3]Russell G. Stauffer, Teaching Reading as a Thinking Process (New York: Harper and Row, 1969), pp. 24-25.

recommend that purpose for reading be established prior to reading. Betts referred to this direction before reading as "mind set."

> Preparation or orientation for a given story usually means the immediate development of one study by stimulating interest, desire and enthusiasm. . . . Creating a mind-set for the thought of the unit is the first task of the teacher. . . . Skillful direction of this part of a directed reading activity gives the group a mind-set and feeling for the story. Readiness for comprehension, or understanding, should be the keystone of this part of a directed reading activity.[4]

In referring to this direction as a "readiness for comprehension" Betts points out the importance he places on it. He and others feel that questioning students before they read a passage is very important for setting the purposes for reading. Especially those who advocate the use of a basal text as a method of teaching reading propose giving direction. In advocating directed reading Russell[5] and Smith[6] specifically mention the inclusion of questions as a necessary means for setting the purposes for reading and comprehension. In discussing the basal text approach Austin and Morrison state,

> Although no two series agree perfectly on the details of methods, the similarities far outweigh the differences. . . . The first reading of the selection is usually stimulated by questions which give the children purposes for reading.[7]

There are those basal texts which give the teacher a list of questions before the story. Others use background information to aid

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[4]Emmett Albert Betts, Foundations of Reading Instruction (New York: Longmans, Green and Co., 1965), pp. 498-99.

[5]Russell, Children Learn to Read, p. 153.

[6]Nila Banton Smith, Reading Instruction for Today's Children (Englewood Cliffs: Prentice-Hall, Inc., 1963), p. 268.

[7]Mary C. Austin and Coleman Morrison, The First R: The Harvard Report on Reading in Elementary Schools (Cambridge: Harvard University Press, 1963), p. 54.

in making the material more meaningful. Stauffer wrote that " . . . purposes or questions or set represent the directional and motivational influences that get a reader started keep him on course, and produce the vigor and potency and push to carry him through to the end."[8]

Spache and Spache based their statement on research in the area when they wrote, " . . . attempting to direct children's reading to improve comprehension by prereading questions does not have the expected results."[9] Yet, Heilman wrote, "Studies indicate that questions that are considered prior to the actual reading, have a salutory effect on both learning and retention."[10]

In discussing "Axioms or Myths in Reading Instruction" Miller explored the idea that a reader must be interested in the material to learn. Since creating interest is involved in directing reading, his comments are appropriate to this discussion.

> The second axiom states that the reader (the one reading) must be interested and the material must be interesting in order for learning to take place. Almost all books in the teaching of reading have a section devoted to interest. Some of the writers state that the child will not learn to read unless he is interested in the reading art and the material used for instruction is interesting to him. Thorndike[11] suggests that

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[8]Stauffer, Teaching Reading as a Thinking Process, p. 24.

[9]George D. Spache and Evelyn B. Spache, Reading in the Elementary School (Boston: Allyn and Bacon, Inc., 1969), p. 468.

[10]Arthur W. Heilman, Principles and Practices of Teaching Reading (3rd ed.; Columbus: Charles E. Merrill Publishing Co., 1972), p. 498.

[11]Edward L. Thorndike, The Psychology of Wants, Interests, and Abilities (New York: Appleton-Century, 1935), cited by Wallace D. Miller, "Axioms or Myths," Reading Improvement, X, No. 1 (1973), 41.

interests "have great potency in directing the course of ideas and arts, thought and action occur largely in the service of wants, interests, and attitudes and are stimulated and guided by them." Russell[12] points out that "the reading program is one of the best ways of changing many potential interests to active ones and of developing new and broader interests." Other experts believe that since interests are developed or learned they do not play an important role in the child's learning to read. Rudman[13] claims the available data on interest studies lead to one conclusion: "interests are learned." Since we are only interested in the things we have experienced, we cannot possibly be interested in reading about things outside our field of curiosity. Rudman states further that "we may be curious about a phenomenon, but we never develop an interest in anything until we first learn about it through our curiosity." At least one reading expert Karlin[14] contends that in learning to read the material used is only a vehicle and it matters little whether or not the student is interested in the material per se. To Karlin, the important thing is a sound program of instruction.[15]

This gives us some indication that the usefulness of direction before reading is not universal. However, it is well enough accepted that we see different theoretical approaches used to explain why comprehension is increased by direction.

Ausubel refers to the information given to direct reading as "advance organizers". According to his theory of learning, the function of an advance organizer is to aid in causing new material presented to be meaningful and relevant to students. Ausubel defines advance

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[12]David H. Russell, Children Learn to Read (New York: Ginn and Co., 1961), cited by Miller, "Axioms or Myths."

[13]Herbert C. Rudman, "What We Know About Children's Reading Interests," Reading in Action, ed. by Nancy Larrick (New York: Scholastic Magazines, 1957), pp. 23-25, cited by Miller, "Axioms or Myths."

[14]Robert Karlin, Teaching Reading (Carbondale: Unpublished Paper, 1964), cited by Miller, "Axioms or Myths."

[15]Wallace D. Miller, "Axioms or Myths," Reading Improvement, X, No. 1 (1973), 41.

organizers as "deliberately prepared sets of ideas which are presented to the learner in advance of the body of (meaningful) material to be learned, in order to insure that relevantly anchoring ideas will be available."[16] Unlike other theories, Ausubel's does not rely on motivational factors to enhance learning. It provides a bridge between what the reader already knows and what he is about to learn. It provides a framework for what is to come and prepares the learner for the important points presented. He points out that these advance organizers must be written on "a higher level of abstraction, inclusiveness, and generality than the new material."[17] They also must be "formulated in terms of language, concepts, and prepositions already familiar to the learner."[18]

Ausubel would say that potentially meaningful material is learned when it enters the cognitive structure, interacts with established elements of that structure and is subsumed under a relevant and more inclusive concept. He gives three ways this is done.

> Organizers probably facilitate the incorporability and longevity of meaningfully learned material in three different ways. First, they explicitly draw upon and mobilize whatever relevant anchoring concepts are already established in the learner's cognitive structure and make them part of the subsuming entity. Thus, not only is the new material rendered more familiar and potentially meaningful, but the most relevant ideational antecedents in cognitive structure are also selected and utilized in an integrated fashion. Second, by making

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[16]David P. Ausubel and Floyd G. Robinson, School Learning, An Introduction to Educational Psychology (New York: Holt, Rinehart, and Winston, Inc., 1969), p. 145.

[17]David P. Ausubel, The Psychology of Meaningful Verbal Learning (New York: Grune and Stratton, 1963), p. 214.

[18]Ibid.

> subsumption under specifically relevant prepositions possible, organizers at an appropriate level of inclusiveness provide optimal anchorage. This promotes both initial learning and later resistance to obliterate subsumption. Third, the use of organizers renders unnecessary much of the note memorization to which students often resort because they are required to learn the details of an unfamiliar discipline before having available a sufficient number of key anchoring ideas.[19]

Berlyne[20] indicates that "epistemic curiosity" is the cause of the retention of factual statements when there has been prior exposure to questions that the statements answer. His theory gives major emphasis to problems of motivation. He considers activation, direction, and reinforcement as the motivational phenomena. Activation, or drive, "is conceived as a variable whose value can be raised by a variety of internal and external factors."[21] According to his explanation a group of stimulus properties such as novelty, incongruity, surprisingness, are or can be the external factors which cause conflict with existing cognitive structures within the individual. A state of high drive is created by this conflict. This state can be relieved by the acquisition of knowledge. This condition is described by Berlyne's term "epistemic curiosity."

Berlyne thinks that the amount of interest the learner has influences intellectual kinds of learning. He points out two factors involved in this interest: "sufficient level of mobilization or

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[19]Ausubel and Robinson, School Learning, p. 148.

[20]D. E. Berlyne, "Conditions of Prequestioning and Retention of Meaningful Material," Journal of Educational Psychology, LVII, No. 3 (1966), 128.

[21]Ibid., p. 131.

alertness, of openness to incoming information, of arousal" and "some correspondence between the motivational condition of the learner and what he is being given an opportunity to learn."[22] In relating this to giving direction by asking questions before a story he writes,

> It has been postulated that the questions would generate epistemic curiosity, which would be relieved after subsequent exposure to the corresponding statements and internal rehearsal of them, and that reinforcement from the consequent curiosity reduction would increase the likelihood of recall when the questions were presented again during the test phase.[23]

Rothkopf[24] and Frase[25] propose that "mathemagenic behavior" plays an important role in determining what is learned. They define mathemagenic behavior as "behaviors which give birth to learning." Any action on the part of the student that is relevant to achievement in learning would be mathemagenic behavior, Rothkopf explains.

> The activities in which S engages when confronted with an instructive document determine the character of the effective stimulation that results from this confrontation and so, in turn, determine what will be learned. They play such an important role in learning from written material that I have given them a special name: mathemagenic behavior, i.e., behaviors that produce learning. The name is derived from the Greek roots mathema (that which is learned) and gignesthai (to be born). Mathemagenic behaviors include gross postural adjustment of the head and body toward the printed page and the movement of the eyes over the page. It is assumed that there are other

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[22]D. E. Berlyne, "Curiosity and Education," Learning and the Educational Process, ed. by J. D. Krumboltz (Chicago: Rand McNally and Co., 1965), p. 68.

[23]Berlyne, "Conditions of Prequestioning," p. 128.

[24]Ernst Z. Rothkopf, "The Concept of Mathemagenic Activities," Review of Educational Research, XL, No. 3 (1970), pp. 325-35.

[25]Lawrence T. Frase, "Boundary Conditions for Mathemagenic Behaviors," Review of Educational Research, XL, No. 3 (1970), pp. 337-46.

mathemagenic activities that cannot be observed directly and which must be inferred.[26]

In relating mathemagenic activities to directing reading, Frase and Rothkopf would explain the more efficient learning because of a higher rate of reinforcement. Finding an answer to a question when reading would provide this reinforcement. The reinforcement is accompanied by an increase in attentive behaviors and a subsequent increase in the learning of the content related to the question. The opportunities for reinforcement found in the prequestion would determine the degree of attentiveness and the amount of learning which takes place. These opportunities are made possible by content-related factors found in a prequestion. Reinforcement affects the inspection activities of students; and the inspection activities determine what is learned. In explaining the similarity of this concept to the distinction between nominal and effective stimuli in learning Rothkoph writes,

> Basically the distinction is that the normal stimulus--the stimulus object presented by the experimenter or teacher--is not in simple correspondence to the stimulus that has an effect on the subject. Discrepancies result from characteristics of the receptor surfaces and from acts by the subject or student which transform or elaborate the nominal stimulus. These acts have been called set, attention, orienting reflex, information processing, cognition, rehearsal, and so on. All of these acts fall within the broad boundaries of the term mathemagenic activity, as it is used here. These considerations suggest a functional view of mathemagenic activities, namely that they determine the nature of the effective stimuli in experimental or instructional situations. The character

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[26]Ernst Z. Rothkopf, "Some Theoretical and Experimental Approaches to Problems in Written Instruction," Learning and the Educational Process, ed. by J. D. Krumboltz (Chicago: Rand McNally and Co., 1965), pp. 198-99.

of the effective stimuli, in turn, determines what is learned.[27]

The theories of advance organizers, epistemic curiosity, and mathemagenic activity have all been widely accepted. One does not find them isolated in psychology books but will find them used by reading authorities to explain the value of giving direction before reading. Some will propose a favorite theory and others will point out the strengths of all of them.

Selected Studies

Research in the area of giving direction began as early as 1920. Since that time, there have been many investigators exploring this area. Some have been interested in the general area of direction both by questions and purposes given before reading. Others have been interested in a more restricted concept in this general area. The results of these research studies have been presented beginning with the earlier studies.

In the sixties there was a revived interest in doing research on direction of reading. Berlyne[28] used high school students to demonstrate epistemic curiosity. He referred to some of his previous research[29] showing retention of factual statements to be enhanced by prior exposure to questions that the statements answered. In this study he added to that information by reporting that when subjects

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[27]Rothkopf, "Concept of Mathemagenic Activities," p. 326.

[28]Berlyne, "Conditions of Prequestioning," pp. 128-32.

[29]D. E. Berlyne, "A Theory of Human Curiosity," British Journal of Psychology, XXXXV (1954), 180-91, cited by Berlyne, "Conditions of Prequestioning," p. 128.

were required to guess an answer, the guess condition produced significantly better retention than the no guess condition.

Also, in 1960, Ausubel[30] conducted a study to validate his theory of advance organizers using college students. Both the control and experimental group were presented with introductory materials prior to reading. The control group's introductory material was related to the passage but contained no conceptual material that would assist the reader in organizing the passage. He found significant differences in materials retained by subjects after three days favoring the experimental group whose material contained advance organizers. In other similar studies also using college students Ausubel[31, 32] found results favoring advance organizers.

Torrance and Harmon[33] assigned three different approaches, which they called reading sets, to graduate students to use on reading their assignments. These reading sets were literal comprehension, critical reading, and appreciation. The investigators suggested that the assigned sets functioned like those caused by purposes stated

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[30]David P. Ausubel, "The Use of Advance Organizers in the Learning and Retention of Meaningful Verbal Material," Journal of Educational Psychology, LI, No. 5 (1960), 271.

