An Investigation of Five Basic Reading Programs at the Third Grade Level for Instruction in Contextual and Structural Clue Techniques of Word-Meaning Attack

Jeanne G. Nurding

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AN INVESTIGATION OF FIVE BASIC READING PROGRAMS AT THE THIRD GRADE LEVEL FOR INSTRUCTION IN CONTEXTUAL AND STRUCTURAL CLUE TECHNIQUES OF WORD-MEANING ATTACK

A Thesis
Presented to
the Graduate Faculty
Central Washington State College

In Partial Fulfillment
of the Requirements for the Degree
Master of Education

by
Jean G. Nurding
August, 1968
APPROVED FOR THE GRADUATE FACULTY

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John Schwenker
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CHAPTER I

THE PROBLEM AND DEFINITIONS OF TERMS USED

Educators continually review basic reading programs used in teaching pupils to read. One aspect they examine is what these programs do to foster growth and independence in vocabulary. Because a number of students are known to experience varying degrees of difficulty in finding the meaning of some words, there appeared to be a need to examine some of the basic reading programs for instruction in techniques of word-meaning attack. Among such techniques advocated by educators are (1) the use of context and (2) analysis of word structure as aids to finding meaning.

Therefore, this study was undertaken in an attempt to explore some of the contextual and structural techniques of word attack for meaning which may appear in basic reading programs.

I. STATEMENT OF THE PROBLEM

The purpose of this study was to examine five basic reading programs at the third grade level to identify instructional lessons presented in two categories of context clues and three types of structural clues. The two categories of contextual clues were word clues and typographical clues. The three types of structural clues were prefixes, suffixes, and inflectional
endings. Identification of the variety of clues and frequency of clue lessons in each textbook series and the similarities and differences in presentation among series was also considered an important part of the purpose for this study.

II. NEED FOR THE STUDY

Smith and Dechant emphasized, "Without an understanding of words, comprehension is impossible" (55:215). The educators in a study by Addy, cited by Smith and Dechant (55:220), recommended that pupils be taught to recognize a variety of clues to word meaning such as those found in context and in affixes. In general, specialists in reading agreed that these and similar clues can and must be taught. Their suggestions were included in Chapter II of this study. Since basic reading programs provide a major source of instructional materials used in teaching children to read (26:67), there appeared to be a need to examine reading programs for instruction on contextual and structural clues to word-meaning.

III. IMPORTANCE OF THE STUDY

Previous attempts to examine reading programs for instruction in contextual and structural clues for the purposes of word-meaning attack, rather than word attack for recognition and pronunciation, have
not been located by the writer up to this time. A study of selected pro-
grams, according to the purpose for this thesis, may inform educators
of what is currently presented for instruction in these guidebooks and
workbooks. This study may assist teachers in the selection of materials
to meet specific reading needs of students.

IV. LIMITATIONS OF THE STUDY

In an attempt to gather and organize the data according to the
purpose for this study, the following limitations were recognized:

The guidebooks and workbooks of the selected programs were
examined for instructional presentations on two categories of context
clues; namely, (1) word clues and (2) typographical clues which some-
times appear in the context and serve as indicators to word-meaning.
In addition, the clue investigation was limited to specific lessons which
discussed the recognition and function of these clues in reading.

The guidebooks and workbooks of the five programs were exam-
ined for lessons on three types of structural clues to word-meaning;
namely, (1) prefixes, (2) suffixes, and (3) inflectional endings. The
structural clue investigation was limited to lessons which discussed
the "inherent" meaning in specific affixes.

This study did not include investigations into other kinds of
clues to word understanding such as those which may be found in analysis
of the root form of a word. It did not include discussion or investigation of additional techniques, such as use of the dictionary, which may aid the pupil in finding the meaning of words. It did not include studies of specific words and their meanings which may have been presented as a part of vocabulary studies within the programs. The contextual and structural clues under examination were of the kind which were described by reading specialists and noted in Chapter II of this paper.

It should be noted that the programs under examination presented different basic approaches to reading. The Lippincott series claimed to use essentially a phonic approach—a point of view which "emphasized the skill of decoding, the process of turning the printed symbols into speech sounds occurring in language, as a procedure for word understanding" (32:iv). It could be assumed that this series might consider knowledge of speech sounds more important than understanding the function of context clues. Consequently, more instructional suggestions might be included on phonics than for the development of contextual techniques, such as word clues.

The remaining four programs appeared to use basically a combination approach to reading which included instruction in phonics and contextual techniques—a point of view which stressed phonics for word recognition and pronunciation, and contextual techniques for word understandings through anticipation of word meaning or through the words and
ideas adjacent to the word. Consequently, it could be assumed that these four programs might offer instruction in contextual techniques such as word clues.

In addition, it may be noted that the contextual and structural clues included in this study are developmental over a period of years. The present investigation was limited to an examination of instruction in these clues in third year programs.

Because the writer was able to locate few studies in research which attempted to measure the effectiveness of these clues as techniques for word-meaning attack, this present study did not attempt to determine the advisability of teaching the clues. The final importance of this investigation may be determined after the effectiveness of the use of the contextual and structural clues considered in this paper have been tested under controlled experimentation.

V. MATERIALS USED IN THE STUDY

The five basic reading programs selected for review, listed by publisher and edition, were: The American Book Company, 1965; Ginn, 1964; Houghton-Mifflin, 1966; Lippincott, 1964; and Scott, Foresman, 1964. These were the current editions which had been published at the time of writing. The writer's intent was to select programs providing a representative sample of instructional materials used in the schools at the time of the study.
Basic reading programs were selected for examination because according to Harris, this type of instructional material is most widely used in teaching children to read (25:71) and because, in Russell's opinion:

The basic reader program provides continuity of growth, provides for a wide variety of reading activities, and provides a worthwhile content of ideas (48:291).

The third grade level was studied because, as Russell noted, this level terminates the primary school organization with its emphasis on "... many of the basic abilities which go to make up competent reading and which are a foundation for higher levels of reading performance" (48:164). Russell's statement as to the importance of this grade was the primary consideration in the selection of this level for review.

VI. PROCEDURES USED IN THE STUDY

The writer surveyed the literature to find some of the contextual and structural clues educators suggested for instructional purposes. Research on these clues was reviewed also in an attempt to ascertain their usefulness in reading and to find what understanding of them was demonstrated by pupils. Findings were reported in Chapter II.

The instructional suggestions contained in the teacher's guidebooks and workbooks of the programs were examined for discussions of contextual and structural clues. Pertinent suggestions in each of the programs were identified according to the type of clue and the number of
times it was presented. The variety of such clues given was noted also. Programs were compared, according to the purpose set forth in this study. The findings appear in Chapter III.

VII. DEFINITIONS OF TERMS USED

For the purposes of this study, the terms below were defined in the following manner:

**Basic Reading Programs**

Basic reading programs are instructional materials which have developmental scope and sequence over a period of years. They were developed by reading specialists to be used in the classroom to teach reading. A program usually consisted of two textbooks of stories for each child (part one and part two); two teacher's guidebooks (part one and part two) which presented instructional suggestions for teaching a variety of reading skills; and two workbooks (part one and part two) with additional instructional suggestions.

**Context**

Context was defined as the discourse that surrounds a word or passage that is being separately discussed. Analysis of these "surrounding words" may help to clarify, or, in some instances, may aid the reader in his understanding of the word or passage.
Context Clues

Context clues were characterized as types of clues, or hints, which appear in reading material and offer indications about the meaning of a word which appears in the same contextual setting. This study was limited to two categories of context clues: (1) word clues, and (2) typographical clues. Within these categories of clues are varieties of specific clues.

