Comparative study of two methods for determining the instructional and the independent reading levels of fourth grade children

Mary Alma Fluet

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A COMPARATIVE STUDY OF TWO METHODS FOR DETERMINING
THE INSTRUCTIONAL AND THE INDEPENDENT READING
LEVELS OF FOURTH GRADE CHILDREN

by

Sister Mary Alma Fluet, S.M.S.M.

A RESEARCH PAPER
SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARTS IN EDUCATION (READING SPECIALIST)
AT THE CARDINAL STRITCH COLLEGE

Milwaukee, Wisconsin
1968
This research paper has been
approved for the Graduate Committee
of the Cardinal Stritch College by

Sister M. Julitta, O.S.F.
(Adviser)

Date May 16, 1968
ACKNOWLEDGMENTS

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CHAPTER I

THE PROBLEM

Introduction

Contemporary educators are discussing characteristics of evaluation and labeling that which describes beginnings as well as progress continuous diagnosis. They likewise consider an independent level of reading as a key point in helping determine progress. Johnson and Kress believe that it is through wide reading at the independent level that the child has opportunities to apply the abilities he has acquired, to learn through his own efforts, to increase the rate and flexibility of his reading — in short, to bring his reading ability to the point that it provides him with real satisfaction. Only through his independent reading will an individual become a 'spontaneous reader,' one to whom reading is a natural part of living.

Statement of the Problem

Bearing this in mind the present writer has undertaken a study of independent and instructional levels of fourth grade children positing the problem in the present format: How do results obtained from the Spache method of determining a child's instructional and independent reading


3Ibid.
levels compare with the evaluation obtained from the Betts method of the Informal Reading Inventory for children in grade four?

Definition of Terms

By way of clarification of terms, the following definitions are given: Independent reading level is "the level at which a child can function on his own and do a virtually perfect job in handling of the material." Instructional reading level is "the level at which the child should be and can profitably be instructed." The present definitions correspond amply with Betts's description when he looks upon the first as "the highest reading level at which the individual can read with full understanding and freedom from mechanical difficulties," and speaks of the second as "the highest reading level at which systematic instruction can be initiated." On the other hand, Spache's version of the independent level is considered as that grade level of supplementary instructional and recreational reading materials which the pupil can read to himself with adequate comprehension, even though he may experience some word-recognition difficulties. He designates the instructional level as the child's grade level in oral reading. It implies the level and quality of reading which most teachers would find acceptable.

4Johnson and Kress, loc. cit., p. 5.
5Ibid., p. 7.
7Ibid., p. 439.
in group or classroom practice, and the grade level of basal or other reading materials to which the child should or would be exposed in the typical classroom.\textsuperscript{9}

Specific Objectives

In this study, the writer plans to adhere to these specific objectives:

1) Does the independent reading level obtained from the Spache Diagnostic Reading Scales tend to be significantly higher than the one determined from the Informal Reading Inventory?

2) How does the instructional level obtained from the Spache Scales differ from the one obtained from the Informal Reading Inventory? Which tends to be higher?

General Procedure

In 1961 Donegan made a study of instructional levels of four standardized tests and an Informal Reading Inventory. The graded paragraphs which she compiled were based on Betts's norms for informal testing. Excerpts from the Betts Basic Reader Series\textsuperscript{10} were used to conduct her study with grade six students. These paragraphs will form part of the present writer's testing procedure. The Spache Diagnostic Reading paragraphs will also be administered to each child at the same sitting to determine the child's instructional and independent reading levels. Specific procedures will be included in chapter three.

\textsuperscript{9}Ibid.