[31]David P. Ausubel and Donald Fitzgerald, "The Role of Discriminability in Meaningful Verbal Learning and Retention," Journal of Educational Psychology, LII, No. 5 (1961), 266-74.

[32]David P. Ausubel and Mohamed Youssef, "Role of Discriminability in Meaningful Parallel Learning," Journal of Educational Psychology, LIV, No. 6 (1963), 331-36.

[33]E. Paul Torrance and Judson A. Harmon, "Effects of Memory, Evaluative, and Creative Reading Sets on Test Performance," Journal of Educational Psychology, LII, No. 4 (1961), 207-14.

before reading. The students were tested with comprehension questions compatible with the assigned set and the other sets. It was found that the students apparently maintained their reading sets for only half of their reading time. However, there were measurable effects upon the reading comprehension.

Using sixth- and eighth-graders, Snavely[34] compared two types of direction to no direction. One group received purpose statements and the other received marginal notes as they read. This study produced no significant results. The use of organizational devices did not prove to be of any value.

Henderson[35] studied individual purpose setting. He compared the performance of three fifth-grade groups. In one group the student set the purpose, in another the examiner set the purpose and in the third no purpose was set before reading. The investigator found that there is a positive relationship between skill in setting purposes for reading and achievement in reading. He also found that the students who were good at setting purposes did well when the examiner set the purpose. However, he concluded that differences in comprehension tests on the material appeared insignificant when the pupils are directed to set their own purposes, are given purposes or are directed to read independently.

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[34]Alberta Eloise Snavely, "The Effectiveness of Purpose Statements and Marginal Notes as Aides to Reading Comprehension" (unpublished Ph.D. dissertation, State University of Iowa, 1961).

[35]Edmund H. Henderson, "A Study of Individually Formulated Purpose for Reading," The Journal of Educational Research, LVIII, No. 10 (1965), 438-41.

Negative effects of prequestions on reading comprehension were reported by Bloomer and Heitzman.[36] Eighth-grade students were used in this study. Direction to the experimental groups was in the form of a pretest identical to the posttest. The control groups were given only the posttest without direction before reading. A McCall Crabb test lesson was used as the reading text. The students with no pretest had significantly higher scores on the posttest than the students who had a pretest. The hypothesis of Bloomer and Heitzman was that the pretest basically reduces the tension on the individual, reducing his motivation to learn.

The effects on comprehension of guiding questions, motivating questions, and no questions before reading were investigated by Ballard.[37] He found that the guiding questions were best for fourth- and fifth-grade students for understanding both the material relevant to the questions and the whole selection. Motivating questions were no better than reading without questions. The guiding questions were equally effective for students of all reading achievement levels.

Rothkopf[38] using university students, compared the effectiveness of presenting questions prior to reading a passage with that of

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[36]Richard H. Bloomer and Andrew J. Heitzman, "Pre-testing and the Efficiency of Paragraph Reading," Journal of Reading, VIII, No. 4 (1965), 219-23.

[37]Grady L. Ballard, "The Effect of Guiding and Motivating Questions upon the Reading Comprehension of Fourth and Fifth Grade Pupils," Journal of Reading, X, No. 3 (1966), 175-76.

[38]Ernst Z. Rothkopf, "Learning from Written Instructive Materials: An Exploration of the Control of Inspection Behavior by Test-Like Events," American Educational Research Journal, III, No. 4 (1966), 247.

presenting questions only at the conclusion of reading a passage. He found that prequestion subjects performed at the same level as postquestion subjects when comprehension of question-specific content was considered. However, when general test performance was considered, the comprehension scores of postquestion subjects were significantly higher than those of the prequestion subjects. This would indicate that questions placed before reading a passage limits the information that students look for as they read.

Smith[39] suggested that purpose influences the reader's mental set and determines what the reader intends to get from a selection. Good and poor high school readers were directed to read a selection for details and for general impressions. Smith studied the students' responses to questions on general impressions and details after reading for each purpose. She found that the directions had no differential effects for either good or poor readers.

Using college students Frase[40, 41] studied the optimal placement of questions in various prose selections. He reasons that it would seem that students should do better if they had the opportunity to look at the questions before they began to read. The results

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[39]Helen K. Smith, "The Responses of Good and Poor Readers When Asked to Read for Different Purposes," Reading Research Quarterly, III, No. 1 (1967), 53-83.

[40]Lawrence T. Frase, "Learning from Prose Material: Length of Passage, Knowledge of Results, and Position of Questions," Journal of Educational Psychology, LVIII, No. 5 (1967), 266-72.

[41]Lawrence T. Frase, "Effect of Questions, Location, Pacing, and Mode upon Retention of Prose Material," Journal of Educational Psychology, LIX, No. 4 (1968), 244-49.

indicated, however, that an overall retention of the prose material was highest in those situations when the students saw the questions after they had read the relevant material. This was true for both specific and general retention. He found presenting questions before paragraphs had the least helpful effect upon retention.

Jerrolds[42] used ninth-graders to see if advance organizers were beneficial with that age student. He also used what he called modified advance organizers which were another form of direction before reading but did not fit Ausubel's definition. Jerrolds found no significant difference in retention between the effects of the advance organizers and modified advance organizers. Neither was there any significant difference indicated between the effects of the direction and no direction.

Third-graders were used in a study which Fincke[43] conducted. All students were given two different forms of an informal reading inventory. One form had purpose-setting questions before each passage and the other did not. Students' performance on both inventories was compared. He reported the effects of factual and emotionally appealing questions. He found that reading with factual prequestions resulted in significantly higher comprehension scores. He also found that emotionally appealing prequestions did not affect reading comprehension.

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[42]Bobby Wallace Jerrolds, "The Effects of Advance Organizers in Reading for the Retention of Specific Facts" (unpublished Ph.D. dissertation, University of Wisconsin, 1967).

[43]William Munn Fincke, "The Effect of Asking Questions to Develop Purposes for Reading on the Attainment of Higher Levels of Comprehension in a Population of Third Grade Children" (unpublished Ed.D. dissertation, Temple University, 1968).

Three groups of fifth-grade students were subjects in a study by Noakes.[44] The control group was given no direction before reading a selection. One experimental group was given the ten posttest questions before reading. The third group was also given the questions but were also given four choices as answers to the questions. They chose an answer before reading the story and then took the same posttest after reading the selection. Noakes found no significant difference when comparing the posttest results of the three groups.

In 1970 Peeck[45] conducted a study concerning the effects of a set of prequestions on immediate and delayed retention test scores. He compared the results of the tests of prequestion groups with those of reading only control groups. One reading control group had extra time equal to the time given to the prequestion groups to deal with the questions. The other control group had the same amount of time to read as the prequestion groups. On the delayed retention test Peeck found that the prequestion groups learned significantly more question-related material than the reading-only control group. However, they retained significantly less of the other content of the passage than the extended reading time control group. The extended time group had about the same total test scores as the prequestion groups. Peeck concluded that prequestions were useful when the objective was

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[44]Ann Marie Noakes, "The Effects of Conditions of Prequestioning upon Comprehension of Fiction and Non-Fiction Selections with Fifth Grade Children" (unpublished Ph.D. dissertation, University of Delaware, 1969).

[45]J. Peeck, "Effect of Prequestions on Delayed Retention of Prose Material," Journal of Educational Psychology, LXI, No. 3 (1970), 241-46.

retention of specific material, but when the objective was more balanced learning the use of prequestions did not seem advisable.

Carrozi[46] conducted a study using above average high school students. He compared the instructional formats of questions before, questions after, and no questions. He found that with reading time fixed at a short interval there were no differences in short or long term retention of incidental or relevant materials for any of the three questioning techniques employed. With reading time extended, however, there were significant differences in short and long term retention of incidental materials favoring the group which did not receive prequestions. He also found that placement of questions before reading did not facilitate retention of materials related to the prequestions.

Another study that showed negative effects of prequestions on reading comprehension was the one by Goudey.[47] He used fourth-graders directing the reading of one group with questions prior to reading and giving the other no direction. In analyzing the data he found that subjects reading under nondirected conditions performed in reading comprehension significantly better than did subjects reading under directed reading conditions. This finding was consistent for subjects identified as high, middle and low reading achievers. There were no differences when reading for appreciation between the groups.

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[46]John F. Carrozi, "The Effects of Reading Time, Type of Question and Instructional Format on Short and Long-Term Retention of Relevant and Incidental Prose Material" (unpublished Ph.D. dissertation, University of Delaware, 1970).

[47]Charles E. Goudey, "Reading-Directed or Not?", The Elementary School Journal, LXX, No. 5 (1970), 245-47.

Estes[48] studied the effects of prereading techniques, specifically "advance organizers" and "structured overview" by comparing retention and comprehension of reading material in high school students with and without prereading treatment. The advance organizer was a brief passage giving a general and inclusive introduction to material to be read. A structured overview was student-teacher interaction dealing with terms and concepts related to the material to be read. Results showed no statistically significant differences between groups.

Schnell[49] did a study to determine if use of an organizer, which was a focus-type material in paragraph form, would significantly affect reading comprehension of prose material. College freshmen were used in this study. They were divided into four groups. One received no organizer, one the organizer before the material, one after, and the fourth before and after. Schnell found that using the organizer, regardless of placement, resulted in higher scores than those obtained by the control group. The postorganizer group scored higher than the preorganizer group or preorganizer and postorganizer group.

A study to examine the effect of written prequestions on the reading comprehension scores of two groups of fifth-graders was conducted by Chadwick.[50] The STEP-Reading Test was used as material.

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[48]Thomas H. Estes, "The Effect of Advance Organizers Upon Meaningful Reception Learning and Retention of Social Studies Content" (Paper presented at the National Reading Conference, Tampa, Florida, Dec., 1971).

[49]Thomas R. Schnell II, "The Effect of Organizers on Reading Comprehension of Prose Materials" (unpublished Ph.D. dissertation, Southern Illinois University, 1972).

[50]Sandy Carroll Chadwick, "The Effect of Written Prequestioning on Reading Comprehension of Fifth Grade Students" (unpublished Ed.D. dissertation, Ball State University, 1972).

Comparisons were made based on reading level and on intelligence level. It was found that the students with no questions preceding the reading did significantly better in reading achievement. It was observed that regardless of whether students were compared on the basis of intelligence or reading achievement, the means of those groups not receiving the written questions before reading were in every instance higher than those of the groups receiving the written questions before reading. The differences were not always significant.

From the sources cited above it is apparent that research designed to examine the effectiveness of directed reading in comparison to nondirected reading has generally produced divergent findings. Superior reading performance has been observed when reading was directed as well as when it was not directed. In none of the research has there been an effort to find the value of this procedure as part of a teaching method. That is, to examine the effect of using direction with the basal stories each day over a period of time. Neither has any study made a distinction between the effectiveness of directed reading with boys and girls as separate groups.

Sex Differences in Reading

There is much evidence that the reading abilities and interests of boys and girls differ. This would indicate the methods used in teaching reading to them might differ in effectiveness. Boys and girls differ in many ways. Certain behavioral differences are evident as early as one year of age. Goldberg and Lewis[51] pointed out that boys

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[51]Susan Goldbert and Michael Lewis, "Play Behavior in the Year-old Infant: Early Sex Differences," Child Development, XL, No. 1 (1969), 21-31.

are already more active and explorative, while girls are passive and more dependent upon their mothers. In addition, parents have already demonstrated different behavior toward the two sexes.

Harris[52] claimed that from birth on there are detectable sex differences in physiological maturity. Girls reach puberty one and a half year earlier than boys. Girls precede boys in language development. During preschool years boys spend more time on large-muscle activities and girls spend more time on sedentary activities which often help develop good close vision and fine manual skills, such as sewing and doll play.

A very important aspect of this earlier development in relation to reading are the language skills. Numerous studies have found girls to develop speech ahead of boys, to articulate more clearly, to use sentences ahead of boys, to use less slang, and to have a larger vocabulary.[53, 54, 55, 56] McCarthy[57] also indicated that boys are the victims of speech defects at a significantly greater proportion than girls.

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[52]Albert J. Harris, How to Increase Reading Ability (5th ed.; New York: David McKay Company, Inc., 1970), p. 22.

[53]Dorothea A. McCarthy, "Some Possible Explanations of Sex Differences in Language Development and Disorders," Journal of Psychology, XXXV, First Half (1953), 155-60.

[54]Dorothea A. McCarthy, "Language Development in Children," A Manual of Child Psychology, ed. by Leonard Carmichael (2nd ed., New York: Wiley, 1954), pp. 492-630.

[55]Terence Moore, "Language and Intelligence: A Longitudinal Study of the First Eight Years: Patterns of Development in Boys and Girls," Human Development, X, No. 2 (1967), 88-106.

[56]Mildred C. Templin, Certain Language Skills in Children: Their Development and Interrelationships (Minneapolis: University of Minnesota Press, 1957).

[57]McCarthy, "Possible Explanations."

At the University of Minnesota, Rubin and Balew[58] compared pre-kindergarten and pre-first-grade (second semester kindergarten) boys and girls on measures of school readiness and language development. Their report listed results of testing 638 pre-kindergarten children and 570 pre-first-graders. The Metropolitan Readiness Test was used to measure school readiness. At both the pre-first-grade level and the pre-kindergarten level, girls scored higher in all but word meaning. Pre-first-grade boys fell at the 35th percentile; pre-first-grade girls at the 42nd.