Word Clues

Word clues comprised one of the categories of context clues which were examined in this study. Such clues appear in writing and may serve as indicators to the meaning of a word which appears in the same contextual setting. Among varieties of word clues which may function in this manner are synonyms, antonyms, words which express related ideas, and words which express the reflection of a mood. Additional varieties of word clues were discussed in Chapter II of this thesis.

Typographical Clues

Typographical clues composed the second category of context clues which were examined in this study. These clues are types of written markings, as in punctuation, which occur in reading material. They sometimes suggest the meaning of words which appear in the same contextual setting. Among the varieties of typographical clues with which
this study was concerned were various functions of the comma, the dash, hyphen, and parentheses as aids to word-meaning attack. These and similar clues were discussed in Chapter II.

**Reading**

Although many definitions of reading were found by the writer, Smith and Dechant declared that "... reading has so many facets that a simple definition cannot adequately encompass all of them" (55:21). With this limitation in mind, Harris' definition was selected for this study because of his emphasis on "meaningful interpretation." Harris defined reading as "... a meaningful interpretation of printed or written verbal symbols" (26:13).

**Structural clues**

Structural clues were characterized as types of clues, or hints, which appear within the structure of a word and sometimes offer indications about the meaning of the word. This study was limited to three types of structural clues—prefixes, suffixes, and inflectional endings—and the specific meanings suggested by them.

**Prefixes**

Prefixes are composed of one or more letters or syllables which sometimes appear at the beginning of a word to change or modify word-meaning.
**Suffixes**

Suffixes are composed of one or more letters or syllables which sometimes are added to the end of a word to change or modify word-meaning. A suffix combines its meaning with that of the word to which it is affixed. Most suffixes have a grammatical function; specifically, they change the words to which they are affixed into different parts of speech. For example, *-er* added to the verb "teach" makes the noun "teacher."

**Inflectional Endings**

Inflectional endings, sometimes called word variants, are meaningful elements which are affixed to the end of words to form plurals and the possessive case of nouns; the past tense, the third person singular, present indicative, and the present participle of verbs; and the comparison of adjectives or adverbs.

**Vocabulary**

As defined for use in this study, the term "vocabulary" referred to words and phrases occurring in reading which the reader should understand to read with comprehension.
VIII. ORGANIZATION OF THE REMAINDER OF THE THESIS

In Chapter II the author presented a review of some of the literature on the varieties of word and typographical clues which sometimes appear in reading context. Also included in Chapter II was a review of some of the literature on the types of structural clues under examination in this study. Specific attention was given to discussions by reading specialists on the function of these clues. Summaries of studies in research on these clues were included.

Chapter III explained the procedures used by the writer in collecting the data and reported the findings of this study.

Chapter IV presented a summary of the study, reported the conclusions, and provided recommendations which were derived from the conclusions. Suggestions for additional research were also included.
CHAPTER II

REVIEW OF THE LITERATURE AND RELATED RESEARCH

This chapter was designed to present a review of some of the literature concerning contextual and structural clues to word-meaning which reading specialists suggested teaching to pupils. Also included in Chapter II were discussions of research studies which attempted to measure the frequency of inclusion of these clues in reading materials. Studies were noted which attempted to demonstrate pupils' needs for guidance in developing techniques for word-meaning attack.

I. CONTEXTUAL CLUES

In his review of research, Gage stated, "There seems to be no doubt among investigators that pupils must be taught to use context. This view is strongly supported by Strang, McCullough, Alm, and others" (18:892).

The issue then, which formed the basis for this study, became that of examining programs to find how they translated the idea of using context to obtain word-meaning into practice for classroom use. Spache and Berg pointed out that it was not enough to tell pupils to refer to the context, or surrounding words, to derive the meaning of a word which appeared in the same contextual setting. They maintained that unless
specific guidance in the use of context is given, the average reader uses his favorite technique--the guess (57:109).

Spache and Berg discussed the Durost-Center Word Mastery Test published by the World Book Company. They cited this test as one illustration of how pupils lack skill in flexible and efficient use of the context to obtain word-meanings.

The standards for this test show that the average high school graduate can use the context to derive meanings in only about 50 to 60 per cent of the words unknown to him. Even when the sentence is carefully constructed to show the meaning of a difficult word, as in this test, the average student can derive meanings only about half the time (57:109).

Based on this test, and on other research for which they did not cite sources, Spache and Berg concluded that pupils needed guidance in techniques which could be used to derive meaning from the context. One procedure suggested by Smith (56:182), Betts (7:601), Spache and Berg (57:110), and others, was to teach pupils to recognize specific kinds of context clues. Thus developed the basis for this study; namely, the amount of guidance basic reading programs gave in the recognition and function of types of context clues.

The fact that there are clues which appear in context was mentioned by Smith: "Perhaps it is the context clue technique that aids the mature reader most often in recognizing a word which he sees for the first time in print" (56:182). Smith guessed that adults probably use context clues so frequently and effectually that they are not aware of
this valuable aid. She urged that teachers help children to "... take steps toward this stage of maturation" (56:182).

Smith pointed out some of the dangers in developing the context clue approach. The first danger noted by Smith develops from indiscreetly instructing the child to guess the word. She cited Webster's definition of the word "guess" as meaning "... to form an opinion without evidence; conjecture." Smith stressed that finding word-meaning through the use of context clues is different from guessing the meaning.

In this case the child carefully considers the meaning implied in a sentence or paragraph as a whole, and in the light of this meaning he reasons what the unrecognized word might be and deduces it as a result of his reasoning. The meanings conveyed by a combination of other words in a passage constitute the evidence on which the child bases his conclusion in supplying the unrecognized word (56:186).

A second danger, according to Smith, was that some children who are already wild guessers in reading will become even wilder and more prolific guessers of words. The third danger she noted was that an overemphasis on the use of context clues may cause some children to look upon this one procedure as an easy way to get all words. This procedure "... may result in retarding or diminishing their attempts to use other techniques" (56:186). Although she cited no research to substantiate these dangers, she did arrive at these opinions out of a background of experience of teaching reading in the public schools and in
teaching on both the graduate and undergraduate levels in New York University.

In conclusion, Smith stated:

Words of warning in regard to teaching the use of context clues are important and need to be observed carefully. If the precautionary measures mentioned are observed, however, the teacher may proceed in her development of this technique with confidence that her efforts will be richly rewarded (56:187).

Betts emphasized that one of the most important aids to word recognition and meaning is the clue afforded by the context. He stated that the systematic use of context clues "... is not outright wild guessing; instead it is a process of examination and evaluation--of basing the probable answer on the facts of the situation" (7:601-602).

C. M. McCullough stated that students must become aware of different kinds of context clues. She suggested types of context clues which sometimes appear in writing:

1. Experience. In the experience clue the unknown word is predictable from the student's life-experience. "An exploding skyrocket set fire to a crowded cabaret early today, and fourteen persons were ______." Knowledge of fire and crowded places suggests the meaning here.

2. Comparison or Contrast. In the comparison or contrast clue the unknown word is predictable as like or opposite to another word. "They were as different as day and night. While he was highly excitable, she was ______."  