Limitations

The limitations of the present study are evidenced by the fact that only one group of children at one grade placement is being evaluated. For reasons of expediency, it was necessary to schedule some children for testing in the evening and after school hour. Since both the Spache Reading Scales and the Informal Reading Inventory were administered at the same sitting, this should not be a factor in differences found. Nevertheless, the writer is eager to see if a general opinion that the independent reading level obtained on the Spache Diagnostic Reading Scales differs greatly from other methods is justified.
CHAPTER II

SURVEY OF RELATED LITERATURE

Importance of Informal Testing

Although there are disagreements as to formal norms for informal testing, "perhaps some of the disagreement results from the dearth of research related to the subject."¹¹ That "there is a range of at least nine years in levels of reading achievement"¹² among fourth graders alone is affirmed by Betts. Because of the growing necessity to understand the problems of underachievers as well as the gifted, some authorities suggest that the teachers themselves learn to diagnose difficulties early through observation and differentiated instruction, in small group and class situations.¹³ This challenge emphasizes the necessity for constructive testing and teaching for the "large number of students, how many has not been exactly determined, whose achievement does not match their intellectual capacity."¹⁴ How can they be helped before the reading difficulty becomes formidable? Ammons gives a partial solution when she states:


¹³Ibid., p. 326.

Individual students . . . are entitled to better than the least we can do. Given our present sophistication, the best we can do is to collect relevant data so that conditions for individuals do not force them into slots, particularly when the slot is marked failure. 15

Since reading instruction aims to challenge a pupil at a reading level at which he can succeed, 16 there is need to be concerned about both his instructional and his independent reading levels.

There has been real progress since 1915 when standardized tests and scales appeared in America. 17 The children of this twentieth century are being measured intellectually, physically, and socially more than ever before. Clinical diagnosis reveals important information which should influence teaching procedures and produce successful learning, yet the struggling learner is bypassing profitable opportunities somehow. Is there a discrepancy in our standardized instruments which can be bridged as it were by unstandardized informal testing? McCracken defines

an informal reading test or inventory (is) as a nonstandardized reading test. . . . The word informal may be misleading. The testing procedures and standards are set and fairly formal. Informal means that the testing is non-standardized in the technical sense of test construction and administration. Informal does not mean relaxed or subjective. 18

Given the necessity that teacher-pupil rapport during individual testing be favorable, the scoring and determining of functional reading levels

15Ammons, op. cit., p. 12.


18Robert A. McCracken, "The Informal Reading Inventory as a Means of Improving Instruction," Perspectives in Reading: No. 8, op. cit., pp. 79-80.
should be guided by objective criteria. McCracken again presents rules
"to make error counting objective and precise."\(^{19}\)

1) Count only one error at any one place in the reading. Many
times a student will make more than one type of error at one
point in the story. For example, a student may omit a dif­
ficult word, reread (repetition) and mispronounce the omitted
word, reread again (another repetition) and pronounce the word
correctly. All of this would be counted as one error.
2) Count as one error if a student corrects an error, with or
without repeating other words.
3) Count as one error the omission of more than one word of con­
secutive print.
4) Count as one error the addition of two or more words consecu­
tively.
5) Count as one error if child makes second error caused by his
forcing grammatical agreement; e.g., substitutes he for they
and reads he wants for they want.
6) Count as one error the mispronouncing of a proper name or dif­
ficult word if the word appears more than once in a 100 to 150
word selection and is mispronounced two or more times. For
example, students will sometimes read Bill as Billy consistently.
Count as one error if a proper name has two or more words
in it and both are mispronounced. Count errors on simple words
each time they occur. For example if a is substituted for the
three times, count three errors.\(^{20}\)

With such helpful criteria the classroom teacher can use informal testing
as an important adjunct to effective instruction. The writer is well a­
ware of the fact that "reading tests should be the servants, not the dio­
tors, of reading instruction,"\(^{21}\) yet such caution merely spurs an in­
terested teacher to seek more reliable data to aid needy reading cases.
Although tests are not the final word, a teacher can find help in meet­
ingen pupil needs by studying test results and using them as guides for
instruction. In the Harvard report published in 1963 Austin and Morrison
transmit the following information:

\(^{19}\)Ibid., p. 36.

\(^{20}\)Ibid., pp. 86-7.