Sex differences in reading are indicated from the USOE First Grade Studies. It was generally found that mean scores were in favor of girls on readiness measures, first-grade achievement tests, and on tests given to the groups that continued the experiments through the second grade. In studying the effect of an intensified and extended reading readiness program Spache, et al., wrote:

> Sex differences favored girls at all levels in the white control population and tended to favor girls at the lower levels of ability among white experimental pupils, sex differences appeared to be overcome or counter balanced by factors in the experimental program.[59]

Wyatt stated "girls in the study seemed better equipped for reading at the beginning of the instruction period, and this advantage

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[58]Rosalyn Rubin and Bruce Balew, "A Comparison of Pre-Kindergarten and Pre-First Grade Boys and Girls on Measures of School Readiness and Language Development" (interim report, unpublished research, University of Minnesota, August, 1968), cited by Jo M. Stanchfield, "The Sexual Factor in Language Development and Reading" (Paper presented to IRA conference, Anaheim, Calif., May, 1970), p. 2.

[59]George D. Spache, et al., "A Longitudinal First Grade Reading Readiness Program," Reading Teacher, XIX, No. 8 (1966), 580-84.

was retained."[60] Hahn[61] Tanyzer and Albert,[62] and Schneyer[63] also found achievement favoring girls. However, some participants such as Sheldon and Lashinger,[64] Fry,[65] Spencer,[66] and Manning[67] concluded there were no sex differences in reading achievement.

In a study of over 13,000 students in grades two through eight, Gates[68] found the mean raw score for girls higher than that for boys on twenty-one comparisons of the Gates Reading Survey. In addition, a "relatively large proportion of boys obtained the lowest scores without a corresponding increase in the number obtaining

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[60]Nita M. Wyatt, "The Reading Achievement of First Grade Boys Versus First Grade Girls," Reading Teacher, XIX, No. 8 (1966), 661-65.

[61]Harry T. Hahn, "Three Approaches to Beginning Reading Instruction--ita, Language Arts, and Basic Readers," Reading Teacher, XIX, No. 8 (1966), 590-94.

[62]Harold J. Tanyzer and Harvey Alpert, "Three Different Basal Reading Systems and First Grade Reading Achievement," Reading Teacher, XIX, No. 8 (1966), 636-42.

[63]J. Wesley Schneyer, "Reading Achievement of First Grade Children Taught by a Linguistic Approach and a Basal Reader Approach," Reading Teacher, XIX, No. 8 (1966), 647-52.

[64]William D. Sheldon and Donald R. Lashinger, "Effect of First Grade Instruction Using Basal Readers, Modified Linguistic Materials, and Linguistic Readers," Reading Teacher, XIX, No. 8 (1966), 576-79.

[65]Edward Bernard Fry, "First Grade Reading Instruction Using the Diacritical Marking System, Initial Teaching Alphabet, and Basal Reading System," Reading Teacher, XIX, No. 8 (1966), 666-69.

[66]Doris U. Spencer, "Individualized First Grade Reading Versus a Basal Reader Program in Rural Communities," Reading Teacher, XIX, No. 8 (1966), 595-600.

[67]John C. Manning, "Evaluation of Levels-designed Visual-auditory and Related Writing Methods of Reading Instruction in First Grade," Reading Teacher, XIX, No. 8 (1966), 611-16.

[68]Arthur I. Gates, "Sex Differences in Reading Ability," Elementary School Journal, LXI, No. 8 (1961), 431-34.

top scores." The results of the study reveal that boys obtain lower mean scores in reading ability throughout elementary school.

In England, Hammond[69] did two identical surveys of reading attainment in 1947 and 1962. Approximately 4,000 boys and 4,000 girls, ages five to eight were tested in the primary schools of Brighton; the results compared reading age with chronological ages. Both times girls, on the average, reached a reading age equivalent to chronological age more quickly than boys. A larger proportion of boys was found to be remedial readers.

Wozencraft[70] selected approximately 10 per cent of all pupils in grade three and 11 per cent of all pupils in grade six from the records of all pupils in Cleveland, Ohio. The sex differences consistently favored the girls, often significantly. She concluded that sex differences were less marked in the high and low intelligence group at grade three.

During the 1940's, one of the largest research projects on sex differences in school achievement was conducted by Stroud and Lindquist.[71] Fifty thousand students from three hundred Iowa schools in grades three through eight were tested with the Iowa Every-Pupil Basic Skills Test. Basic language skills, reading comprehension,

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[69]Dorothy Hammond, "Reading Attainment in the Primary Schools of Brighton," Educational Research, X, No. 1 (1967), 57-64.

[70]Marion Wozencraft, "Sex Comparisons of Certain Abilities," Journal of Educational Research, LVII, No. 1 (1963), 21-27.

[71]J. B. Stroud and E. F. Lindquist, "Sex Differences in Achievement in the Elementary and Secondary Schools," Journal of Educational Psychology, XXXIII, No. 9 (1942), 657-67.

vocabulary, and word-study skills were among the tests given. In all of these language development skills, the girls maintained a consistent, significant superiority over the boys.

Ruddell[72] studied the language patterns of fourth-grade children to determine the effect of children's oral and written language patterns on reading comprehension using passages similar to their oral language structure. It was found that reading comprehension was a function of the similarity of oral patterns of language structure to written patterns of language structure used in reading materials. In this situation the investigator concluded that sex differences were not significantly related to reading comprehension.

Jarvis[73] in comparing sixth-grade girls and boys concluded that girls tend to excel in language arts achievement. Around 700 students were measured with the California Achievement Test Battery. Parsley[74] and others used the California Reading Achievement Test. The first study did not show significant differences between the sexes. There were around 5,000 students involved in grades two through eight. They repeated the study on grades four through eight using the California Achievement Test Battery. This sample totaled 3,551 pupils, and

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[72]Robert B. Ruddell, "An Investigation of the Effect of the Similarity of Oral and Written Patterns of Language Structure on Reading Comprehension," Journal of Reading, IX, No. 6 (1966), 392-93.

[73]Oscar T. Jarvis, "Boy-Girl Ability Differences in Elementary School Language Arts," Childhood Education, XLII, No. 3 (1965), 198-200.

[74]Kenneth M. Parsley, Jr., Marvin Powell, and Henry A. O'Connor, "Further Investigation of Sex Differences in Achievement of Underaverage and Overachieving Students Within Five I.Q. Groups in Grades Four Through Eight," Journal of Educational Research, LVII, No. 5 (1964), 268-70.

generally was very similar to the previous sample. This time sex differences in achievement showed up. Even when the differences were not significant statistically, the differences generally favored the girls. These authors suggested that too much emphasis has been placed on sex differences.

Research as high as the college level indicates that the sex factor continues to exist in performance of language skills after finishing elementary and secondary schooling. Aven and Chrisp[75] tested 1,341 college freshmen in English proficiency. Their research, reported in 1967, revealed that significantly more boys than girls scored below the 50th percentile.

Research has been so conclusive that there is a sex factor favoring girls in reading achievement that authorities have exerted a great amount of energy determining the causes of this difference. It is difficult to say what causes these differences. Several hypotheses have appeared which suggest possible causal factors. Heilman presented some of these factors:

1. Boys and girls mature at different rates and some phases of growth are closely related to reading.
2. The school environment and curriculum at the primary level are more frustrating to boys than to girls.
3. Basal reader materials are less motivating and satisfying to boys than to girls.
4. Most primary teachers are women.
5. Boys are less motivated to learn to read.[76]

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[75]Samuel D. Aven and Marvin Chrisp, "English Proficiency of Males and Females--Is There a Difference?" (unpublished research, Youngstown University, Ohio, 1967), cited by Stanchfield, "Sexual Factor in Language Development," p. 5.

[76]Heilman, Principles and Practices, p. 38-39.

Weintraub[77] claimed that causal problems are very complex and involve cultural, environmental, and maturational factors. A few studies were pointed out which seem to confirm his hypothesis. Maturational factors were considered first. Then environmental factors were considered in two categories, content and method, and secondly a negative relation from female teachers. Last, studies indicating cultural factors were considered.

Anderson, Hughes, and Dixon[78] found that girls learned to read more than six months earlier than boys and with fewer extreme delays pointing out a maturational difference. McCarty[79] stated that girls were statistically superior in language usage and facility in preschool and primary years which helped to develop a firm foundation for learning to read. She suggested that girls' early language superiority results partly from earlier physical maturity.[80] A study by Sinks and Powell[81] covering grades four to eight, found the younger students' reading ability was significantly different favoring the girls. However, in grades six to eight, the pattern varied.

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[77]Samuel Weintraub, "Sex Differences in Reading Achievement," Reading Teacher, XX, No. 2 (1966), 155-65.

[78]Irving H. Anderson, Byron O. Hughes, and W. Robert Dixon, "Age of Learning to Read and its Relation to Sex, Intelligence, and Reading Achievement in the Sixth Grade," Journal of Educational Research, XLIX, No. 6 (1956), 447-53.

[79]McCarthy, "Possible Explanations."

[80]Ibid., p. 157.

[81]Naomi B. Sinks and Marvin Powell, "Sex and Intelligence as Factors in Achievement in Reading in Grades Four through Eight," Journal of Genetic Psychology, CVI, No. 1 (1965), 67-79.

Some have asked, if the cause is maturational why are not the results the same in all areas? It is commonly found that boys at all age levels are generally superior to girls in tasks involving numerical reasoning and spatial relationships.[82, 83]

In Gates'[84] large survey of reading achievement he found that not only are girls' reading scores higher than boys' from third through eighth grade, but that the gap actually increases slightly in the higher grades. He pointed out that this data supports an environmental rather than a physical explanation.

The method used to teach reading or the content of the material used is many times pointed out as the cause. Turner[85] evaluated the intensive use of the SRA (Science Research Association) Reading Laboratory IIa with seventh-graders for its effect on reading achievement. No sex differences were found in reading achievement gain. In direct opposition to this study, Summers[86] evaluated a seventh-grade developmental reading program. The author stated that in almost every comparison analyzed, the females made significantly greater gains than the males.

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[82]Josef E. Garai and Amram Scheinfeld, "Sex Differences in Mental and Behavioral Traits," Genetic Psychology Monographs, LXXVII, Second Half (1968), 169-299.

[83]Lewis M. Terman and Leona A. Tyler, "Psychological Sex Differences," Manual of Child Psychology, ed. by Carmichael, pp. 1064-1114.

[84]Gates, "Sex Differences."

[85]Aaron L. Turner, "Intensive Use of the SRA Reading Laboratory at the Seventh Grade Level," Journal of Reading, IX, Nol 6 (1966), 397-98.

[86]Edward G. Summers, "An Evaluation of Reading Growth and Retention Under Two Plans of Organization for Seventh Grade Developmental Reading," Journal of Reading, X, No. 6 (1967), 385-86.

The method used many times involves the amount of attention the teacher has from the students. Lahaderne[87] reported that school achievement at grade six was related to attention. A similar finding was reported by Cobb[88] for fourth-grade pupils. Turnure and Samuels[89] pointed out when measurements come that late in the child's academic career, one cannot be sure if inattentiveness may not represent avoidance behavior resulting from academic failure. They conducted a similar study with first-graders. The students were observed to determine whether attentiveness (visual orienting behavior or direction of gaze) was related to reading achievement prior to the effects of long-term success-failure school experiences and whether the expected superior reading achievement of girls was related to observed attentiveness in the classroom. It was found that girls were significantly more attentive than boys and achieved higher word recognition scores. After this study Turnure and Samuels concluded, "It should be pointed out to teachers that both high and low achievement appear to be related to attention. Instructional success clearly requires that teachers secure and maintain the attention of all their pupils."[90]

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[87]Henriette M. Lahaderne, "Attitudinal and Intellectual Correlates of Attention: A Study of Four Sixth-Grade Classrooms," Journal of Educational Psychology, LIX, No. 5 (1968), 320-24.

[88]Joseph A. Cobb, "Relationship of Discrete Classroom Behaviors to Fourth-Grade Academic Achievement," Journal of Educational Psychology, LXIII, No. 1 (1972), 75-83.

[89]James E. Turnure and S. Jay Samuels, "Attention and Reading Achievement in First Grade Boys and Girls," (Research Report No. 43, Minnesota Univ., Minneapolis, Dec. 1972).

[90]Ibid., p. 7.

Flaherty and Anderson[91] claimed that the story content of most basal readers is more interesting to girls than to boys. Heilman wrote:

> . . . sterile, repetitious ("look, oh, look, see baby play") vocabulary and the rigid conformist mood, tone, and atmosphere contained in and conveyed by the preprimers, primers and early readers are considerably less challenging to boys than to girls.[92]

Dykstra and Tinney[93] summarized data from the USOE Cooperative Research projects and noted that sex differences in reading achievement in favor of girls are consistent regardless of the method or materials employed. In many of these studies one of the methods used was a basal text approach. This did not give the girls a larger advantage over boys than any other form of reading instruction.

The study by O'Donnel, Griffin, and Norris[94] showed that actual syntactical differences occur between the sexes. Though they could not find a consistent pattern in speech they concluded about printed language, "Numerous differences were observed in structures and functions in the language of boys and girls at the sixth-grade levels studied, and a good many of them were large enough to be statistically

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[91]Rose Flaherty and Howard B. Anderson, "Boys Difficulty in Learning to Read," Elementary English, XLIII, No. 5 (1966), 471.

[92]Heilman, Principles and Practices, p. 39.