3. Synonym or Definition. In the synonym clue the unknown word is suggested by a synonym for it. In some cases this is done through the appositive structure. "The _______, a wizard of great reputation for villainy, gazed scornfully at his victim."
4. **Familiar Expression or Language Experience.** This clue uses the student's acquaintance with everyday expressions, common language patterns. "The drowning man was carried to the beach, where firemen gave him artificial ________." 

5. **Summary.** In the summary clue the unknown word summarizes the ideas that precede or follow it. "At the age of eighty-five the king was still playing a skillful game of tennis. He seldom missed his daily swim. For a man of his age, he was very ________." 

6. **Reflection of a mood or Situation.** In this clue the unknown word fits the situation or mood already established. "His arms ached and his breath came harder with each stroke as he kept on swimming toward the shore. Stroke by stroke, more and more slowly, he forced his ________ body through the water" (60:127).

McCullough emphasized that the purpose of presenting these types of clues was not to dictate the language of identification or to limit consideration to these types of clues. These were "merely suggestions" of some of the kinds of word clues that may be encountered in the materials individuals read (60:128).

Dechant defined antonyms as an additional type of contextual clue since they usually precede or follow a word or phrase and express the opposite meaning to the word in question (13:332).

Artley described another kind of context clue. He suggested that typographical markings such as quotation marks, boldface type, and parenthesis offered indications to word-meaning. He labeled these devices as "stop signals," or as a means of informing the child that here is an unusual use of a familiar word. He used as an example the word "minutes."
Parentheses--The minutes (a written record) of a meeting are usually written by the secretary.

Quotation marks--The "minutes" of a meeting are usually written by the secretary (5:68-74).

Michaelis discussed a variety of punctuation marks which may offer clues to word-meaning. Among punctuation he suggested teaching to pupils were: "the comma to set off items in a series, terms and phrases in apposition, dependent clauses, adverbial phrases containing a verb form and parenthetical expressions; exclamation points to express joy, surprise, danger, or anger; the apostrophe in a contraction or to indicate possession; the colon before an expression that explains or gives examples of what has gone before, or the colon can mean "as follows" ; and the semi-colon--used to separate clauses in compound sentences and to separate parts of a sentence that includes commas" (38:333-336).

Because a number of reading specialists described a variety of contextual clues, the task of this study was to see if basic reading programs made use of these kinds of suggestions.

"Not many studies have been made in regard to children's use of context clues as a word identification technique," declared Smith (56:182). She cited one study in which McKee found that the average child in the fourth grade was able to use context clues to identify the meaning of an unknown word in his textbooks about one in three times.
Smith, referring to McKee's work, concluded, "This finding gives us reason to believe that it is advisable to give more guidance in the use of the contextual technique" (56:182). To a degree, this present study was developed in response to Smith's conclusion.

Strang completed a similar study in which she attempted to measure pupils' understanding and use of various kinds of context clues. She concluded that students of high school and college levels had very little understanding of the types of context clues or techniques for using them to discover word meaning. She suggested that serious inadequacies in the use of context clues by pupils existed (59:88-93).

In conclusion, educators generally agreed that pupils need to be taught to use the context in order to obtain the meaning of words. To translate this idea into classroom practice became the issue. Some reading specialists advocated teaching pupils a variety of context clues which appear in writing. They listed and discussed a variety of such clues, although they also urged that the reader understand that writing was not confined to those clues alone. Since specialists in reading suggested teaching context clues, the purpose of this study, then, was to see if basic reading programs offered instruction in these and other kinds of contextual clues.
II. STRUCTURAL CLUES

A review of the literature indicated that a number of reading specialists advocated teaching pupils the meanings of the more common affixes and roots. Bond and Tinker (9:248), Smith and DeChant (55:219), and Betts (7:655) were among educators who cited research and concluded that certain affixes had inherent and relatively stable meanings. In addition, these and other specialists cited research which attempted to list the affixes which appear more commonly in writing, speaking, and in reference books. A brief summary of some of the studies to which they referred, and additional studies, are cited below.

Investigations into research were made concerning the use of affixes in writing and speaking. Harris wrote, "About one quarter of the more common English words, and a higher proportion of the less common words, begin with prefixes that have relatively constant meanings" (26:227). He stated also, "There are many suffixes in English, and the majority of them have more than one meaning, so that teaching only the most common meaning may create some confusion" (26:228).

Harris stressed the need for developing competence in structural analysis of affixes in beginning reading. "During the second and third grades, but mainly in the third, words with prefixes and suffixes begin to appear with increasing frequency" (26:205). In an attempt to illustrate the need for instruction in structural analysis of affixes, Harris analyzed
the words of three or more syllables in five pages of current sixth-grade social studies textbooks:

There were 91 different polysyllabic words in these five pages. There were 32 words with inflectional endings, 59 words with suffixes, and 21 words with prefixes and 19 different suffixes, of which nine occurred three or more times. Excluding proper names, there were only four polysyllabic words that were not compounds or did not have a prefix, a suffix, or an inflectional ending (26:204).

Smith and Dechant cited the following research: Brown and Wright studied the frequency in appearance of common prefixes and roots in reference books. Two types of dictionaries were analyzed. All prefixes were listed and the number of words in the dictionary containing a form of affixes and roots were counted. Out of that research, they compiled a list of fourteen master-words. The master-words contained twenty prefix and fourteen root elements--elements found in over 14,000 words of desk dictionary size, or an estimated 100,000 of unabridged dictionary size. The master-words contained two Greek roots, twelve Latin roots, and twenty prefixes (55:220). That portion of their findings which is related more closely to the purpose established for this thesis, namely, prefixes, is listed below. The common prefixes which appeared most frequently in the dictionaries were:

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</table>
Smith and Dechant cited the following research: Stauffer reported a similar study of the prefixes which appeared in the 1932 edition of Thorndike's *The Teacher's Word Book of 20,000 Words*. He discovered that 24 per cent of the words in the book had prefixes and that fifteen prefixes accounted for 82 per cent of all the prefixes in the 20,000 words. A list of the fifteen prefixes appears below:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Common Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ab</td>
<td>from</td>
</tr>
<tr>
<td>ad</td>
<td>to</td>
</tr>
<tr>
<td>be</td>
<td>by</td>
</tr>
<tr>
<td>com</td>
<td>with</td>
</tr>
<tr>
<td>de</td>
<td>from</td>
</tr>
<tr>
<td>dis</td>
<td>apart</td>
</tr>
<tr>
<td>en</td>
<td>in</td>
</tr>
<tr>
<td>ex</td>
<td>out</td>
</tr>
<tr>
<td>in</td>
<td>into</td>
</tr>
<tr>
<td>in</td>
<td>not</td>
</tr>
<tr>
<td>pre</td>
<td>before</td>
</tr>
<tr>
<td>pro</td>
<td>in front of</td>
</tr>
<tr>
<td>re</td>
<td>back</td>
</tr>
<tr>
<td>sub</td>
<td>under</td>
</tr>
<tr>
<td>un</td>
<td>not (55:220)</td>
</tr>
</tbody>
</table>
Studies were located which attempted to measure gains in an understanding of words through the study of prefixes and roots. Thompson reported the results of a study in which students concentrated on learning the "inherent" meanings of twenty prefixes and fourteen roots. The purpose of his test was to find the extent to which students could apply the learnings derived from a study of such elements. The 162 college students in his study showed a mean gain of 20 per cent over the pre-test vocabulary score. Thompson concluded that a statistical analysis of the results was quite encouraging (62:62-66).