\(^{21}\)William R. Hermer, *Perspectives in Reading No. 8*, op. cit.,
p. 64.
In one school system it was the responsibility of the research department to collect, classify, and summarize the following items: (1) standardized test information, (2) personality adjustment inventories, (3) observation information, (4) student and parental surveys, (5) interview data, and (6) pupil-attitude scales.22

To such a valuable collection of data could be added another precious source, namely, the informal reading inventory. By means of professional interpretation of these data, reading specialists, school counselors, and classroom teachers will fulfill their primary role which is to help the learner in a learning situation. "Ignorance of the known cannot be condoned."23

Use of Informal Testing

This study has tried to emphasize the importance of informal testing in an effort to make it more widely used. Standardized tests form part and parcel of regular testing programs in schools and reading clinics throughout the country, but there is a sense of apprehension among many teachers about the use of informal testing. This is perhaps the result of a paucity of research on the subject. There is agreement among authorities about the value of this instrument. Betts, Newton, Strang, and Umans give valuable insight to informal testing and look upon it as a basic tool in diagnosis, differentiated instruction, and appraising reading programs. In discussing the open textbook test relating to a student's instructional level, Umans provides the following:


Such a test reveals a student's competencies by his ability to read approximately 95 per cent or more of the running words in a selection, and it tests his ability to understand what he has read. It also serves as an excellent diagnostic instrument by which to observe his reading mannerisms—finger pointing, head and lip movements, or facial and other tensions; his ability to read the material orally in rhythmic patterns (correct phrasing); his ability to interpret punctuation and to anticipate meaning; his ability to read silently at a rate considerably greater than his oral rate.24

It is evident from this quote that an informal testing situation can provide valid information for effective teaching. The above observational techniques can be applied to the independent, the frustration, and the potential reading levels also. The uses of an informal reading inventory can be manifold. By way of comparison of the Spache and the Betts methods for determining the reading levels of children in grade four, the writer will give but a general summary here, for the specific objectives and results of the study will be discussed in subsequent chapters.

As mentioned in the Donegan study25 the Betts norms were used. For the independent reading level the child was to achieve a ninety-nine per cent pronunciation and ninety per cent comprehension. His instructional level was to be assessed by a ninety-five per cent pronunciation and seventy per cent comprehension. Donegan mentions a slight deviation from Betts's norms for instructional level. "Although seventy-five per cent is the criterion suggested by Betts for the instructional level, seventy percent was used in this study to facilitate correcting based in each case on ten questions."26


26Ibid., p. 27.
Spache's Diagnostic Reading Scales norms differ from Betts. To assess the child's independent reading level on Spache's standardized test the examinee must achieve but a sixty per cent comprehension level on silent reading, and his first attempt must be on a paragraph just above the instructional level. On the instructional level the child must score eighty-five per cent comprehension or better on oral reading and the number of errors allowed is indicated above each paragraph in the record booklet.

Research Studies

A recent research study of three popular reading diagnostic tests draws the conclusion that

the Spache test includes certain pairs of reading passages which are supposed to be of equal difficulty (within the pair), but which are of markedly different within-pair difficulties. These unequal item difficulties have deleterious effects on the administration of the oral and silent reading subtests.27

After administering these Spache Diagnostic Reading Scales, the writer concedes to the probability of harmful effects on the silent reading subtests because the child is given reading matter that is above his instructional level, yet cannot agree with Eller and Attea on the same type of effect on the oral reading results. Spache's paragraphs have been submitted to validity and reliability tests which make them worthwhile, yet because "implication of the data in various tables is not fully explored,"28 it would seem reasonable to suggest that these subtests be investigated


further. One authority states that "these scales provide a logical and well organized approach to diagnosis of reading skills and difficulties."\textsuperscript{29} It may be that Bryant is right, yet one is prone to question the logic of the Spache norms to determine a child's independent reading level with a requirement of only sixty per cent comprehension.