[93]R. Dykstra and R. Tinney, "Sex Differences in Reading Readiness--First Grade Achievement and Second Grade Achievement," Reading and Realism, XIII, No. 7 (1969), 623-28.

[94]Roy C. O'Donnel, William J. Griffin, and Raymond C. Norris, Syntax of Kindergarten and Elementary Children: A Transformational Analysis, National Council of Teachers of English, NCTE Committee on Research, Bulletin No. 8, p. 96.

significant." In their book, Reading Rights for Boys, the authors stated:

> Disregarding the restrictions of the printed forms of language, then, and considering only the speech structures of boys and girls, it would seem that sex is not a factor. However, when written language is examined, girls appear to be clearly superior to boys. That each sex is equal to the other in oral language, but that differences occur in the witten form, would indicate strongly that the inferior position of boys is that fault of the instructional program.[95]

Female teachers may compare boys and girls in their classes and give the girls preferred treatment. Several researchers have attempted to measure differences in reading achievement between boys and girls after instruction was provided to sex-segregated groups. Wyatt[96] conducted a study with first-graders by utilizing sex differences as criteria for grouping. No significant differences were found among boys in different teaching approaches. Girls as a group did have higher scores than boys. Wyatt concluded that the lag found among boys appears dependent upon factors other than grouping and teaching approach. Tagatz[97] and Stanchfield[98] both studied sex-segregated grouping. Test results revealed no significant differences in reading achievement. The boys did not learn to read better as a result of such grouping.

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[95]David E. Austin, Velma B. Clark, and Gladys W. Fitchett, Reading Rights for Boys (New York: Appleton-Century-Crofts, 1970), p. 36.

[96]Wyatt, "Reading Achievement," p. 665.

[97]Glenn E. Tagatz, "Grouping by Sex at the First and Second Grade," Journal of Educational Research, LIX, No. 9 (1966), 415-18.

[98]Stanchfield, "Sexual Factor," p. 6.

McNeil[99] wanted to find if an association existed between differential teacher behavior and student performance in beginning reading instruction. An auto-instructional program in reading was presented to 132 children when they were in kindergarten. The children were tested on word recognition afterwards. The same group then enrolled as first-graders and received instruction from female teachers. Again, the students were tested after four months of instruction in addition to being interviewed individually. Boys obtained significantly higher scores than girls after the programmed instruction; however, after exposure to female teachers in the first grade the girls' reading superiority was noted. In addition, analysis of the taped interviews revealed that boys received more negative admonitions than girls and boys were given less opportunity to read. McNeil inferred an association between teacher behavior and poor male performance in reading. It might be noted that McNeil's study could also demonstrate a difference in results from two teaching approaches.

Davis and Slobodian[100] tested by observation to see if teachers do discriminate against boys. They found they do not discriminate against boys during reading instruction. However, they reported that pupils' responses to interview questions showed that pupils perceived both differential teacher treatment (boys receive more negative teacher

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[99]John P. McNeil, "Programmed Instruction Versus Usual Classroom Procedures in Teaching Boys to Read," American Educational Research Journal, I, No. 2 (1964), 113-19.

[100]O. L. Davis, Jr. and June Jonkinson Slobodian, "Teacher Behavior Toward Boys and Girls During First Grade Reading Instruction," American Educational Research Journal, IV, No. 3 (1967), 261-69.

comments) and differential achievement (boys read more poorly than girls). Good and Brophy[101] conducted a similar study and also found that teachers extend equal treatment to boys and girls during reading. They did note more teacher criticism over all areas of classroom life because of "their more frequent disruptive behavior." Again students perceived boys getting more negative treatment during reading. Good and Brophy feel this comes from a generalized halo effect. They concluded, "The fact that girls learn to read faster than boys cannot be traced to teacher behavior during reading groups."

Clap[102] found that teacher sex had no significant effect on the achievement of fifth-grade boys or on the attitudes that they expressed about school and classroom activities. Arnold[103] also provided some information counter to the punitive female teacher theory when he found no difference between marks given by male and female teachers.

The cultural cause is used many times to explain the differences. Probably the most popular study in this area was conducted by Preston[104]

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[101]Thomas L. Good and Jere E. Brophy, "Questioned Equality for Grade One Boys and Girls," Reading Teacher, XXV, No. 3 (1971), 247-52.

[102]Rufus Carrel Clapp, "The Relationship of Teacher Sex to Fifth Grade Boys' Achievement Gains and Attitudes Toward School," (unpublished Ed.D. dissertation, Stanford University, 1967).

[103]Richard Dean Arnold, "The Relationship of Teacher's Sex to Assigned Marks and Tested Achievement Among Upper Elementary Grade Boys and Girls" (unpublished Ph.D. dissertation, University of Minnesota, 1966).

[104]Ralph C. Preston, "Reading Achievement of German and American Children," School and Society, XC, No. 2214 (1962), 350-54.

comparing the reading achievement of German students with that of American students. Fourth- and sixth-grade students were used in both countries. Each group of students took two reading tests. The Frankfurter Test and the Gates Reading Survey were translated so that each pupil took both tests in his native language. When the mean scores were compared, it was found that American girls excelled in reading over American boys. German boys read better than the German girls. He also reported that reading retardation is greater among boys in America and greater among girls in Germany. Preston pointed out that the majority of teachers in Germany are male, which may suggest more of an emphasis in the German culture on reading as a masculine activity.

After Gates' study which was mentioned earlier he noted:

> The usual explanation for the girls' superiority in reading is that they mature earlier. The explanation seems unlikely, for the superiority of the girls appears to be, on the whole, as great in the upper grades as in the lower.[105]

Further support for cultural explanation of the differences has been reported by Anderson[106] who observed that in Japan, where male children are given preferential attention in both home and school, the language development of boys is more advanced than that of girls.

Several researchers have sought concrete evidence that reading is viewed primarily as a feminine activity. Stein and Smithells[107]

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[105]Gates, "Sex Differences," p. 432.

[106]Paul S. Anderson, Language Skills in Elementary Education (New York: The MacMillan Company, 1964), p. 81.

[107]Aletha Huston Stein and Jancis Smithells, "Age and Sex Differences in Children's Sex Role Standards About Achievement," Developmental Psychology, I, No. 3 (1969), 252-59.

found that second-, sixth-, and twelfth-graders, both boys and girls, rated reading as a feminine activity. Kagan[108] found that second- and third-grade children viewed objects commonly found in the classroom as more clearly associated with femininity than with masculinity. Mazurkiewiez[109] found that a very large majority of fathers and sons classified reading as a feminine activity, and that there was a positive correlation between fathers' and sons' opinions about reading. It was also found that boys who classified reading as a feminine activity tended to be slightly less able in reading than those who classified reading as masculine. Dwyer[110] found that children's sex-role standards about reading (their perception of reading as an activity appropriate to their own sex) accounted for a significant amount of the variance in their reading achievement scores. In addition, both boys and girls in grades two through twelve tended to rate reading as an activity appropriate for girls.

The purpose here is not to decide the cause of differences in reading ability between boys and girls but to conclude that there are several possible causes. These could enter into how reading is taught and possibly indicate whether there should be a difference in the way the sexes are taught. In this study the boys and girls are compared

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[108]Jerome Kagan, "The Child's Sex Role Classification of School Objects," Child Development, XXXV, No. 4 (1964), 1051-56.

[109]Albert J. Mazurkiewiez, "Social-Cultural Influences and Reading," Journal of Developmental Reading, III, No. 4 (1960), 254-63.

[110]Carol A. Dwyer, "Children's Sex-role Standards and Sex-role Identification and Their Relationship to Achievement" (unpublished Ph.D. dissertation, University of California, 1972).

in using oral directed, written directed, or nondirected reading. Since there is possibly a difference and the cause cannot be isolated, one method might be better for one sex and another method for the other sex.

CHAPTER III

PROCEDURES OF STUDY

Selection of Schools

Certain elementary school sites within the Putnam City Public School System were chosen to conduct the experiment. Putnam City is a suburban school system in Oklahoma City, Oklahoma with 21,000 students. The schools are neighborhood schools with students coming from predominantly white middle- and upper-middle-class homes. Several criteria were established for selecting the elementary schools. These criteria eliminated most of the thirteen elementary schools available. The criteria used to select the elementary schools were as follows:

1. No ability grouping of sixth-grade students.
2. No "open" concept schools.
3. Sixth grade must be departmentalized.
4. Must have at least three classrooms of sixth-grade students.
5. All three classes must have the same reading teacher.
6. The sixth grade must use the Lavender Skywriters as their basal reading text for their sixth-grade classes.

Nine elementary schools were eliminated. Two were "open" concept schools, one did not have three sixth-grade classes with the same reading teacher, and six had students assigned to classrooms because of ability; but four met the criteria listed. The sixth-grade students from these four elementary schools formed the population used in the

experimental study. The students were randomly placed in classrooms at the beginning of the year.

Selection of Subjects

One of the criteria established and met by the four elementary schools chosen for the study was that they have at least three classes of sixth-grade students. Students from these three classes whose reading comprehension level was unusually low were eliminated to permit all students in the study to be using the same basic text. Those sixth-grade students repeating the sixth grade and those below the 6.0 grade equivalent on the pretest administration of the Gates-MacGinitie Reading Test (Survey D: Form 1M) were eliminated.

The pretests were given during the week of February 4, 1974 and the posttests during the week of May 6, 1974. Each reading teacher gave the tests to their own students following the manual exactly. They used the words indicated in the manual to give instructions. This allowed each student to receive identical instructions.

A search of each student's cumulative folder and the pretest administration of the Gates-MacGinitie showed that the two criteria eliminated several of the students at each school site. Table 1 shows that a total of 306 students were tested for possible inclusion in the study. However, 74 failed to meet the criteria which had been established, and the number of students who qualified was established at 232. These data show that over 26 per cent of the students were eliminated from the group tested. Of the 232 students who qualified, 14 were not available for the posttest.

Instruments

The instrument chosen for measuring the reading comprehension of the student participants was the Gates-MacGinitie Reading Test (Survey D: Forms 1M and 2M). Form 1M of the Gates-MacGinitie was given as a pretest measure of reading comprehension and as a screening device for the study participants. Form 2M was given to determine the posttest measure of reading comprehension.

The reliability and validity of the Gates-MacGinitie seem to be well established. In expressing confidence in the technical manual Wantman writes: [the technical manual] "is excellent and extremely conservative, and the emphasis on practical significance as opposed to statistical significance is commendable."[1] Van Roekel says, "The standardization appears to have been carefully done. The tryout sample and norming group appear to have been quite adequate."[2] Powell states, "As compared with other general reading tests, the Gates-MacGinitie Reading Tests would provide usable data on achievement in comprehension, vocabulary, and speed."[3]

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[1]Morey J. Wantman in Oscar K. Buros, ed., Sixth Mental Measurement Yearbook (Highland Park, N. J.: The Gryphon Press, 1965), p. 1066.

[2]Byron H. Van Roekel in Oscar K. Buros, ed., Seventh Mental Measurement Yearbook (Highland Park, N. J.: The Gryphon Press, 1972), p. 1082.

[3]William Powell, "Gates-MacGinitie Reading Test," Journal of Educational Measurement, VI (Summer 1969), 114, quoted in Oscar K. Buros, ed., Seventh Mental Measurement Yearbook (Highland Park, N. J.: The Gryphon Press, 1972), p. 1083.

TABLE I

NUMBER OF SIXTH-GRADE STUDENTS IN EACH GROUP BOTH BEFORE AND AFTER PRELIMINARY SCREENING WAS COMPLETED

SCHOOL SITES		Oral Directed Teaching Method		Written Directed Teaching Method		Nondirected Teaching Method		Totals		GRAND TOTAL NUMBERS
		Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	
LAKE PARK	Before*	13	9	13	13	13	12	39	34	73
	After**	10	7	10	11	10	11	30	29	59
TULAKES	Before	11	16	16	10	11	18	38	44	82
	After	7	10	13	10	11	13	31	33	64
WINDSOR HILLS	Before	12	12	14	9	15	7	41	28	69
	After	9	8	11	8	13	7	33	23	56
HILLDALE	Before	17	12	14	13	14	12	45	37	82
	After	11	7	9	8	9	9	29	24	53
TOTALS	Before	53	49	57	45	53	49	163	143	306
	After	37	32	43	37	43	40	123	129	232

*Number of students BEFORE the screening procedures were conducted
**Number of students AFTER the screen procedures were completed

The Technical Manual[4] reports the alternate form reliability for the comprehension section at .87 for grade six. The grade six comprehension section split-half reliability is reported to be .95. The correlation between the grade six comprehension section and the verbal I.Q. score on the Lorge-Thorndike is .77.

The basal reader used by the Putnam City Schools in sixth grade is Lavender Skywriters published by the Economy Company. The series is one of the seven state-adopted texts in Oklahoma and is used by 320 school systems in Oklahoma.

Preparation of Lesson Plans

Three questions were prepared over each story. These were used in the lesson plans for the two directed groups. The questions asked in manuals which use a more specific questioning than the Economy series were used as a pattern. A panel of reading specialists was used to evaluate the questions. The three member panel individually marked each question acceptable or not acceptable. Any question which was not marked acceptable by all three members was eliminated. Each member had his own set of questions and did not communicate with the other members. Substitute questions were evaluated by the same panel. Acceptable was defined as a question which one would expect to be used by reading experts and teachers' manuals as a purpose-setting question before students read the story.