A similar investigation was conducted by Otterman, who taught the meanings of prefixes and roots to two grade seven classes for thirty days, ten minutes a day. Pupils were later tested for their ability to interpret the meaning of unfamiliar words which contained the elements they had studied. On the basis of the results of the testing, Otterman concluded that only those of high intelligence showed a statistically reliable gain in ability to interpret new words. In addition, he concluded that there was no measurable improvement in general vocabulary or in reading comprehension (42:611-616).

Pond conducted a study which was somewhat related to the subject of structural analysis clues to word-meaning. Since Latin is a primary source of affixes and roots, Pond attempted to ascertain the value of studying the Latin language as a means of enlarging one's English
reading vocabulary. He concluded that a study of Latin was of little value in increasing the meaning vocabulary of high school pupils because there seemed to be little transfer to English vocabulary among the students in his study (44:611-618).

In conclusion, there appeared to be some evidence in the research which indicated that (1) certain affixes appear frequently in writing, and (2) some of the more common affixes, particularly prefixes, have relatively fixed meanings. Reading specialists, some of whom were cited in this section, advocated teaching some of the more common affixes to pupils as an aid to finding the meaning of words. Therefore, this present study was developed to ascertain the amount of instruction basic reading programs offered in the "inherent" meanings of common affixes at one grade level.

III. SUMMARY

In this chapter, the author discussed some of the research pertaining to different types of contextual and structural clues to word-meaning. Attention was given to specific word and typographical clues which sometimes appear in the context of written materials. Studies were cited which discussed the need that pupils demonstrated for careful guidance in the use of context. Additional studies described the frequent appearance of affixes in the English language; the inherent and
relatively stable meanings attributed to affixes, particularly the prefixes; and studies were cited which attempted to measure pupil growth in vocabulary as a result of studying certain of the structural elements.
CHAPTER III

COLLECTION OF DATA AND FINDINGS OF THE STUDY

The purpose of this study was to examine five basic reading programs at the third grade level to identify instructional lessons presented in two categories of context clues and three types of structural clues. The two categories of context clues were word clues and typographical clues. The three types of structural clues were prefixes, suffixes, and inflectional endings. Identification of the variety of clues and frequency of clue lessons in each textbook series and similarities and differences in presentation among series was also considered an important part of the purpose of this study.

To attain the above stated information and purpose, the procedures discussed in this chapter were followed. In addition, the findings of the investigation were included in this chapter.

I. COLLECTION OF DATA

The information used in this study was found in the five basic reading programs selected for review. They were, listed by publisher and edition: The American Book Company, 1965; Ginn, 1964; Houghton-Mifflin, 1966; Lippincott, 1964; and Scott, Foresman, 1964. Each of the programs contained two teacher's guidebooks—third grade, level one
and third grade, level two \((3^2)\). The programs included two workbooks \((3^1\) and \(3^2)\), with supplementary instructional suggestions. Although some of the programs listed additional supplies, such as books and word games, these were not included in the investigation.

For the purpose of clarity, the information gathered on context clues from the reading programs was organized into two categories: (1) word clues and (2) typographical clues. The context clues accepted for this study were those which were in accordance with the limitations and definitions established in Chapter I. The specific clues found in the programs appear in a subsequent portion of this chapter.

Similar procedures were followed in the organization of structural clues identified in this study. For the purpose of clarity, the information gathered on structural clue instruction in reading programs was organized into three categories: (1) prefixes, (2) suffixes, and (3) inflectional endings. The inherent meanings in the affixes, as they were given in the programs, was noted.

The following procedures were used in collecting data. The indices of the guidebooks and workbooks were surveyed in an attempt to locate the page numbers on which instruction in the clues was offered. Skill development sections, which listed the reading skills presented in the programs, were examined for similar information. Finally, a page-by-page examination of the entire contents of the books was employed in an
effort to locate instructional presentations on the clues. When such presentations were located, the type of clue was noted for inclusion in this study.

II. FINDINGS OF THE STUDY ON CONTEXT CLUES

Word Clues

Table I, page 28, presents the word types of context clues and the varieties of word clues found in the five reading series. In addition, Table I graphically compares programs with respect to similarities and differences, total clue lessons, and varieties of clues.

It may be seen in Table I that the word type of context clue instruction was found to be included in the American Book Company, Ginn, Houghton-Mifflin, and Scott, Foresman programs. No similar instruction appeared to be included in the Lippincott series. In addition, it was noted that the majority of lessons in the combined programs was given on the "association" clue.

It may be observed that varieties of three or more clues were identified in the American Book Company, Houghton-Mifflin, and Scott, Foresman programs. No similar variety appeared to be included in the Ginn and Lippincott series. In addition, it may be seen that a variety of nine clues were found in the combined programs.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Antonyms</td>
<td></td>
<td>2 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Association</td>
<td></td>
<td>1 5 2</td>
<td>27 4 2</td>
<td></td>
<td>2 1 2</td>
</tr>
<tr>
<td>3. Classification</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Definition</td>
<td></td>
<td>1</td>
<td>1 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Familiar expression</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Indexing</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Reflection of a mood</td>
<td></td>
<td>1 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Related ideas</td>
<td></td>
<td>1 1 1 1</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>9. Synonyms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2 1</td>
</tr>
<tr>
<td>Total Lessons</td>
<td>(15)</td>
<td>(7)</td>
<td>(38)</td>
<td>(0)</td>
<td>(9)</td>
</tr>
<tr>
<td>Variety of Clues</td>
<td>(8)</td>
<td>(1)</td>
<td>(3)</td>
<td>(0)</td>
<td>(3)</td>
</tr>
</tbody>
</table>
An analysis of the information in Table I suggested the existence of major similarities among the programs with respect to clue selection, frequency of clue instruction, and type of book in which the majority of lessons was located.

Regarding similarities in clue selection, it may be seen that three clues were included in two or more programs, namely, the "association" clue in four programs, the "related ideas" clue in three, and the "definition" clue in two of the series. The "association" clue, although not mentioned by name in Chapter II as a type of context clue, was used in one or more of the following ways: The meaning of a word is conveyed (1) through association with another word, (2) through association with words and ideas in a sentence, and (3) through an association with words and ideas in a paragraph.

With respect to similarities among programs in frequency of single clue instruction, it was observed that when instruction in a clue was given, such instruction "generally" appeared once or twice within a guidebook or workbook. Exceptions were seen concerning the "association" clue in the programs of Houghton-Mifflin and Ginn.

Concerning similarities among programs in the type of book in which the majority of clue instruction was located, it was found that more of the total lessons within a program appeared in guidebooks rather than workbooks. An exception to this was noted in the Scott,
Foresman series. In this series, the majority of the lessons was included in workbooks rather than guidebooks.

It may be observed in Table I that there appeared to be major differences among programs with respect to clue selection, total numbers of lessons on the clues, and variety of clues.

Concerning differences among programs in clue selection, it was seen that, of the nine clues in the combined programs, six of the clues appeared for instruction in single programs. In addition, regarding differences in clue selection, it was observed that a majority of lessons was on the "association" clue in the programs of Ginn, Houghton-Mifflin, and Scott, Foresman. However, the American Book Company series selected the "antonyms" and "related ideas" clues for their most frequent lessons.