Harbiger implies from her study that an "awareness of the wide range of abilities existing in every class must guide the teacher in selecting reading material for his class."\textsuperscript{30} So in the choice of tests, the wise teacher, the reading specialist, the diagnostician, know and use the best instruments available, both standardized and unstandardized. If the reality criterion for diagnostic testing is of primary importance as stipulated by Ramsey who defines it as "testing ability in much the same manner as the ability is used in real reading,"\textsuperscript{31} then objective norms must also be realistic. The writer tends to agree with Engelhart and Beck who state that "too little is known concerning the mental processes underlying test scores."\textsuperscript{32}

\textsuperscript{29}Ibid., p. 821.


\textsuperscript{31}Wallace Ramsey, \textit{Perspectives in Reading} No. 8, \textit{op. cit.}, p. 67.

CHAPTER III

PROCEDURE

The present study was undertaken to compare the independent and instructional reading levels of fourth grade children by means of the Spache Diagnostic Reading Scales and the Donegan Informal Reading Inventory.

Population

Twenty-eight fourth grade subjects presently enrolled at The Cardinal Stritch College Reading Clinic formed the nucleus of this experiment. The group was somewhat heterogeneous in character. The majority of the children came from a middle class status while a minority formed part of a higher socio-economic stratum. Their ages, computed to March 1, 1968, were within the range of nine years, two months to ten years, ten months inclusively. Their intelligence quotients on the Stanford-Binet Scale ranged from 96 IQ through 120 IQ, totaling twenty-four points. Two children were within the 96 IQ range while only one child had an IQ of 120. The individual Wide Range Spelling scores for each of the twenty-eight subjects extended three grade levels. These scores served as a guide for initial paragraph level with each child who was tested by the writer from March twelfth, nineteen hundred and sixty-eight through March twenty-third, nineteen hundred and sixty-eight on the Spache Diagnostic Reading Scales and the Donegan Graded Paragraphs.

Criteria

The criteria for determining the reading levels followed by Donegan
are those based on Betts's criteria for finding the instructional and the independent reading levels. The range of reading difficulty covered by the Donegan paragraphs extends from pre-primer to grade ten. Since grade four pupils were being tested in this study, the examiner found it necessary to prepare record sheets from pre-primer through grade eight. As was mentioned in this study33 Donegan used Betts's norms. To achieve an independent reading level the child was expected to read fluently and allowed a ninety-nine per cent pronunciation, that is, one error per one hundred running words with a comprehension of ninety per cent. His instructional level was assessed from a ninety-five per cent pronunciation capacity and seventy per cent comprehension. The child's reading rhythm at this level was to be somewhat smooth.

Spache's Diagnostic Reading Scales differed in criteria. To achieve an independent reading level the child was asked to read a paragraph just above his instructional level silently. Only sixty per cent comprehension was required at this level as compared to Betts's ninety per cent. The instructional reading level was found by asking the child to read paragraphs orally until an eighty-five per cent comprehension or better was met.

From the outset it was noticed by the examiner that the independent reading criterion posed a difficulty, so a variable was introduced. When the child failed to meet Spache's "just above the obtained instructional level"34 criterion, the examiner gave him a lower paragraph which

33 supra, p. 9.
had not been used for oral reading. Only four subjects yielded a lower independent reading level while fourteen achieved a higher level than the instructional. The others yielded scores commensurate with their instructional reading levels. The graded paragraphs on this standardized test cover eleven grade levels contained within grade one through grade eight. The error span runs the gamut of nine through fourteen.

The instructional reading level determined for the child in the reading clinic is a composite of a total evaluation of the preliminary tests administered and an actual "try-out" on books.

The Testing Program

The writer administered the above mentioned tests alternately to each child at one sitting within a testing span of eleven days. All children were tested either in the afternoon or in the evening depending on when most convenient for the child to come to the college. Results were scored and tabulated from highest to lowest in chronological age, and each child's scores appeared under the instructional level for the Spache scales, the Donegan paragraphs, and the level at which the child was being taught in the reading clinic. The latter information from the records was verified by the corroboration of the clinician working with each child at the time of the administration of the Spache and Donegan scales. The independent reading level scores obtained from the Spache paragraphs and the Donegan paragraphs were also tabulated in the same fashion as the instructional levels.