Directing reading falls into two general categories, a more general motivation and specific purpose-setting questions over the

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[4]Arthur I. Gates and Walter H. MacGinitie, Technical Manual Gates-MacGinitie Reading Tests (New York: Teachers College Press, 1965), p. 8.

content that is to follow. Direction in this study included both categories for each story. With the specific questions which had been approved by the panel and the general motivation provided in the Economy manual the lesson plans were prepared.

The instructions for teaching reading included the date each story was presented and the instructions for teaching the lesson. These lesson plans for the story were based on the Teacher's Manual Lavender Skywriters. A step-by-step procedure is provided in the manual. It is organized under four headings: "Developing Word Perception," "Developing Comprehension Skills," "Reading the Selection," and "Discussion and Rereading." The manual points out that the order of presentation should be carefully followed.

The lesson plan referred the teacher to Teacher's Manual Lavender Skywriters for the "Developing Word Perception" section. This section is designed to teach word analysis skills. The method used and the degree to which a teacher followed the manual's suggestions was not of major importance to this study.

The lesson plans for all three groups had an exact copy of Teacher's Manual Lavender Skywriters section "Developing Comprehension Skills." Instructions in this section do not involve content of the story. All students received identical instruction. The lesson plans also provided worksheets suggested in this section of the manual.

"Reading the Selection" section of the manual is designed to give the teacher ideas about motivating students concerning the specific story that they are now ready to read. This section in the lesson plans is called "Direction." The "Direction" section was different for each of the three groups according to the teaching method.

"Direction" for oral directed gave exactly the "Reading the Selection" from the manual plus three purpose-setting questions which were prepared with instructions to ask these questions orally. Following is a copy of this section from one lesson plan:

III. Direction--

Have the pupils open Lavender Skywriters to page 222, ask someone to read the title and date aloud and tell anything important he knows about this period in American history. Read the introductory statement aloud, making sure the pupils understand the reference to the Boston Tea Party. Then say, "Writers of history can't possibly tell you everything that happened in the past; they have to select points they think will interest the reader and help him understand the people, events, and conditions during a certain period. The author of this selection, Dorothy Canfield Fisher, had a deep feeling for the colonial period and wanted to share it with young readers." On the board write the dates 1879-1958 and say, "The author lived during this period and she was born in Kansas. Yet once she said that she had lived in Vermont ever since 1763. As you read her account of events in Boston, perhaps you will have that same sense of being present."

Say, "As you read the story look for the answers to these questions.

1. What were the people in Boston doing that caused England to send soldiers?
2. What name did the little boys call the British soldiers?
3. What did Paul Revere do to earn a living?"

"Direction" for written directed gave exactly the "Reading the Selection" from the manual plus three purpose-setting questions which were prepared with instructions to write these questions on the chalkboard. Following is a copy of this section from one lesson plan:

III. Direction--Have the following questions on the chalkboard prior to giving direction:

1. What were the people in Boston doing that caused England to send soldiers?
2. What name did the little boys call the British soldiers?
3. What did Paul Revere do to earn a living?

Have the pupils open Lavender Skywriters to page 222; ask someone to read the title and date aloud and tell anything important he knows about this period in American history. Read the introductory statement aloud, making sure the pupils understand the reference to the Boston Tea Party. Then say, "Writers of history can't possibly tell you everything that happened in the past; they have to select points they think will interest the reader and help him to understand the people, events and conditions during a certain period. The author of this selection, Dorothy Canfield Fisher, had a deep feeling for the colonial period and wanted to share it with young readers." On the board write the dates 1879-1958 and say, "The author lived during this period and she was born in Kansas. Yet once she said that she had lived in Vermont ever since 1763. As you read her account of events in Boston, perhaps you will have that same sense of being present.

Say, "As you read the story look for the answers to the questions on the board." Let a student read these orally.

"Direction" for nondirected instructed the teacher to give only the page number. Following is a copy of this section from one lesson plan:

III. Direction--

Make no comment, except, "Please read the story on page 222."

Following the reading of a selection the lesson plans gave the answers to the questions in the two directed groups. Then for all three groups the "Discussion and Rereading" section of the teacher's manual was duplicated in the lesson plans. This section is designed to aid the pupils' comprehension of the selection and help the pupils form habits of thoughtful and critical reading.

On six lessons, instructions in the lesson plans called for answering the questions in writing rather than orally and then have a discussion to follow. This gave each student an equal amount of practice in comprehension testing. In summary, the lesson plans were identical for all three groups except for the "Direction." They gave

all instruction that the teacher's manual does when it involved comprehension skills.

Procedure

The method of teaching was randomly assigned to each class. Step-by-step explanation was made through the lesson plan for each method of teaching the first story. After each had taught the first lesson, questions were answered and it was determined that the lesson plans were followed.

The teachers were told to follow exactly sections II, III, and IV of the lesson plans which all involved comprehension skills. This gave all students an equal amount of teaching in the area of comprehension except for the item of concern, "Direction." They were told of the importance of students not having access to the stories prior to the introduction in class. This made it necessary for the teacher to keep the books.

These directions were also given to them in writing. They were given a schedule in addition to each lesson plan having a date on it. A minimum of four checks on each teacher were made during the experiment to insure that the plan was being followed.

During the experiment six different comprehension tests were given to each class. Each of the comprehension tests was over one story. Copies of these tests were supplied with the lesson plans. The purpose was to provide an equal amount of practice for each subject on taking comprehension tests. Also, this was another way of reminding the teachers that their progress was being checked.

This experiment was conducted during the four calendar months of February, March, April, and May of 1974. This constituted a total of sixty days of classroom instruction.

Data Analysis

The statistical analysis was performed on the raw scores taken from the reading comprehension subtest of the Gates-MacGinitie Reading Test. The first step in the data analysis procedures was to compute the descriptive statistics for each of the groups.

To determine differences, three-way analysis of covariance was computed. The .05 level of significance was adopted for rejection of the null hypothesis. The covariance design was chosen in order to obtain more precise information on the treatment effects, and to equate the group means by the use of a supplementary and correlated measure. The supplementary and correlated measure in this study was the pretest. The analysis of covariance design enables the adjustment, or correction, of variability which may be due to differences between groups on the pretest, thus isolating the differences which can be attributed to the treatment effects.

The dependent variable in the analysis was the mean posttest score obtained by each group. The covariate, or control variable, in each case was the mean pretest score obtained by each group. Before using these descriptive statistics it was necessary to determine any adjustment necessary because of differing sample sizes.

After an analysis of pretests any differences would indicate an adjustment using the table of residuals. Then the posttest results

were compared for significant differences. All computations were made in accordance with two statistical references.[5, 6]

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[5]James L. Bruning and B. L. Kintz, Computational Handbook of Statistics (Glenview, Ill.: Scott, Forsman and Company, 1968).

[6]Robert G. D. Steel and James H. Torrie, Principles and Procedures of Statistics (New York: McGraw-Hill Book Company, Inc., 1960).

CHAPTER IV

RESULTS OF STUDY

Analysis of Covariance Results

The descriptive statistics revealed the pretest and posttest means of the samples (Table 2). The statistical comparisons which follow determined any significant differences existing between the means. It was not necessary to adjust means as a result of differing sample size because column and row marginal cells were homogeneous. F-ratios of variances were not significant; therefore, homogeneity of variance was determined. The analysis of covariance technique was valid for the present design of the study for determining significant differences between groups.

TABLE 2

PRETEST AND POSTTEST MEANS OF EACH GROUP

Method #1				Method #2				Method #3			
Male		Female		Male		Female		Male		Female	
Y	X	Y	X	Y	X	Y	X	Y	X	Y	X
46.08	46.00	46.11	43.11	44.00	48.14	45.10	46.40	43.91	46.36	44.17	43.42
42.80	42.70	47.50	47.20	43.30	45.30	42.57	42.29	45.89	45.33	46.82	46.27
40.56	45.44	45.86	47.29	46.00	46.78	41.25	45.75	44.77	48.08	43.43	43.88
44.75	45.75	46.43	46.14	44.88	46.38	45.29	47.29	44.14	47.43	45.00	46.33

Notes:

Schools listed: Line 1--B1; Line 2--B2; Line 3--B3; Line 4--B4.
Y--Pretest; X--Posttest.
Method 1--written directed; Method 2--oral directed; Method 3--nondirected.

The means of the groups varied from about 40.5 to 48.08 (Table 2). This information alone will help the reader to observe how the average student in each group performed on the pretests and post-tests; but Table 2 does not give the analysis of covariance results necessary to indicate where significant differences existed between the means.

Table 3 provides the analysis of covariance statistical results for accepting or rejecting the hypotheses stated in Chapter II. The three-way analysis of covariance analysis of pretests resulted in no significant differences between methods, schools, sex or interactions between the variables at the .05 level of confidence.

TABLE 3

THREE-WAY ANALYSIS OF COVARIANCE: SOURCE OF VARIANCES FOR PRETEST (COVARIATE) SCORES

Source	SS	df	MS	F	Level of Significance
Methods (1)	32.60	2	16.30	.07	p >.05
Schools (2)	66.00	3	22.00	.10	p >.05
Sex (3)	30.65	1	30.65	.14	p >.05
Interactions					
1 x 2	148.52	6	24.75	.11	p >.05
1 x 3	125.90	2	62.95	.29	p >.05
2 x 3	43.64	3	14.54	.07	p >.05
1 x 2 x 3	2150.55	6	358.43	1.64	p >.05
Within	42,240.70	194	217.74		
Total	44,838.56	217			

Since there were no significant differences in the pretest scores, the pretest means in Table 2 should be very close for all groups. This is true for interactions as well as those original groups. For example, the three methods had pretest means of 45.01, 44.09, and 44.82. Because these pretest means were within a 1.0 raw score of each other, no significant difference was expected in the F-ratio for methods (Table 3).

A three-way analysis of variance of residuals was not necessary, since there were no significant differences in the pretests. Because no significant differences were found in the pretest scores, any significant differences found in the posttest scores will be accurate indications of differences between methods, schools, or sex. For example, if pretest differences had been significant between methods, then any differences found between methods on the posttest would have been due, in part, to the initial pretest differences. But since no pretest differences were found (Table 3), a three-way analysis of variance of the posttest scores determined actual differences between groups at the end of the program (Table 4).

TABLE 4

THREE-WAY ANALYSIS OF COVARIANCE: SOURCE OF VARIANCES FOR POSTTEST SCORES

Source	SS	df	MS	F	Level of Significance
Methods (1)	17.27	2	8.63	.47	$p > .05$
Schools (2)	86.78	3	28.93	1.57	$p > .05$
Sex (3)	25.25	1	25.25	1.37	$p > .05$
Interactions					
1 x 2	86.36	6	14.39	.78	$p > .05$
1 x 3	76.47	2	38.23	2.08	$p > .05$
2 x 3	100.46	3	33.49	1.82	$p > .05$
1 x 2 x 3	154.82	6	25.80	1.40	$p > .05$
Within	3568.88	194	18.40		
Total	4116.29	217			

No significant differences between the posttest scores of any of the groups were found. Therefore, there were no significant effects of differing methods, schools, or sex on the posttest scores of the students. Although there were numerical gains from pretest to posttest among the groups, there were no significant differences in the pre-post means between the groups (Table 4). Since this analysis includes all sources and interactions, it was not necessary to consider each sub-hypothesis individually.

Disposition of Hypotheses

Because (a) the general hypothesis and all thirty sub-hypotheses were stated in the null form (hypothesizing no significant difference), and (b) no significant differences were found between any groups on the pretests and posttests, all hypotheses were accepted as stated. Table 4 can be used to determine which sub-hypotheses were accepted during each phase of the three-way analysis of covariance.

Sub-hypotheses one, two and three are concerned only with method. The sex variable and school site variable are not considered. These sub-hypotheses are accepted because the level of significance was not reached when method was considered. There was no statistically significant difference between posttest scores in reading comprehension of those students taught by oral directed, written directed and non-directed reading.

Sub-hypotheses four through twelve are dealing with any interactions concerning the method and sex of the students. Since Table 4 indicates no significant difference in any interaction involving method and sex (1 x 3), these nine sub-hypotheses are accepted.

The remainder of the sub-hypotheses, thirteen through thirty, involves the method and school site variables (1 x 2). The acceptance of these sub-hypotheses is indicated by no significance in any interaction involving these variables.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

For the classroom teacher to give direction in the form of motivation or purpose-setting questions before students read their basal text story is a common practice. The manuals to accompany the texts recommend this procedure and those writing books on how to teach reading suggest this procedure.

A few have questioned the value of this pre-reading direction. Sufficient research has been done in this area to at least question complete acceptance of the fact that it is beneficial. Some studies have failed to find any difference in the comprehension of students who received this direction before a story and those who did not receive the direction. A few found those who did not receive the direction had better comprehension than those who did.

Studies have been made in the past to determine whether direction increases the comprehension of a story. The present research was conducted to determine whether continued use of this direction as part of a teaching method with each story increases the students' general abilities in reading comprehension. Three methods of introducing the stories for a semester were compared: (1) direction including motivational information and purpose-setting questions all given orally; (2) direction including motivational information and purpose-setting

questions given orally with the questions also in writing; and (3) no direction.