Dissimilarities among programs were seen in the total numbers of lessons which the series presented on the clues. It should be noted here that although the Houghton-Mifflin series offered more lessons on word clues than did any of the other programs studied, 87 per cent of their presentations were on the "association" clue. In addition, it was seen that all of the Ginn series word clue instruction was exclusively on the "association" clue.

Dissimilarities among programs were seen with respect to variety of clues. Analysis of the table indicated that a variety of eight clues
appeared in the American Book Company series, and a variety of three clues in the programs of Houghton-Mifflin and Scott, Foresman, respectively. In addition, when the varieties of clues appearing in the five programs are compared to clues suggested for instruction by C. M. McCullough in Chapter II, page 15, of this thesis, it may be seen that none of the programs examined included lessons on three of the recommended clues, namely, the "experience" clue, the "summary" clue, and the "comparison or contrast" clue.

**Typographical Clues**

Table II, page 32, presents a tabulation of the kinds of typographical context clues found in the reading programs selected for this study. An examination of the data reveals that all of the programs studied appeared to offer instruction in the typographical type of context clue. It may be remembered that this was not the case with respect to word clue instruction. (See Table I, page 28.)

It may be observed in Table II that a variety of two types of typographical clues was found to be included in the American Book Company series. No comparable variety appeared in the programs of Ginn, Houghton-Mifflin, Lippincott, or Scott, Foresman. In addition, it may be noted that four clues were included for instruction in the combined programs and that multiple-meaning instruction (discussion of two or more functions of a clue) appeared with three of the clues.
TABLE II

TYPOGRAPHICAL TYPE OF CONTEXT CLUES IN FIVE BASIC READING PROGRAMS
AT THE THIRD GRADE LEVEL; NUMBER OF LESSONS
AND VARIETY OF CLUES

<table>
<thead>
<tr>
<th>Typographical Type of Context Clues</th>
<th>American Book Co.</th>
<th>Ginn &amp; Co.</th>
<th>Houghton-Mifflin Co.</th>
<th>Lippincott</th>
<th>Scott, Foresman Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Comma</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. of address</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. in apposition</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>c. in a series</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Dash</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. precedes explanation</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. denotes added idea</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Hyphen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. expresses single idea</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>b. to imitate sounds</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Parenthesis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. to explain prior action</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Total Lessons</td>
<td>(3)</td>
<td>(1)</td>
<td>(8)</td>
<td>(2)</td>
<td>(1)</td>
</tr>
<tr>
<td>Variety of Clues</td>
<td>(2)</td>
<td>(1)</td>
<td>(1)</td>
<td>(1)</td>
<td>(1)</td>
</tr>
</tbody>
</table>
It may be noted in Table II that there appeared to be a similarity among programs with respect to frequency of typographical clue instruction, namely, that with the exception of the Houghton-Mifflin series, the programs offered one lesson on one function or meaning of a clue when such a meaning was selected for presentation.

Clue selection appeared to be varied among programs. Analysis of the findings indicated that two programs selected the "comma" (in apposition) clue; two programs selected the "hyphen" (to express a single idea) clue. The remaining two clues, as well as six different or multiple meanings of the clues, appeared in single programs. In addition, it was observed that three programs offered multiple-meaning instruction and that the clues selected for these lessons were different in each of the programs; specifically, Houghton-Mifflin discussed three ways the comma is used, The American Book Company presented two uses of the dash, and Lippincott illustrated two meanings of the hyphen.

An analysis of programs on the basis of total numbers of lessons indicated that the Houghton-Mifflin series gave the majority of lessons on typographical clues—all on one clue, namely, three functions of the "comma."

It was seen that the American Book Company offered instruction in two varieties of typographical clues and the remaining programs presented one type of clue. In addition, it may be noted that none of the
examined programs included lessons on four typographical clues described by J. U. Michaelis, or the "quotation marks" and "boldface type" clues mentioned by A. S. Artley. Discussions of these clues appeared on pages 16 and 17 of this thesis.

III. FINDINGS OF THE STUDY ON STRUCTURAL CLUES

The Prefix Type of Structural Clue

Table III, page 35, presents the prefixes offered as structural clues to word meaning in the five reading programs. As indicated in Table II, the prefix type of structural clue was found to be included in all of the programs examined for this study. In addition, it was noted that the majority of lessons in the combined programs was given on the "un" prefix.

It may be seen that instruction in a variety of three or more prefix clues was identified in all of the programs. Nine prefixes appeared for instruction among the combined programs.

As noted in Table III, there appeared to be major similarities among programs with respect to clue selection, specifically that five identical prefixes were included for instruction in two or more programs. The "un" prefix appeared in four programs, three prefixes ("dis," "re," and "tele") were included in three varying programs, and the "fore" prefix appeared in two of the series.
<table>
<thead>
<tr>
<th>Prefix Type of Structural Clues</th>
<th>American Book Co.</th>
<th>Ginn &amp; Co.</th>
<th>Houghton-Mifflin Co.</th>
<th>Lippincott</th>
<th>Scott, Foresman Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. dis (not; opposite)</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. fore (before; front)</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. im (not)</td>
<td>1</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. mid (middle; amid)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. mis (badly; wrongly)</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>6. pro (in place of)</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>7. re (again; back)</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>8. tele (far away)</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. un (not; opposite; taken from)</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total Lessons</td>
<td>(12)</td>
<td>(5)</td>
<td>(4)</td>
<td>(3)</td>
<td>(11)</td>
</tr>
<tr>
<td>Variety of Prefixes</td>
<td>(3)</td>
<td>(3)</td>
<td>(4)</td>
<td>(3)</td>
<td>(6)</td>
</tr>
</tbody>
</table>
In addition, it was observed that four programs offered the majority of lessons in guidebooks rather than workbooks, and that the programs of Lippincott and Scott, Foresman used guidebooks exclusively for lesson presentation.

Differences among the programs appeared to exist concerning clue selection. It was observed that although five prefixes appeared for instruction in two or more programs, four prefixes were included for instruction in single programs. In addition, other than the "un" prefix, there appeared to be little similarity among programs in the prefixes selected for more than a single lesson; specifically, multiple lessons were given in the "re" prefix in the program of American Book Company, and multiple lessons appeared on the "dis" and "im" clues in the Scott, Foresman series. An additional dissimilarity among programs regarding clues selected for multiple lessons may be seen in Table III; namely, that the "im" prefix appeared exclusively in the Scott, Foresman series.

Differences among programs were noted with respect to frequency of instruction in specific clues. It was seen that although both multiple and single lessons on clues appeared in the programs of Ginn, American Book Company, and Scott, Foresman, selected clues in the Houghton-Mifflin and Lippincott series were given single presentations, exclusively.

A comparison of reading programs, on the basis of total instructional lessons in prefixes, indicated that the American Book Company and
Scott, Foresman series offered more lessons, twelve and eleven lessons respectively, than did other programs studied; and more than twice the number of prefix lessons given in each of the three other programs.

The greatest variety of clues, namely six, were included in the Scott, Foresman series. It was seen that two-thirds of the prefixes appearing in the combined programs were presented in this series.

In addition, it may be seen that four of the prefixes ("fore," "im," "mid," and "tele") included for instruction in one or more reading programs, did not appear in the lists of prefixes which Brown and Wright and Stauffer developed as a result of their research. These studies were noted in Chapter II of this thesis, on pages 20 and 21.

The Suffix Type of Structural Clue

Table IV, page 38, identifies the suffixes presented as structural clues to word-meaning in the five basic reading programs. As noted in Table IV, the suffix type of structural clue was included for instruction in all programs examined. In addition, the majority of lessons in the combined programs was on the "er" suffix.