Statistical Treatment of Data

In order to determine if there was any significant differences between the means of levels attained on the Spache and Donegan Scales
and the levels assigned at the Clinic, the t-test, using the formula for correlated data, was used. To make a comparative study of the results obtained by individual students, the scores were charted graphically.
CHAPTER IV

INTERPRETATION OF DATA

The writer's purpose in pursuing this study was to make a comparative evaluation of the instructional and independent reading levels obtained by the use of the Spache and the Donegan Scales and the level at which the children were taught at the clinic. There is a general opinion that the independent level obtained on the Spache Diagnostic Reading Scales differs greatly from other methods. This study will give some evidence as to whether or not this is true. It would indicate also if studies should be continued to determine which has greater validity should results show that there is a real difference between levels obtained by the two different methods. Often, teachers find it necessary to do further informal assessments of levels in order to find the instructional level. Is it really necessary after having used either the Spache Diagnostic Reading Scales or the Donegan paragraphs, to administer additional tests or use informal techniques?

Comparison of Instructional and Independent Reading Levels

The exact instructional and independent reading levels obtained through the use of the Spache and Donegan Scales were subjected to the formula for correlated data to obtain the t-score. These data are presented in Table 1.

Comparison of instructional levels of twenty-eight subjects with an age range of one year, eight months; an IQ range of twenty-four IQ
<table>
<thead>
<tr>
<th>SOURCE OF READING LEVELS</th>
<th>MEAN</th>
<th>SD</th>
<th>$SB_M$</th>
<th>$r$</th>
<th>DIFF.</th>
<th>$SB_D$</th>
<th>t ratio</th>
<th>LEV. OF CONF.</th>
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<td>Spache Diagnostic Reading Scales</td>
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<td>.143</td>
<td></td>
<td>.33</td>
<td>1.38</td>
<td>.155</td>
<td>8.90</td>
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<td>Independent level</td>
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<td></td>
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<td></td>
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<td></td>
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<tr>
<td>Spache Diagnostic Reading Scales</td>
<td>4.91</td>
<td>1.01</td>
<td>.194</td>
<td></td>
<td>.55</td>
<td>2.61</td>
<td>.163</td>
<td>16.01</td>
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<tr>
<td>Donegan Informal Reading Inventory</td>
<td>2.30</td>
<td>.686</td>
<td>.132</td>
<td></td>
<td></td>
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<td></td>
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</tbody>
</table>
points; a spelling range of three grade scores, reveals the following information:

The differences between the means on the Spache Diagnostic Reading Scales and the Donegan Informal Reading Inventory for the instructional reading levels is but one grade, three months. The standard deviation difference is but one month, while the standard error of the mean is minimal. As the coefficient of correlation decreases with a decrease in the dispersion of scores, it is understandable that the coefficient of correlation between these two scales is fairly low (.33). The t-test establishes a significant difference between these two tests at the .001 level of confidence.

Comparison of the independent levels on both tests resulted in a moderately high coefficient of correlation (.55) and a significant difference at the .001 level of confidence. Reference to Table 1 will show that the difference between the means on these variables was two grade levels and six months; hence the great significant difference.

The instructional reading levels obtained through the use of the Spache and Donegan Scales and the Reading Clinic instructional level obtained from an aggregate of tests administered were subjected to the formula for correlated data to obtain the t-score. These data are presented in Table 2.