Included in the study was a comparison of the effectiveness of these treatments on male and female students. A comparison was also made according to the school which the student attended. This would take into account the teacher giving the direction, since each school had a classroom using each method and the same teacher instructed all three groups.

Subjects for the study were 218 sixth-grade students from four elementary schools. All four of these schools are in the Putnam City School System, a suburban school system in Oklahoma City, Oklahoma.

The Gates-MacGinitie Reading Test (Survey D: Form 1M) was used as a pretest. Form 2M of the same test was given as the posttest. An analysis of covariance was the statistical procedure used.

Conclusions

In all comparisons made it was found that the method of direction or nondirection made no significant difference at the .05 level on the reading comprehension abilities of the sixth-grade students included in this study. This indicates that for these students the following conclusions were reached:

1. There was equal advantage in giving oral direction before the students read their stories from their basal text.
2. There was equal advantage in giving written direction before the students read their stories from their basal text.
3. There was equal advantage in giving no direction before the students read their stories from their basal text.
4. The effectiveness of these approaches was not influenced by the sex of the student.

5. The effectiveness of these approaches was not influenced by the home school of the student.

6. The effectiveness of these approaches was not influenced by the teacher of the student.

Recommendations

With the limitations involved in any one study, suggesting the change of a procedure recommended by almost all authorities would not be appropriate. However, questioning the value of direction before the reading of a basal text story does seem appropriate. Especially the value for sixth-grade students who read at or above grade level would be questioned. If this study were repeated and similar results were obtained, the assumption of value in direction could be challenged. The following changes are recommended in repeated studies:

1. Use different students in these studies.

2. Use different school systems in each study.

3. Use a different basal text in each study.

4. Continue the study for a year rather than a semester in part of the studies.

5. Use different methods of measuring growth in comprehension skills.

If the results of this study were validated with similar studies there would remain many other situations in which direction before basal text stories might be beneficial. It would take studies in countless areas before the concept of direction would be challenged. Some of these would include:

1. Studies at all grade levels.

2. Studies involving students reading below grade level.

3. Studies involving students from a variety of backgrounds.
4. Studies in schools using a variety of instructional approaches.
5. Studies involving students with low socio-economic backgrounds.
6. Studies involving students with different learning handicaps.

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APPENDIX A

PRETEST AND POSTTEST RAW SCORES

GATES-MACGINITIE READING TEST (SURVEY D: FORM 1M AND 2M)
PRETEST AND POSTTEST RAW SCORES
SCHOOL #1

Method #1			Method #2			Method #3		
Boys	Pretest	Posttest	Boys	Pretest	Posttest	Boys	Pretest	Posttest
1	48	48	1	44	49	1	44	48
2	45	49	2	47	50	2	38	42
3	45	46	3	47	50	3	49	52
4	46	45	4	44	50	4	35	33
5	44	49	5	42	46	5	52	52
6	46	44	6	37	46	6	45	48
7	51	43	7	47	46	7	44	46
8	49	48				8	35	45
9	48	48				9	51	51
10	47	47				10	51	49
11	43	42				11	39	46
12	41	39						
13	46	50						
Girls			Girls			Girls		
1	47	41	1	51	50	1	42	42
2	52	51	2	37	42	2	46	43
3	37	33	3	48	48	3	44	41
4	50	46	4	43	49	4	49	49
5	45	44	5	43	42	5	37	37
6	48	46	6	39	48	6	43	43
7	47	45	7	49	46	7	44	44
8	48	47	8	49	47	8	45	45
9	41	35	9	43	43	9	45	44
			10	49	49	10	47	44
						11	44	47
						12	44	42

Method #1--Written Directed Method #2--Oral Directed Method #3--Nondirected

GATES-MACGINITIE READING TEST (SURVEY D: FORM 1M AND 2M)
PRETEST AND POSTTEST RAW SCORES
SCHOOL #2

Method #1			Method #2			Method #3		
Boys	Pretest	Posttest	Boys	Pretest	Posttest	Boys	Pretest	Posttest
1	44	40	1	35	37	1	42	42
2	40	44	2	41	49	2	47	47
3	38	41	3	44	48	3	50	47
4	19	15	4	32	32	4	47	45
5	32	30	5	48	48	5	47	45
6	51	48	6	47	48	6	49	52
7	41	42	7	52	52	7	48	51
8	44	47	8	41	41	8	42	43
9	44	46	9	43	46	9	41	36
10	45	44	10	50	52			
Girls			Girls			Girls		
1	50	50	1	37	42	1	49	50
2	43	43	2	48	49	2	48	43
3	46	45	3	48	46	3	45	49
4	47	46	4	45	40	4	49	49
5	47	43	5	40	38	5	44	47
6	48	49	6	48	49	6	48	49
7	47	48	7	32	32	7	45	39
8	50	50				8	47	46
9	47	48				9	47	48
10	50	50				10	50	49
						11	43	40

Method #1--Written Directed Method #2--Oral Directed Method #3--Nondirected

GATES-MACGINITIE READING TEST (SURVEY D: FORM 1M AND 2M)
PRETEST AND POSTTEST RAW SCORES
SCHOOL #3

Method #1			Method #2			Method #3		
Boys	Pretest	Posttest	Boys	Pretest	Posttest	Boys	Pretest	Posttest
1	40	43	1	48	49	1	45	47
2	40	44	2	42	46	2	49	50
3	49	51	3	48	51	3	51	48
4	47	48	4	36	35	4	44	51
5	38	41	5	45	50	5	45	50
6	40	51	6	51	48	6	48	49
7	45	43	7	46	48	7	46	46
8	34	47	8	50	50	8	51	51
9	32	41	9	48	44	9	35	44
						10	46	46
						11	47	48
						12	43	49
						13	32	46
Girls			Girls			Girls		
1	44	47	1	52	50	1	50	49
2	46	51	2	44	48	2	44	44
3	45	48	3	41	46	3	48	49
4	50	49	4	35	35	4	48	48
5	44	38	5	41	47	5	39	45
6	49	51	6	30	45	6	28	26
7	43	47	7	44	51	7	47	46
			8	43	44			
Method #1--Written Directed			Method #2--Oral Directed			Method #3--Nondirected		

GATES-MACGINITIE READING TEST (SURVEY D: FORM 1M AND 2M)
PRETEST AND POSTTEST RAW SCORES
SCHOOL #4

Method #1			Method #2			Method #3		
Boys	Pretest	Posttest	Boys	Pretest	Posttest	Boys	Pretest	Posttest
1	45	48	1	42	44	1	47	47
2	40	46	2	50	51	2	47	48
3	43	39	3	45	46	3	49	50
4	48	47	4	42	47	4	45	44
5	44	44	5	45	45	5	30	46
6	44	45	6	44	46	6	46	49
7	48	50	7	47	44	7	45	48
8	46	47	8	44	48			
Girls			Girls			Girls		
1	50	47	1	37	44	1	47	46
2	43	48	2	47	43	2	45	45
3	46	41	3	48	48	3	51	48
4	49	49	4	46	47	4	38	48
5	41	40	5	45	51	5	44	47
6	51	50	6	48	48	6	48	46
7	45	48	7	46	50	7	48	46
						8	43	44
						9	41	47
Method #1--Written Directed			Method #2--Oral Directed			Method #3--Nondirected		

APPENDIX B

INSTRUCTIONS AND SCHEDULE OF PROJECT

PROJECT INSTRUCTIONS

For the purpose of my study it is very important that you follow exactly the sections II, III, and IV of the following lesson plans.

This is to be sure all students receive an equal amount of teaching in the area of comprehension except for the item of concern, direction.

Since rate of receiving instruction could also influence the outcome, I have enclosed a schedule. Please follow this.

It is important that students not have access to these stories prior to your introducing them in class. Please don't allow them to take the books outside the classroom.

When the lesson plan calls for extra duplicated work sheets or tests, I will provide the master of this.

I will be making spot visits during the semester. Please call me at any time you might have a question.

Thank you for your cooperation.

Gary Shreck

Home: 751-3172

Office: 478-1661, Ext. 336

SCHEDULE OF PROJECT

Date	Plans
February 4-8	#20
February 11-16	#21 & 22
February 18-22	#23 & 24
February 25-March 1	#25 & 26
March 4-8	#27 & 28
March 11-15	#29 & 30
March 18-22	Exam Week
March 25-29	Spring Break
April 1-5	#31
April 8-12	#32 & 33
April 15-19	#34 & 35
April 22-26	#36 & 37
April 29-May 3	#38 & 39
May 6-10	Posttest

APPENDIX C

LETTER OF PERMISSION

OKLAHOMA CITY 73125 ATLANTA 30324 INDIANAPOLIS 46241

THE ECONOMY COMPANY

Educational Publishers
OKLAHOMA CITY, OKLAHOMA

May 1, 1974

Mr. Gary L. Shreck
Oklahoma Christian College
Route 1, Box 141
Oklahoma City, Oklahoma 73111

Dear Mr. Shreck:

This is in reply to your letter of April 26, 1974, requesting permission to use material from the teacher's manual for LAVENDER SKYWRITERS in lesson plans for teachers.

You have our permission to use material from the manual in the lesson plans for teachers which would then be an appendix to your dissertation, provided, however, that you use the copyright notices in the appropriate places and acknowledge The Economy Company as the publisher of the material and that the material not be used for resale.

Yours truly,

Dave D. Price, C.E.O.

DDP:vm

1901 NORTH WALNUT P. O. BOX 25308 TELEPHONE (405) 524-2213

APPENDIX D

SAMPLE LESSON PLANS

(Composed primarily of copyrighted material
from Economy Company)

Plan 20 Oral Directed
Page 106 Teacher's Manual
Page 212 Student's Book
Date: February 4-8

I. Refer to teacher's manual for Objectives, Preparation, and Developing Word Perception. Have worksheets for students.

II. Developing Comprehension Skills--

Say to the pupils, "When you read a story or an article, it is important to observe the order in which events take place. For example, in reading about the history of the United States, it would be confusing if you thought the Revolutionary War took place before Columbus made his voyage to the New World. Events in an article or in a story are often told in the order in which they occurred. Sometimes, however, a writer may tell about one series of events and then refer to something that happened at a preceding time. To understand the sequence of events, the reader must be alert to words and phrases that indicate time."

Give each pupil a duplicated work sheet. Explain that it contains a story followed by a list of the events in the story. Point out that the events are not listed in the proper sequence. Tell the pupils to read the selection silently and to follow the directions.

After everyone has completed the work sheet, let volunteers read the selection aloud, tell how they numbered each event, and then read the list of events in order.

III. Direction-- Have the children turn to page 212 and let someone read the title, dates, and introductory statement aloud. Say, "As you read the story look for the answers to these questions:

1. How did the man pictured on page 213 convince the soldiers not to take him captive?

2. What symbol was used by runners to tell that all was well?

3. What did the Spaniard do that made the Indians decide not to kill him and his friends?"

IV. Discussion and Rereading--Point out the answers to the purpose-setting questions.

1. Offered ten boys as substitutes

2. Wooden Cross

3. Used knowledge of medicine to cure Indian making them believe magic was involved.

Continue with the manual questions.

1. How did the first Africans shipped to Portugal happen to become captives? (were traded by captured Moor in return for his freedom) Why were the Portuguese sailing in African waters? (to find sea route to Orient around southern tip of Africa)

2. What did his shipmates call the pilot that Columbus hired for the first voyage from Spain? (El Negro) What did El Negro accomplish after serving as a pilot for Columbus? (first successful voyage across the Atlantic for purely commercial reasons)

3. What evidence indicated that Africans might have found the New World before Europeans arrived there? (When Spanish explorers landed in South America, they found men and women who looked like Africans and who used some African words)

4. What did Cortez and his soldiers bring to Mexico? (Christian religion and the horse) Who probably tended and reaped the first crop of wheat to be grown in the New World? (Negro soldier in army of Cortez)

5. From whose point of view were the histories and reports of expeditions to the New World written? (leaders and officials who wrote them) How might they have differed if they had been written by other men who took part in the expeditions? (opinions)

6. How did Cabeza de Vaca and the three men shipwrecked with him gain a reprieve from death at the hands of the Indians? (by show of magic and by curing sick Indian)

7. Why did Cortez choose Estevan as a guide in the search for the Seven Cities of Cibola? (because Estevan had accompanied Cabeza de Vaca on his eight-year journey from Florida to Mexico) What did Estevan find? (one of the great pueblo cities in what is now New Mexico)

8. What did you find out from reading this article that you did not know before? (personal experiences)

To help pupils observe sequence, ask questions similar to the following:

1. Did Columbus make his voyage to the New World before or after Africans were first shipped to Portugal? (after)

2. Did El Negro make his trading trip before or after Columbus made his third voyage? (after)

3. Did Cortez invade Mexico before or after he searched for the Seven Cities of Cibola? (before)

4. Did Estevan accompany Cortez before or after being shipwrecked with Cabeza de Vaca? (after)

V. Refer to teacher's manual for Individualizing Instruction.

Plan 20 Written Directed
Page 106 Teacher's Manual
Page 212 Student's Book
Date: February 4-8

I. Refer to teacher's manual for Objectives, Preparation, and Developing Word Perception. Have worksheets for students.

II. Developing Comprehension Skills--

Say to the pupils, "When you read a story or an article, it is important to observe the order in which events take place. For example, in reading about the history of the United States, it would be confusing if you thought the Revolutionary War took place before Columbus made his voyage to the New World. Events in an article or in a story are often told in the order in which they occurred. Sometimes, however, a writer may tell about one series of events and then refer to something that happened at a preceding time. To understand the sequence of events, the reader must be alert to words and phrases that indicate time."