Instruction in a variety of four or more suffixes was observed in the five programs. In addition, a variety of sixteen suffixes appeared in the combined programs and multiple-meaning instruction was given with five of the suffixes.
<table>
<thead>
<tr>
<th>Suffix Type of Structural Clue (Suffix and Meaning)</th>
<th>American Book Co.</th>
<th>Ginn &amp; Co.</th>
<th>Houghton-Mifflin Co.</th>
<th>Lippincott</th>
<th>Scott, Foresman Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. able</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. en (made of)</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>en (to make)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. er (agent or one who)</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>4. ful (full of)</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>ful (quantity)</td>
<td>5</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. less (without; opposite)</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>6. ly (describes; in a way that is ____)</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>7. ment (act of; state of)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>8. ness (denotes state of)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>9. or (agent or one who)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>10. ous (full of)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>11. ship (rank; state of; skill)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>12. teen (ten more than ____)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>13. th (describes a state or quality)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>th (forms ordinal numbers)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>14. ty (denotes tens in numbers)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>ty (describes a state of being)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>15. ward (toward)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>16. y (describes; modifies noun)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>y (full of; inclined to; somewhat)</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Lessons: (26) (17) (10) (14) (18)

Variety of Suffixes: (6) (5) (4) (7) (12)
As indicated in an analysis of Table IV, there appeared to be major similarities among programs with respect to clue selection; specifically, that of the sixteen suffixes in the combined programs, nine were included for instruction in two or more programs. The "less" suffix was presented in five of the series, "er" appeared in four, "ful" in four, "en" and "ly" in three, "able" and "ness" in two, "ous" in two, and "y" was included in two of the series.

Similarity among programs was observed concerning guidebook instruction; namely, the majority of lessons on suffixes appeared in guidebooks rather than workbooks. (The Scott, Foresman series offered suffix lessons in guidebooks, exclusively.)

Dissimilarity among programs was noted concerning multiple-meaning instruction. The programs of American Book Company, Ginn, and Scott, Foresman included multiple-meaning instruction in one or more of the suffixes. No comparable multiple-meaning instruction was located by the writer in the Houghton-Mifflin and Lippincott series.

Differences among programs were seen with respect to clues selected for emphasis (in terms of frequency of lessons on specific clues). Four or more lessons were presented on the "er" suffix in the American Book Company, Ginn, and Lippincott series, "en" received multiple lessons in the Ginn program, "ly" in the programs of Ginn and Lippincott, "less" in Houghton-Mifflin, "y" in the American Book
Company series, and "ty" in the Scott, Foresman program. In addition, the "ty" suffix appeared exclusively in the Scott, Foresman series.

A comparison of programs, on the basis of the total number of lessons which were offered in suffix meanings, indicated that the American Book Company series gave the majority of lessons. It was noted also that 62 per cent of their presentations were lessons on the "er" and "ful" suffixes.

A comparison of programs, on the basis of variety of suffixes, indicated that the Scott, Foresman series presented the greatest variety of suffixes and that seven of the sixteen suffixes in the combined programs appeared exclusively in this program.

Inflectional Ending Type of Structural Clue

Table V, page 41, was designed to identify the inflectional endings presented in the programs as structural clues to word-meaning. As indicated in Table V, the inflectional ending type of structural clue was included for instruction in the programs of the American Book Company, Ginn, Houghton-Mifflin, and Lippincott. No comparable instruction appeared to be presented in the Scott, Foresman series. In addition, the majority of lessons in the combined programs was on the "er" and "est" clues.

Instruction in a variety of two or more inflectional endings was found to be included in the programs of American Book Company, Ginn,
<table>
<thead>
<tr>
<th>Inflectional Ending Type of Structural Clue (Ending and Meaning)</th>
<th>American Book Co.</th>
<th>Ginn &amp; Co.</th>
<th>Houghton-Mifflin Co.</th>
<th>Lippincott</th>
<th>Scott, Foresman Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ed (finished action)</td>
<td>1 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. er (comparison of two)</td>
<td>2 1</td>
<td></td>
<td></td>
<td></td>
<td>2 2 1</td>
</tr>
<tr>
<td>3. es (plural)</td>
<td>1</td>
<td>3 1</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>4. est (comparison of three or more)</td>
<td>2 1</td>
<td>1 2</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>5. ing (going on)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. s (plural)</td>
<td>2 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Lessons</td>
<td>(7)</td>
<td>(14)</td>
<td>(1)</td>
<td>(7)</td>
<td>(0)</td>
</tr>
<tr>
<td>Variety of Inflectional Endings</td>
<td>(3)</td>
<td>(5)</td>
<td>(1)</td>
<td>(2)</td>
<td>(0)</td>
</tr>
</tbody>
</table>
and Lippincott. No comparable variety appeared to be presented in the Houghton-Mifflin series. In addition, a variety of six word variants was found among the combined programs.

As indicated in an analysis of Table V, there appeared to be major similarities among programs with respect to clue selection. It was observed that three word variants were included for instruction in two or more programs; specifically, "es" and "est" were presented in three programs and "er" appeared in two programs.

Similarity among programs was noted concerning the frequency of lessons on a single clue. It was seen that with the exception of multiple lessons on the "es" inflectional ending in guidebook one of the Ginn series, programs offered one or two lessons within a book when a clue was selected for instruction.

Dissimilarity among programs was noted with respect to the type of book in which inflectional ending instruction occurred. The American Book Company and Ginn programs offered lessons in guidebooks exclusively, Houghton-Mifflin presented their single lesson in a workbook, and Lippincott included lessons in both guidebooks and workbooks.

Differences among programs were noted concerning clue selection. It was seen that although three of the word variants were included in two or more programs, three different inflectional endings appeared in the
Ginn series, exclusively. In addition, two of the Ginn program's clues, "s" and "ed," were presented in multiple lessons.

Dissimilarity among programs was seen with respect to clue emphasis. The majority of word variant lessons in the American Book Company and Lippincott series appeared on the "er" clue. The American Book Company program also emphasized the "est" inflectional ending and the Ginn series presented lessons more frequently on the "es" word variant.

A comparison of programs, on the basis of total numbers of lessons in inflectional endings and their respective meanings, indicated that the Ginn series gave twice as many lessons (14) as did the programs of the American Book Company (7) and Lippincott (7).

A comparison of programs, on the basis of variety of clues, indicated again that the Ginn series presented the greatest variety of clues. In addition, it was seen that of the six clues which appeared for instruction in the combined programs, five were presented in the Ginn series.

V. SUMMARY

The purpose of this chapter was to discuss collection of the data and to present an analysis of the data collected in the investigation of programs. Tables of programs and clue instruction were given and discussed.
CHAPTER IV

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

I. SUMMARY

This study was an investigation of some of the instructional materials used in classroom reading programs. The materials selected for examination were teachers' guidebooks and workbooks included in five basic reading programs at the third grade level. Listed by publisher, the programs studied were: American Book Company, Ginn, Houghton-Mifflin, Lippincott, and Scott, Foresman.

The purpose for the study was to examine the programs in an attempt to identify instruction in two techniques of word-meaning attack: contextual and structural clues to word-meaning.

A summary of the findings of the investigation is given below.