Comparison of these data shows that there is but six months difference between the means on the Spache Diagnostic Reading Scales results, and the Reading Clinic assessment. Likewise, the difference between the means on the Donegan Informal Reading Inventory and the Reading Clinic assessment is but seven months. This would indicate but one month dif-
Table 2

Comparison of Instructional Reading Levels of Spache Diagnostic Reading Scales, Donegan Informal Reading Inventory, and Cardinal Stritch College Reading Clinic for Children in Grade Four

<table>
<thead>
<tr>
<th>SOURCE OF READING LEVELS</th>
<th>MEAN</th>
<th>SD</th>
<th>SE_M</th>
<th>r</th>
<th>DIFF.</th>
<th>SE_D M</th>
<th>t ratio</th>
<th>LEV. OF CONF.</th>
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<tr>
<td>Instructional level</td>
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<td>Spache Diagnostic Reading Scales</td>
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<td>.748</td>
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<td>.25</td>
<td>.67</td>
<td>.165</td>
<td>4.06</td>
<td>.01</td>
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<td>Reading Clinic</td>
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<td>.126</td>
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<td>Donegan Informal Reading Inventory</td>
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ference between these differences. The standard error of the mean is again minimal in this instance which would indicate a decrease in the dispersion of scores. The t-tests on these variables yield a significant difference at the .01 level of confidence.

A graphic representation in Figure 1 gives a summary picture of levels. From these data it is evident that the Spache Diagnostic Reading Scales have the tendency to overrate a child's independent level, while the Betts criteria have the tendency to underrate the child's capacity for independent reading by the application of a ninety per cent comprehension - one error norm. On the other hand, the instructional level on all three variables - the Spache Reading Scales, the Informal Reading Inventory, and the Reading Clinic, show a more equalized pattern despite the fact that the Spache Reading Scales rate the child at a higher initial level.

These data answer our specific objectives:

1) The independent reading level obtained from the Spache Diagnostic Reading Scales differs significantly from the one determined by the Informal Reading Inventory.

2) The instructional reading level obtained from the Spache Diagnostic Reading Scales also differs significantly from the one obtained by the Informal Reading Inventory. The Spache Scales scores are higher.

To determine if the mean differences between the levels attained by the various measures would be a pattern for individual pupils, the in-

\[\text{Supra, p. 3.}\]
Fig. 1.--Summary comparison of the instructional reading levels determined by the Spache Diagnostic Reading Scales, the Donegan Informal Reading Inventory, and the Cardinal Stritch College Reading Clinic; and the independent reading levels determined by the Spache Diagnostic Reading Scales and the Donegan Informal Reading Inventory.
individual scores were plotted.

In Figures 2 and 3, the individual instructional levels determined by the Spache Diagnostic Reading Scales, the Donegan Informal Reading Inventory, and the Reading Clinic, are plotted.

The individual scores follow a pattern variation at the lower and upper end of the achievement scale with the larger discrepancy of scores at pupil eleven. The instructional levels obtained by the children on the Spache Scales seem very similar, hence one questions the discriminative value of this particular measure.

In Figures 4 and 5, the individual independent reading levels determined by the Spache Diagnostic Reading Scales and the Donegan Informal Reading Inventory are plotted.

There is a broad difference evidenced here, yet the general pattern is regular. When a child's level is higher on the Spache Scales it is also higher on the Donegan Scales and vice versa, with the exception of pupils thirteen and nineteen who rate a lower independent level on the Donegan Scales while scoring higher on the Spache Diagnostic Reading Scales.

These data indicate that although the Spache Diagnostic Reading Scales and the Donegan Scales test similar reading skills, their methods of administration vary greatly. It seems proper to conclude that studies should be continued to determine which of the two methods has the greatest validity. Until more research produces evidence to the contrary, teachers should continue with their own try-outs with informal testing, even when a standardized test has been given, to ascertain a child's reading capacity both instructionally and independently.
Fig. 2.—Comparison of instructional reading levels of the Spache Diagnostic Reading Scales, the Donegan Informal Reading Inventory, and the Cardinal Stritch College Reading Clinic for fourteen children whose results were at the lower end of the achievement scale.
Fig. 3.—Comparison of instructional reading levels of the Spache Diagnostic Reading Scales, the Donegan Informal Reading Inventory, and the Cardinal Stritch College Reading Clinic for fourteen children whose results were at the upper end of the achievement scale.
Fig. 4.—Comparison of independent reading levels of the Spache Diagnostic Reading Scales and the Donegan Informal Reading Inventory for fourteen children whose results were at the lower end of the achievement scale.
Fig. 5.--Comparison of independent reading levels of the Spache Diagnostic Reading Scales and the Donegan Informal Reading Inventory for fourteen children whose results were at the upper end of the achievement scale.
CHAPTER V

SUMMARY AND CONCLUSIONS

The problem of this research project was framed in the following question: How do results obtained from the Spache method of determining a child’s instructional and independent reading levels compare with the evaluation obtained from the Betts method of the Informal Reading Inventory for children in grade four?