Give each pupil a duplicated work sheet. Explain that it contains a story followed by a list of the events in the story. Point out that the events are not listed in the proper sequence. Tell the pupils to read the selection silently and to follow the directions.

After everyone has completed the work sheet, let volunteers read the selection aloud, tell how they numbered each event, and then read the list of events in order.

III. Direction--Have the following questions on the chalkboard prior to giving direction:

1. How did the man pictured on page 213 convince the soldiers not to take him captive?

2. What symbol was used by runners to tell that all was well?

3. What did the Spaniard do that made the Indians decide not to kill him and his friends?

Have the children turn to page 212 and let someone read the title, dates, and introductory statement aloud. Say, "As you read the story look for the answers to the questions on the board." Let a student read these orally.

IV. Discussion and Rereading--Point out the answers to the purpose-setting questions.

1. Offered ten boys as substitutes

2. Wooden cross

3. Used knowledge of medicine to cure Indian making them believe magic was involved.

Continue with the manual questions.

1. How did the first Africans shipped to Portugal happen to become captives? (were traded by captured Moor in return for his freedom) Why were the Portuguese sailing in African waters? (to find sea route to Orient around southern tip of Africa)

2. What did his shipmates call the pilot that Columbus hired for the first voyage from Spain? (El Negro) What did El Negro accomplish after serving as a pilot for Columbus? (first successful voyage across Atlantic for purely commercial reasons)

3. What evidence indicated that Africans might have found the New World before Europeans arrived there? (When Spanish explorers landed in South America, they found men and women who looked like Africans and who used some African words)

4. What did Cortez and his soldiers bring to Mexico? (Christian religion and the horse) Who probably tended and reaped the first crop of wheat to be grown in the New World? (Negro soldier in army of Cortez)

5. From whose point of view were the histories and reports of expeditions to the New World written? (leaders and officials who wrote them) How might they have differed if they had been written by other men who took part in the expeditions? (opinions)

6. How did Cabeza de Vaca and the three men shipwrecked with him gain a reprieve from death at the hands of the Indians? (by show of magic and by curing sick Indian)

7. Why did Cortez choose Estevan as a guide in the search for the Seven Cities of Cibola? (because Estevan had accompanied Cabeza de Vaca on his eight-year journey from Florida to Mexico) What did Estevan find? (one of great pueblo cities in what is now New Mexico)

8. What did you find out from reading this article that you did not know before? (personal experiences)

To help pupils observe sequence, ask questions similar to the following:

1. Did Columbus make his voyage to the New World before or after Africans were first shipped to Portugal? (after)

2. Did El Negro make his trading trip before or after Columbus made his third voyage? (after)

3. Did Cortez invade Mexico before or after he searched for the Seven Cities of Cibola? (before)

4. Did Estevan accompany Cortez before or after being shipwrecked with Cabeza de Vaca? (after)

V. Refer to teacher's manual for Individualizing Instruction.

Plan 20 Nondirected
Page 106 Teacher's Manual
Page 212 Student's Book
Date: February 4-8

I. Refer to teacher's manual for Objectives, Preparation, and Developing Word Perception. Have work sheets for students.

II. Developing Comprehension Skills--

Say to the pupils, "When you read a story or an article, it is important to observe the order in which events take place. For example, in reading about the history of the United States, it would be confusing if you thought the Revolutionary War took place before Columbus made his voyage to the New World. Events in an article or in a story are often told in the order in which they occurred. Sometimes, however, a writer may tell about one series of events and then refer to something that happened at a preceding time. To understand the sequence of events, the reader must be alert to words and phrases that indicate time."

Give each pupil a duplicated work sheet. Explain that it contains a story followed by a list of the events in the story. Point out that the events are not listed in the proper sequence. Tell the pupils to read the selection silently and to follow the directions.

After everyone has completed the work sheet, let volunteers read the selection aloud, tell how they numbered each event, and then read the list of events in order.

III. Direction--Make no comment except, "Please read the story on page 212."

IV. Discussion and Rereading--

1. How did the first Africans shipped to Portugal happen to become captives? (were traded by captured Moor in return for his freedom) Why were the Portuguese sailing in African waters? (to find sea route to Orient around southern tip of Africa)

2. What did his shipmates call the pilot that Columbus hired for the first voyage from Spain? (El Negro) What did El Negro accomplish after serving as a pilot for Columbus? (first successful voyage across Atlantic for purely commercial reasons)

3. What evidence indicated that Africans might have found the New World before Europeans arrived there? (When Spanish explorers landed in South America, they found men and women who looked like Africans and who used some African words)

4. What did Cortez and his soldiers bring to Mexico? (Christian religion and the horse) Who probably tended and reaped the first crop of wheat to be grown in the New World? (Negro soldier in army of Cortez)

5. From whose point of view were the histories and reports of expeditions to the New World written? (leaders and officials who wrote them) How might they have differed if they had been written by other men who took part in the expeditions? (opinions)

6. How did Cabeza de Vaca and the three men shipwrecked with him gain a reprieve from death at the hands of the Indians? (by show of magic and by curing sick Indian)

7. Why did Cortez choose Estevan as a guide in the search for the Seven Cities of Cibola? (because Estevan had accompanied Cabeza de Vaca on his eight-year journey from Florida to Mexico) What did Estevan find? (one of the great pueblo cities in what is now New Mexico)

8. What did you find out from reading this article that you did not know before? (personal experiences)

To help pupils observe sequence, ask questions similar to the following:

1. Did Columbus make his voyage to the New World before or after Africans were first shipped to Portugal? (after)

2. Did El Negro make his trading trip before or after Columbus made his third voyage? (after)

3. Did Cortez invade Mexico before or after he searched for the Seven Cities of Cibola? (before)

4. Did Estevan accompany Cortez before or after being shipwrecked with Cabeza de Vaca? (after)

V. Refer to teacher's manual for Individualizing Instruction.

Plan 20
Worksheet

"Tell me a story," my daughter begged. "Tell about when you were a little girl."

My mind went back over the years. Until I was eight years old, my family and I lived in the city. But I remember best our life after we moved to the farm.

My daughter interrupted my thoughts. "Tell about the tornado," she ordered.

"But you've heard that story before," I protested.

"I don't care; I want to hear it again," she insisted.

"Well, all right," I began. "It was our first summer on the farm. That morning the air was heavy and still. 'There's going to be a storm, Alice,' my mother told me.

"Before long, dark boiling clouds filled the sky. Suddenly one of them dipped toward the ground. 'It's a tornado funnel,' my father cried. 'Run to the storm cellar.'

"I was almost to the cellar when I remembered my dog. In the confusion of the storm no one saw me run back to the house. I found the dog under a bed. But just as I crawled under the bed to get him, the tornado struck.

"When my parents found us, we were still there, too frightened to move. The tornado had blown the roof off our house, but the bed had protected the dog and me from injury."

"I wish I could live on a farm," my daughter said.

Number the events to show their sequence in time.

____ Alice and her parents moved to a farm.

____ Alice's daughter wished she could live on a farm.

____ Alice's mother predicted that a storm was coming.

____ Alice started for the storm cellar but ran back for her dog.

____ Suddenly one of the clouds dipped toward the ground.

____ The tornado blew the roof off the house.

____ Alice and her parents lived in the city.

____ Alice told her daughter a story.

____ Alice's parents found her and the dog under the bed.

"Both Sides Get Their Backs Up"

Plan 21 Oral Directed
Page 111 Teacher's Manual
Page 222 Student's Book
Date: February 11-15

I. Refer to teacher's manual for Objectives, Preparation, and Developing Word Perception. Write the following on the board:

History is interesting because it is about people.
Although I'm sleepy, I don't want any coffee.
After it rains tomorrow, the grass will turn green.
I have no brothers or sisters; therefore, I am lonely.
Until people have better sense, there ought to be a law against smoking.

II. Developing Comprehension Skills--

Write "assumption" on the board; let someone pronounce the word and tell what it means (something taken for granted). Say, "A writer often makes a statement that is a conclusion, and he may not indicate how he reached it. It is helpful to a reader in deciding whether to accept or reject the statement to think about the assumptions the writer made in reaching his conclusion." Explain that the sentences on the board can help the pupils understand how they can identify assumptions that writers make. Continue, "In the first sentence the writer assumes that anything about people is interesting. Now if you are far more interested in rocks or animals than in people, you may disagree with his conclusion." Help the pupils recognize the assumptions in the second and third sentences (coffee will reduce my sleepiness; it will rain tomorrow).

In working with the fourth sentence, explain, "Sometimes you may agree with a writer's statement but disagree with his assumption. In this sentence I might agree that the writer is lonely, but I might disagree that having no brothers or sisters is the reason. After all, I know lots of people who have no brothers or sisters, and most of them are not lonely." Before the pupils work with the last sentence, point out that often assumptions cannot be identified by reading the sentence but only by thinking; also point out that there may be several assumptions for one conclusion. Let the pupils suggest assumptions that the writer of the sentence made, but make sure they recognize that he apparently assumes that smoking is harmful, that a law would keep people from smoking, that laws prohibiting people from harming themselves are desirable, and that people will eventually have better sense than they do now. If time permits, let volunteers give statements based on assumptions and let others try to identify the assumptions.

III. Direction--

Have the pupils open Lavender Skywriters to page 222, ask someone to read the title and dates aloud and tell anything important

he knows about this period in American history. Read the introductory statement aloud, making sure the pupils understand the reference to the Boston Tea Party. Then say, "Writers of history can't possibly tell you everything that happened in the past, they have to select points they think will interest the reader and help him understand the people, events, and conditions during a certain period. The author of this selection, Dorothy Canfield Fisher, had a deep feeling for the colonial period and wanted to share it with young readers." On the board write the dates 1879-1958 and say, "The author lived during this period and she was born in Kansas. Yet once she said that she had lived in Vermont ever since 1763. As you read her account of events in Boston, perhaps you will have that same sense of being present."

Say, "As you read the story look for the answers to these questions:

1. What were the people in Boston doing that caused England to send soldiers?

2. What name did the little boys call the British soldiers?

3. What did Paul Revere do to earn a living?"

IV. Discussion and Rereading--Point out the answers to the purpose-setting questions.

1. street marching

2. lobster back

3. made silverware

Continue with the manual questions.

1. What was the British viewpoint about who should pay for the war against the French? (that colonists ought to pay because war had been carried on to take care of them, not the British) According to the Americans, what was wrong with this viewpoint? (did not account for money Americans had spent for colonial troops to help British; did not bring out that British Empire had won much land and that many Englishmen had made fortunes)

2. Find places in the account that let you know the author was sympathetic with the British people as well as with the Americans. (page 225, lines 19-23; page 226, lines 13-16; line 26, page 228, through line 9, page 229; page 232, lines 1-6)

3. When the British Parliament removed the Stamp Act, what assumptions did the Americans make? (that British agreed with them that nobody should pay taxes he had not voted on; that danger of war was over) Were their assumptions correct? (no)

Ask the pupils to tell whether they think the author approves or disapproves of a government in which the power is in the hands of a ruler rather than in the hands of the people. Then have them reread the last paragraph on page 225 and the first two lines at the top of page 226 for words and phrases that influence the way they feel about rulers at that time in history (little kings and dukes . . . held on tight to all the power they could get; one-man job; idea was boiling; rulers sat on the lid of the teakettle).

End the discussion by asking whether anybody knows what Evacuation Day is and when and where it is celebrated. If no one knows, tell them that on March 17, 1776, George Washington won the city of Boston back from the British and to this day the people of Boston set March 17 aside to celebrate the evacuation of the redcoats.

V. Refer to teacher's manual for Individualizing Instruction.

"Both Sides Get Their Backs Up"

Plan 21 Written Directed
Page 111 Teacher's Manual
Page 222 Student's Book
Date: February 11-15

I. Refer to teacher's manual for Objectives, Preparation, and Developing Word Perception. Write the following on the board:

History is interesting because it is about people.
Although I'm sleepy, I don't want any coffee.
After it rains tomorrow, the grass will turn green.
I have no brothers or sisters; therefore, I am lonely.
Until people have better sense, there ought to be a law against smoking.

II. Developing Comprehension Skills--

Write "assumption" on the board; let someone pronounce the word and tell what it means (something taken for granted). Say, "A writer often makes a statement that is a conclusion, and he may not indicate how he reached it. It is helpful to a reader in deciding whether to accept or reject the statement to think about the assumptions the writer made in reaching his conclusion." Explain that the sentences on the board can help the pupils understand how they can identify assumptions that writers make. Continue, "In the first sentence the writer assumes that anything about people is interesting. Now if you are far more interested in rocks or animals than in people, you may disagree with his conclusion." Help the pupils recognize the assumptions in the second and third sentences (coffee will reduce my sleepiness; it will rain tomorrow).

In working with the fourth sentence, explain, "Sometimes you may agree with a writer's statement but disagree with his assumption. In this sentence I might agree that the writer is lonely, but I might disagree that having no brothers or sisters is the reason. After all, I know lots of people who have no brothers or sisters, and most of them are not lonely." Before the pupils work with the last sentence, point out that often assumptions cannot be identified by reading the sentence but only by thinking; also point out that there may be several assumptions for one conclusion. Let the pupils suggest assumptions that the writer of the sentence made, but make sure they recognize that he apparently assumes that smoking is harmful, that a law would keep people from smoking, that laws prohibiting people from harming themselves are desirable, and that people will eventually have better sense than they do now. If time permits, let volunteers give statements based on assumptions and let others try to identify the assumptions.