Context Clues

Identification of clue instruction. With the exception of word clue instruction in the Lippincott series, the word and typographical type of context clue instruction was found in the five programs examined for this study. The majority of lessons in the combined programs dealt with the "association" word clue and the "comma" typographical clue.
Varieties of clues. Nine word clues and four typographical clues (the latter with multiple-meaning instruction in three clues) were found in the combined programs. A variety of two or more word clues was identified in the programs of American Book Company, Houghton-Mifflin, and Scott, Foresman. A variety of two typographical clues was found in the American Book Company series, exclusively. It was noted that certain of the contextual clues mentioned in the reading research were not found to be included in the third year level programs.

Comparison of programs. There appeared to be differences among programs with respect to clue selection, emphasis on specific clues, location of lessons, and multiple- and single-clue-meaning instruction.

1. Clue selection: Three word clues were included in two or more programs and six clues appeared in single programs. Two typographical clues were found in two dissimilar programs and two clues (including various multiple-meanings) appeared for instruction in single programs.

2. Emphasis on specific clues (in terms of frequency of lessons):

The "association" word clue was emphasized in the programs of Ginn, Houghton-Mifflin, and Scott, Foresman. The "antonyms" and "related ideas" clues were emphasized in the American Book Company series. In typographical clues,
it was seen that each of the programs selected a different clue for comparable emphasis, and in four programs all such instruction was on the one clue selected.

3. Location of lessons: Lessons were located exclusively in the guidebooks of the Ginn Series and in the workbooks of the Lippincott series. The programs of American Book Company, Houghton-Mifflin, and Scott, Foresman, offered lessons in both guidebooks and workbooks.

4. Multiple- and single-clue-meaning instruction: Multiple-meaning instruction in the typographical type of context clue was found in the programs of Houghton-Mifflin and Lippincott, single meaning instruction appeared in the Ginn and Scott, Foresman series, and the American Book Company presented both multiple- and single-meaning clue instruction.

Similarities among programs were found concerning frequency of lessons within a guidebook or workbook; namely, that when a clue was selected for instruction, "generally" the clue appeared in one or two lessons within a guidebook or workbook. Exceptions were noted in the Ginn and Houghton-Mifflin series. However, it was found that although the Ginn series gave more than the "usual" number of word clue lessons in guidebook one, all lessons were on one clue exclusively--the "association" clue. It was noted also that although the Houghton-Mifflin
program gave seven lessons on the "comma" clue in workbook two, these
lessons were all on three functions of the comma as clues to word-meaning.

It was found that the Houghton-Mifflin series gave the majority
of lessons in both categories of context clues--more than twice the
lessons in any other program. It was also noted that 87 per cent of the
word type of context clue instruction was on the "association" clue and
that all typographical lessons were on the "comma" clue.

Analysis of the findings indicated that the American Book Com­
pany series presented the greatest variety of both word and typographical
context clues. It was found that this series was second to the Houghton-
Mifflin program in total number of lessons presented in both categories
of context clues.

Structural Clues

Identification of clue instruction. With the exception of inflec­
tional ending instruction in the Scott, Foresman series, all programs
were found to offer lessons in prefixes, suffixes, and inflectional
endings. The majority of lessons in the combined programs dealt with
the "un" prefix, the "er" suffix, and the "er" and "est" word variants.

Varieties of clues. Nine prefixes, sixteen suffixes (with
multiple-meaning instruction in five), and six inflectional endings were
found in the combined programs. A variety of three or more prefixes and
suffixes was identified in all of the programs examined. Comparable variety in word variant instruction appeared in the programs of American Book Company and Ginn. It was noted that some of the clues mentioned in reading research were not included for instruction in the examined programs.

**Comparison of programs.** There appeared to be differences among programs with respect to clue selection, emphasis on specific clues, location of lessons, and multiple- and single-meaning clue instruction.

1. Clue selection: There appeared to be more commonality among programs in structural clues selected for presentations than in the word type of context clue selection. (Three word clues were included in more than one of the series and six clues appeared in single programs.) It was seen that five prefixes appeared in two or more programs and four were included in single programs. Nine suffixes were common to two or more programs, whereas seven appeared in single programs. Three word variants were included in two or more programs and three appeared in single programs.

2. Emphasis on specific clues (in terms of frequency of lessons):

Other than the "un" prefix and "er" suffix, in two or three
programs, the series selected different clues for emphasis. In some instances, those affixes which were given multiple lessons by one program did not appear in any lesson in some of the series.

3. Location of lessons: Lessons were located in guidebooks and workbooks of the American Book Company, Ginn, Houghton-Mifflin, and Lippincott series. All comparable instruction was found exclusively in the guidebooks of the Scott, Foresman program.

4. Multiple- and single-meaning clue instruction: It was found that the programs of American Book Company, Ginn, and Scott, Foresman included multiple-meaning instruction in one or more of the suffixes. No comparable instruction was located in the Houghton-Mifflin and Lippincott series. It may be remembered from the discussion on page 46 of this thesis that the programs of Houghton-Mifflin and Lippincott offered multiple-meaning typographical clue lessons whereas the Ginn and Scott, Foresman series did not--an indication of reversal of "possible" policy in these programs regarding multiple-meaning instruction. In addition, it was noted that the American Book Company presented both multiple- and single-meaning suffix instruction, as they did also with typographical clues.
Similarities among programs were found concerning frequency of lessons within a guidebook or workbook; namely, that when a clue was selected for instruction, "generally," the clue appeared in one or two lessons within a guidebook or workbook. Exceptions were noted with four affixes in the American Book Company program, two affixes in the Ginn series, and three affixes in the Scott, Foresman program.

It was found that the American Book Company program gave the majority of lessons in prefixes and suffixes, and the Ginn series gave the majority of lessons in word variants.

Analysis of the findings indicated that the Scott, Foresman series presented the greatest variety of prefixes and suffixes. (It was noted that the Scott, Foresman program was second to the American Book Company series in total number of lessons in prefixes and suffixes.) The Ginn series, in addition to offering the majority of lessons in word variants, presented the greatest variety of inflectional endings. (It was seen that five of the six word variants in the combined series appeared in the Ginn program.)

II. CONCLUSIONS

In accordance with the purpose for this investigation and on the basis of this study, the following conclusions were drawn:
1. It was concluded that none of the programs examined can be expected to offer guidance, at the third grade level, in teaching all of the contextual and structural clues needed by the reader.

2. It was concluded that programs do not indicate a common understanding of the terms "contextual clues" and "structural clues" to word-meaning. In many instances, indices did not list these categories. If references to these types of clue instruction were made, lessons were located under topics such as "Vocabulary," "Comprehension," or "Word Meanings." Because of the apparent lack of "common" terminology and understandings among programs in index references, the writer had to examine guidebooks and workbooks page by page to find lessons pertinent to the study.

3. It was concluded that differences exist between studies in reading and programs regarding clue selection—differences in clues suggested for teaching by the research and clues included for instruction in reading programs. Discussions of these differences in clue selection were included on pages 31, 33, and 37 of this thesis. However, since this study was limited to an investigation of the clues presented in the third year program, it may be that other levels in these same series
included clues suggested by the research. (Further inquiry into this possibility was beyond the scope of this study.)

4. It was concluded that the phonic approach to reading possibly does circumvent one contextual technique of attacking word-meaning, namely that of word clues. This conclusion was based on the finding that no word type of context clue instruction was included in the Lippincott series. However, it should be noted that the Lippincott series was consistent with their philosophy of the phonic approach which this series described as emphasizing the process of "decoding" printed symbols into speech sounds as a procedure for obtaining word meaning, rather than implementing the contextual approach--the process of examining the surrounding words for clues to meaning.