Specific objectives raised by this problem were: (1) Does the independent reading level obtained from the Spache Diagnostic Reading Scales tend to be significantly higher than the one determined from the Informal Reading Inventory? and (2) How does the instructional level obtained from the Spache Scales differ from the one obtained from the Informal Reading Inventory? Which tends to be higher?

The measures used in this study were the Spache Diagnostic Reading Scales, the Donegan Informal Reading Inventory, and the Reading Clinic data. To find the instructional reading level for a child on the Spache Diagnostic Reading Scales the examiner gives oral reading paragraphs which should yield an eighty-five per cent comprehension or above. With the Donegan Informal Reading Inventory, the instructional reading level is sought by giving the child reading paragraphs which yield a ninety-five per cent pronunciation and seventy to seventy-five per cent comprehension. The Reading Clinic instructional reading level is the result of a composite of tests given by the staff prior to enrollment in the clinic. The independent reading level is found on the Spache Diag-
nostic Reading Scales by asking the child to read paragraphs silently. The examiner chooses that paragraph which is just above the child's instructional level; the comprehension score should be at least sixty per cent. On the Donegan Informal Reading Inventory, the independent reading level is sought by requiring a ninety-nine per cent pronunciation and a ninety per cent comprehension. It is obvious by the above norms that the greatest difficulty for both examiner and testee is adherence to the Spache method of determining a child's independent reading level.

Findings

During this study the investigator was interested in determining what would be the actual results of testing according to the Spache and Betts methods. It was found that the greatest significant difference was between the independent levels on both the Diagnostic Reading Scales and the Informal Reading Inventory with a moderately high coefficient of correlation (.55). It was also found that the Spache standardized test overrated the instructional level of the child while the Donegan informal test tended to underrate his instructional level. The instructional level for all three variables, the Spache test, the Donegan test, and the actual instructional level at the Clinic, were on a more equalized basis than the obtained independent levels. Both instructional and independent levels were summarized in the form of a bar graph as shown in Figure 1 and indicate that the mean differences between the Spache Diagnostic Reading Scales and the Reading Clinic assessment is six months. Likewise, the difference between the means on the Donegan Informal Reading Inventory and the Reading Clinic assessment is but seven months. The overall pattern in Figures 2 and 3 is that the individual scores vary at both ends of the achievement scale on all three variables, the Spache test, the Donegan
test, and Reading Clinic instructional reading level. The Spache Scale seemed to be less discriminative than either the Betts or the level evaluated by the clinician. In Figures 4 and 5, the general pattern is regular even though there is evidence of a broad difference between the independent reading levels on both the Spache and the Donegan tests.

Implications

From the data gathered through formal and informal testing of children in grade four who are presently enrolled at The Cardinal Stritch College Reading Clinic, the investigator may imply the following within the limitations of this study:

1) Children in grade four vary both as to actual reading level and type of reading skill, IQ notwithstanding.
2) The age factor does not seem to influence reading achievement at this grade level.
3) The independent reading level of the two methods investigated varies greatly due to differentiated norms.
4) The instructional reading level of the Spache Diagnostic Reading Scales, the Donegan Informal Reading Inventory, and the Reading Clinic assessment tends to be better equalized for children in grade four.