III. Direction--Have the following questions on the chalkboard prior to giving direction:

1. What were the people in Boston doing that caused England to send soldiers?

2. What name did the little boys call the British soldiers?

3. What did Paul Revere do to earn a living?

Have pupils open Lavender Skywriters to page 222; ask someone to read the title and dates aloud and tell anything important he knows about this period in American history. Read the introductory statement aloud, making sure the pupils understand the reference to the Boston Tea Party. Then say, "Writers of history can't possibly tell you everything that happened in the past; they have to select points they think will interest the reader and help him understand the people, events, and conditions during a certain period. The author of this selection, Dorothy Canfield Fisher, had a deep feeling for the colonial period and wanted to share it with young readers." On the board write the dates 1879-1958 and say, "The author lived during this period and she was born in Kansas. Yet once she said that she had lived in Vermont ever since 1763. As you read her account of events in Boston, perhaps you will have that same sense of being present."

Say, "As you read the story look for the answers to the questions on the board." Let a student read these orally.

IV. Discussion and Rereading--Point out the answers to the purpose-setting questions.

1. street marching

2. lobster back

3. made silverware

Continue with the manual questions.

1. What was the British viewpoint about who should pay for the war against the French? (that colonists ought to pay because war had been carried on to take care of them, not the British) According to the Americans, what was wrong with this viewpoint? (did not account for money Americans had spent for colonial troops to help British; did not bring out that British Empire had won much land and that many Englishmen had made fortunes)

2. Find places in the account that let you know the author was sympathetic with the British people as well as with the Americans. (page 225, lines 19-23; page 226, lines 13-16; line 26, page 228, through line 9, page 229; page 232, lines 1-6)

3. When the British Parliament removed the Stamp Act, what assumptions did the Americans make? (that British agreed with them

that nobody should pay taxes he had not voted on; that danger of war was over) Were their assumptions correct? (no)

Ask the pupils to tell whether they think the author approves or disapproves of a government in which the power is in the hands of a ruler rather than in the hands of the people. Then have them reread the last paragraph on page 225 and the first two lines at the top of page 226 for words and phrases that influence the way they feel about rulers at that time in history (little kings and dukes . . . held on tight to all the power they could get; one-man job; idea was building; rulers sat on the lid of the teakettle).

End the discussion by asking whether anybody knows what Evacuation Day is and when and where it is celebrated. If no one knows, tell them that on March 17, 1776, George Washington won the city of Boston back from the British and to this day the people of Boston set March 17 aside to celebrate the evacuation of the redcoats.

V. Refer to teacher's manual for Individualizing Instruction.

"Both Sides Get Their Backs Up"

Plan 21 Nondirected
Page 111 Teacher's Manual
Page 222 Student's Book
Date: February 11-15

I. Refer to teacher's manual for Objectives, Preparation, and Developing Word Perception. Write the following on the board:

History is interesting because it is about people.
Although I'm sleepy, I don't want any coffee.
After it rains tomorrow, the grass will turn green.
I have no brothers or sisters; therefore, I am lonely.
Until people have better sense, there ought to be a law against smoking.

II. Developing Comprehension Skills--

Write "assumption" on the board; let someone pronounce the word and tell what it means (something taken for granted). Say, "A writer often makes a statement that is a conclusion, and he may not indicate how he reached it. It is helpful to a reader in deciding whether to accept or reject the statement to think about the assumptions the writer made in reaching his conclusion." Explain that the sentences on the board can help the pupils understand how they can identify assumptions that writers make. Continue, "In the first sentence the writer assumes that anything about people is interesting. Now if you are far more interested in rocks or animals than in people, you may disagree with his conclusion." Help the pupils recognize the assumptions in the second and third sentences (coffee will reduce my sleepiness; it will rain tomorrow).

In working with the fourth sentence, explain, "Sometimes you may agree with a writer's statement but disagree with his assumption. In this sentence I might agree that the writer is lonely, but I might disagree that having no brothers or sisters is the reason. After all, I know lots of people who have no brothers or sisters, and most of them are not lonely." Before the pupils work with the last sentence, point out that often assumptions cannot be identified by reading the sentence but only by thinking; also point out that there may be several assumptions for one conclusion. Let the pupils suggest assumptions that the writer of the sentence made, but make sure they recognize that he apparently assumes that smoking is harmful, that a law would keep people from smoking, that laws prohibiting people from harming themselves are desirable, and that people will eventually have better sense than they do now. If time permits, let volunteers give statements based on assumptions and let others try to identify the assumptions.

III. Direction--Make no comment except, "Please read the story on page 222."

IV. Discussion and Rereading--

1. What was the British viewpoint about who should pay for the war against the French? (that colonists ought to pay because war had been carried on to take care of them, not the British) According to the Americans, what was wrong with this viewpoint? (did not account for money Americans had spent for colonial troops to help British; did not bring out that British Empire had won much land and that many Englishmen had made fortunes)

2. Find places in the account that let you know the author was sympathetic with the British people as well as with the Americans. (page 225, lines 19-23; page 226, lines 13-16; line 26, page 228, through line 9, page 229; page 232, lines 1-6).

3. When the British Parliament removed the Stamp Act, what assumptions did the Americans make? (that British agreed with them that nobody should pay taxes he had not voted on; that danger of war was over) Were their assumptions correct? (no)

Ask the pupils to tell whether they think the author approves or disapproves of a government in which the power is in the hands of a ruler rather than in the hands of the people. Then have them reread the last paragraph on page 225 and the first two lines at the top of page 226 for words and phrases that influence the way they feel about rulers at that time in history (little kings and dukes . . . held on tight to all the power they could get; one-man job; idea was boiling; rulers sat on the lid of the teakettle).

End the discussion by asking whether anybody knows what Evacuation Day is and when and where it is celebrated. If no one knows, tell them that on March 17, 1776, George Washington won the city of Boston back from the British and to this day the people of Boston set March 17 aside to celebrate the evacuation of the redcoats.

V. Refer to teacher's manual for Individualizing Instruction.

"The Blue-Backed Speller"

Plan 22 Oral Directed
Page 115 Teacher's Manual
Page 234 Student's Book
Date: February 11-15

I. Refer to teacher's manual for Objectives, Preparation, and Developing Word Perception. Have papers for written evaluation of students.

II. Developing Comprehension Skills--

Find out what assumptions the pupils have made about how history is written. Questions similar to the following may be helpful: How do we know what happened in the past? Who do you suppose finds old records and studies them? When a historian writes about a period of time in America, does he tell everything that happened? Why not? How do you suppose he decides which things to tell?

Explain that historians study old records and documents and then write explanations and interpretations of them. Ask what kinds of old records historians might be interested in (newspapers, letters, minutes of meetings, purchase orders, etc.). Point out that these originals are called primary sources and that reading them is something quite different from reading about their significance.

Say, "If you wanted to know something about the Constitution of the United States, you might read a history book, an encyclopedia article, or the Constitution itself. Which would represent a primary source? Would a letter written by Thomas Jefferson or a book about Jefferson's life be a primary source? Would a copy of a speech given by John F. Kennedy or a newspaper editorial about the speech be a primary source?" Let the pupils suggest other examples.

Suggest that when a primary source is available, it is a good idea to check it. Ask why. Make sure the pupils understand that a reader of history is in a better position to judge the writer's explanation and interpretation if he has seen the primary sources himself.

III. Direction--

Remind the pupils that the work of the historian is to study records and to point out to us important events and their meanings. You may wish to mention that one result of such work is the kind of information we read in social studies books at school or in history books from the library and that another is the kind of brief historical account found in an encyclopedia. Point out that when the pupils read about history, they need to remember that they are relying on the opinions of the writer about what is important.

Tell the pupils to open their books to page 234. After reading the title and the dates, help them relate the period of 1783-1793 to the end of the Revolutionary War and to the birth of our nation. Point out related dates and facts the children are familiar with. Then read the introductory statement aloud while the pupils read silently.

Say, "As you read the story look for the answers to these questions:

1. How much did the Blue-Backed Speller cost?

2. What is the only book that has had more copies sold?

3. How old was Noah Webster?

IV. Discussion and Rereading--

Point out the answers to the purpose-setting questions.

1. 30¢ (one shilling and twopence)

2. Bible

3. 24

Hand out the written evaluation. When the papers are returned to the student, they should be discussed. Then collect them to give to the experimenter. (answers on page 117 of teacher's manual)

V. Refer to teacher's manual for Individualizing Instruction.

"The Blue-Backed Speller"

Plan 22 Written Directed
Page 115 Teacher's Manual
Page 234 Student's Book
Date: February 11-15

I. Refer to teacher's manual for Objectives, Preparation, and Developing Word Perception. Have papers for written evaluation of students.

II. Developing Comprehension Skills--

Find out what assumptions the pupils have made about how history is written. Questions similar to the following may be helpful: How do we know what happened in the past? Who do you suppose finds old records and studies them? When a historian writes about a period of time in America, does he tell everything that happened? Why not? How do you suppose he decides which things to tell?

Explain that historians study old records and documents and then write explanations and interpretations of them. Ask what kinds of old records historians might be interested in (newspapers, letters, minutes of meetings, purchase orders, etc.). Point out that these originals are called primary sources and that reading them is something quite different from reading about their significance.

Say, "If you wanted to know something about the Constitution of the United States, you might read a history book, an encyclopedia article, or the Constitution itself. Which would represent a primary source? Would a letter written by Thomas Jefferson or a book about Jefferson's life be a primary source? Would a copy of a speech given by John F. Kennedy or a newspaper editorial about the speech be a primary source?" Let the pupils suggest other examples.

Suggest that when a primary source is available, it is a good idea to check it. Ask why. Make sure the pupils understand that a reader of history is in a better position to judge the writer's explanation and interpretation if he has seen the primary sources himself.

III. Direction--

Have the following questions on the chalkboard prior to giving direction:

1. How much did the Blue-Backed Speller cost?

2. What is the only book that has had more copies sold?

3. How old was Noah Webster?

Remind the pupils that the work of the historian is to study records and to point out to us important events and their meanings. You may wish to mention that one result of such work is the kind of information we read in social studies books at school or in history books from the library and that another is the kind of brief

historical account found in an encyclopedia. Point out that when the pupils read about history, they need to remember that they are relying on the opinions of the writer about what is important.

Tell the pupils to open their books to page 234. After reading the title and the dates, help them relate the period of 1783-1793 to the end of the Revolutionary War and to the birth of our nation. Point out related dates and facts the children are familiar with. Then read the introductory statement aloud while the pupils read silently.

Say, "As you read the story look for the answers to the questions on the board." Let a student read these orally.

IV. Discussion and Rereading--

Point out the answers to the purpose-setting questions.

1. 30¢ (one shilling and twopence)

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Hand out the written evaluation. When the papers are returned to the student, they should be discussed. Then collect them to give to the experimenter. (answers on page 117 of teacher's manual)

V. Refer to teacher's manual for Individualizing Instruction.

"The Blue-Backed Speller"

Plan 22 Nondirected
Page 115 Teacher's Manual
Page 234 Student's Book
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I. Refer to teacher's manual for Objectives, Preparation, and Developing Word Perception. Have papers for written evaluation of students.

II. Developing Comprehension Skills--

Find out what assumptions the pupils have made about how history is written. Questions similar to the following may be helpful: How do we know what happened in the past? Who do you suppose finds old records and studies them? When a historian writes about a period of time in America, does he tell everything that happened? Why not? How do you suppose he decides which things to tell?

Explain that historians study old records and documents and then write explanations and interpretations of them. Ask what kinds of old records historians might be interested in (newspapers, letters, minutes of meetings, purchase orders, etc.). Point out that these originals are called primary sources and that reading them is something quite different from reading about their significance.

Say, "If you wanted to know something about the Constitution of the United States, you might read a history book, an encyclopedia article, or the Constitution itself. Which would represent a primary source? Would a letter written by Thomas Jefferson or a book about Jefferson's life be a primary source? Would a copy of a speech given by John F. Kennedy or a newspaper editorial about the speech be a primary source?" Let the pupils suggest other examples.

Suggest that when a primary source is available, it is a good idea to check it. Ask why. Make sure the pupils understand that a reader of history is in a better position to judge the writer's explanation and interpretation if he has seen the primary sources himself.

III. Direction--Make no comment except, "Please read the story on page 234."

IV. Discussion and Rereading--

Hand out the written evaluation. When the papers are returned to the student, they should be discussed. Then collect them to give to the experimenter. (answers on page 117 of teacher's manual)

V. Refer to teacher's manual for Individualizing Instruction.

Plan 22
Evaluation

Name _____

1. What did Noah Webster do about getting a copyright for his book?

2. How did Noah get his book published?

3. Where was the Speller sold?

4. What evidence do you have that the conversation in this story did not actually take place? Why did the writer use conversation in her story?

5. What did boys and girls in school like about the Speller?

6. What was the effect of the Speller's popularity?

7. How can you find out whether information other than the conversation in the story is accurate?

8. Where might you find a copy of the blue-backed Speller?