5. Because there appeared to be negligible consensus among programs concerning which of the contextual and structural clues were to be included at the third grade level, the writer concluded that changing reading series from year to year may be hazardous for pupils. The pupils conceivably might not be exposed to the variety of clues which might be included in the developmental sequence of a single series over a period of years.
6. Because some of the examined programs stressed certain context clues by presenting frequent lessons on them, and because in many of these same programs a limited variety of clues were presented, it might be asked if reading programs emphasized these clues at the expense of introducing new clues which might be equally important. In addition, frequent instruction in one or two clues may have hindered programs to the extent that adequate review of previously introduced clues in prior grade levels may have been neglected.

7. It was concluded that the reading programs reviewed presented a limited variety of context clues for instruction at the third grade level. An exception was noted in the American Book Company series which presented a variety of eight word clues. A severely limited variety of typographical clues was prevalent in all programs.

8. It was concluded that variations among programs existed with respect to the type of book in which clue lessons were given. Some of the programs used guidebooks or workbooks exclusively and others utilized a combination of both guidebooks and workbooks for clue presentations. In addition, the writer observed inconsistencies within the Ginn, Scott,
Foresman, and Lippincott series in the location of lessons. The programs of Ginn and Lippincott used guidebooks or workbooks exclusively in presenting context clues, but used both guidebooks and workbooks for structural clue lessons. Scott, Foresman, which used both guidebooks and workbooks for context clue instruction, used guidebooks exclusively for structural clue lessons. The American Book Company and Houghton-Mifflin series were consistent in offering contextual and structural lessons in both guidebooks and workbooks.

9. It was concluded that variations concerning multiple-meaning instruction exist among programs. Inconsistencies within all programs were observed with this type of instruction. Although Houghton-Mifflin gave multiple-meaning instruction in context clues, they did not in structural clues. Although the programs of Ginn and Scott, Foresman had multiple-meaning instruction in structural clues, they did not in context clues. The American Book Company series was consistent in offering multiple-meaning instruction in both contextual and structural clues.

10. On the basis of the information included in Chapter II of this study, it was concluded that contextual clues to word-meaning may be useful tools for the reader. If these clues are as important to the contextual approach to reading as the contextual
philosophy indicated, it seemed unfortunate that any textbook series would generally provide only one or two lessons within a book on the development of a specific clue.

11. It was concluded that programs appeared to disagree on how many lessons on single clues pupils needed to utilize the clues when reading.

12. Although the Houghton-Mifflin, American Book Company, and Ginn series were found to present more lessons in some of the categories which were established in this investigation, it is concluded that criteria other than frequency of lessons should not be overlooked in the process of selecting a textbook series for classroom use. Varieties of clues may be of vital importance to the needs of the third-year reader.

III. RECOMMENDATIONS OF THE STUDY AND SUGGESTIONS FOR FURTHER RESEARCH

Recommendations

The following recommendations are offered for the reader's consideration and for those who edit, publish, and author basic reading textbook series. Suggestions for the classroom teacher are also included.

The reviewer suggests that reading specialists, textbook writers, and those involved in reading research review present understandings of
the terms "Context Clues" and "Structural Clues" as techniques of word attack for obtaining meaning. In the reviewer’s opinion, there appears to be a lack of consistency among those involved in the various fields of reading development as to the definition, purpose, and scope of these two concepts. For instance, some programs listed prefix instruction, but many of the lessons were more related to word attack for the purpose of pronunciation or syllable-recognition rather than presenting discussions of the "inherent" meanings of the prefixes and how these stable meanings function within a word.

In discussions of definition, purpose, and scope of the concepts, authors and publishers should consider developing "common" terminology--common to all programs--to facilitate the reader's understanding of contextual and structural clues. The reviewer found in this study that the name of a specific clue varied from program to program (i.e., the "association" clue in some programs was known as an "antonym" clue in another program).

After reviewing, developing, and refining present understandings of the concepts, the writer suggests that reading program authors discuss, in an introductory section of guidebooks, the "role" or function of contextual and structural clues to word-understanding. It is the opinion of this writer that teachers would then be better able to implement the intent of the clue lessons.
To facilitate the location of clue lessons, the writer suggests that publishers include two topics in the indices of the guidebooks and workbooks of basic reading programs; specifically, "Context Clues to Word-Meaning" and "Structural Clues to Word-Meaning." Subsequent sub-topics should include names of clues and the pages on which lessons on them occur. Mention was made on page 51 of this study, of how this reviewer had to examine the guidebooks and workbooks page by page to find the lessons applicable to this investigation. This method of survey was necessary because indices did not usually provide adequate topical and locational information appropriate to the present study. Although clue lessons were included in indices, they were listed under a variety of topics such as "Vocabulary," "Syllabication," "Word Understanding," "Comprehension," etc.

Because reading programs are developmental over a period of years, the authors of these texts might consider listing in each textbook level the scope and sequence of contextual and structural clues presented in each of the levels throughout the series.

The following recommendations are offered for consideration by the classroom teacher who plans to use basic reading series and their instructional suggestions on contextual and structural clues:

The teacher needs to be aware of what constitutes techniques for attacking word-meaning, such as those which were discussed in this
study. This awareness is necessary because textbook series do not
appear to be in agreement in terms of terminology, which aspects of the
concepts should be presented for instruction, which clues to include for
study, and frequency of clue presentation at the third grade level. Because
of the length and variety of instructional suggestions which the series
present in different areas of reading development, it would be possible
for a teacher to inadvertently overlook some of the contextual and
structural clue lessons.

The classroom teacher needs to be cognizant of the fact that
reading is a developmental process over a period of years. Therefore,
the teacher should be familiar with contextual and structural clue instruc-
tion to develop word-meaning at all grade levels in textbook series
selected for use in his classroom. This information would provide the
teacher with knowledge of which clues students might be expected to
know from previous years' instruction. In addition, the teacher would
be able to provide opportunities for review of specific clues. Because
the reviewer found that the series did not always provide opportunities
for the reinforcement of previously introduced clues, the teacher is
advised to plan periodic review lessons on these clues. The lack of
review instruction was noted in the finding that "generally" a clue
appeared in only one or two lessons within a book.
Suggestions for Further Research

In discussing the conclusions of this study, several problems were mentioned which could profit from further research:

It would be desirable to repeat this study using a number of different basic reading programs in an attempt to ascertain if the findings would be comparable to those in this investigation.

An examination of these five reading programs for instruction in additional techniques of word-meaning attack would assist the teacher in selecting a series which emphasizes a variety of techniques. An investigation of programs for lessons on root words, sentence patterning, word origins, and figurative language--frequency of lessons and variety presented--would be pertinent areas to explore.

The writer suggests that total series be examined for scope and sequence of contextual and structural clue instruction. It was mentioned on pages 58 and 59 that the teacher should be aware of the clue instruction presented at all levels. A study such as the one proposed here would give the teacher this information.

Perhaps the most pressing question related to this study was not included because it was beyond the scope of the investigation: "How helpful are contextual and structural clues as aids for obtaining the meanings of words?" Although studies have attempted to measure pupils' understanding of these clues, it would seem that investigations
of the effectiveness of clues in reading should be studied, possibly before further investigations of pupils' understandings of the functions of these clues are instigated.