Suggestions for Further Research

Because of these findings and implications, the writer ventures a few salient suggestions:

1) A more elaborate research study comparing the Diagnostic Reading Scales and the Informal Reading Inventory results for students in grades five, six, and junior high school.
2) An evaluation of the validity of the reading levels obtained from the Spache Diagnostic Reading Scales and the Donegan Informal Reading Inventory through comparison with the reading levels attained by a composite of six evaluations made by reading specialists.
BIBLIOGRAPHY

Books


Articles and Periodicals


Unpublished Material


For reference to the Donegan Informal Reading Inventory refer to bibliographical entry under "Unpublished Material" in this study, page 33.
Diagnostic Reading Scales
devised by George D. Spache

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School ................................................................. City ................................................
Grade .................................................................

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WORD RECOGNITION

List 1

____ 1. look
____ 2. come
____ 3. in
____ 4. the
____ 5. you
____ 6. one
____ 7. she
____ 8. mother
____ 9. me
____ 10. yellow
____ 11. pig
____ 12. it
____ 13. big
____ 14. milk
____ 15. dog
____ 16. tree
____ 17. are
____ 18. day
____ 19. run
____ 20. all
____ 21. father
____ 22. door
____ 23. like
____ 24. ball
____ 25. eat
____ 26. good
____ 27. girl
____ 28. name
____ 29. away
____ 30. this
____ 31. bed
____ 32. call
____ 33. time
____ 34. sleep
____ 35. fish
____ 36. morning
____ 37. seen
____ 38. children
____ 39. live
____ 40. around
____ 41. barn
____ 42. other
____ 43. under
____ 44. cry
____ 45. chicken
____ 46. breakfast
____ 47. chair
____ 48. rain
____ 49. asleep
____ 50. peep

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</tbody>
</table>
WORD RECOGNITION
List 2

1. fly
2. road
3. horse
4. farmer
5. know
6. smoke
7. ground
8. right
9. fair
10. believe
11. workman
12. stamp
13. drink
14. shoes
15. witch
16. inch
17. strong
18. midnight
19. quickly
20. turkey
21. handle
22. battle
23. forgotten
24. slice
25. different
26. speed
27. skate
28. bridge
29. quarter
30. single
31. cleaned
32. drawn
33. either
34. crank
35. twilight
36. review
37. chapter
38. tongue
39. crawl
40. guard

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4
WORD RECOGNITION

List 3

1. difference  
2. carpenter  
3. broadcast  
4. championship  
5. janitor  
6. battery  
7. unloading  
8. troublesome  
9. thoughtfulness  
10. invent  
11. postpone  
12. disturb  
13. imagine  
14. provide  
15. flown  
16. windshield  
17. pretend  
18. powerfully  
19. smolder  
20. photograph  
21. shingle  
22. advertisement  
23. nephew  
24. ache  
25. delayed  
26. blunt  
27. practice  
28. brittle  
29. canary  
30. prairie  
31. strengthen  
32. blundering  
33. freight  
34. argue  
35. wrenches  
36. circumstances  
37. triumphant  
38. occasionally  
39. standardize  
40. obstinate

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5
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<tr>
<th>WORD ANALYSIS CHECKLIST</th>
<th>Word Recognition Errors</th>
<th>Oral Reading Errors</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Guesses word as a whole</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Substitutes word of similar configuration</td>
<td>_____</td>
<td>_____</td>
</tr>
<tr>
<td>2. Substitutes word of similar meaning or idea</td>
<td>_____</td>
<td>_____</td>
</tr>
<tr>
<td>3. Substitutes word beginning with same sound or letter</td>
<td>_____</td>
<td>_____</td>
</tr>
<tr>
<td>4. Substitutes irrelevant word</td>
<td>_____</td>
<td>_____</td>
</tr>
<tr>
<td>B. Spells letter-by-letter</td>
<td>_____</td>
<td>_____</td>
</tr>
<tr>
<td>C. Phonic Methods</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Sounds initial letter or blend, fuses rest</td>
<td>_____</td>
<td>_____</td>
</tr>
<tr>
<td>2. Sounds letter-by-letter</td>
<td>_____</td>
<td>_____</td>
</tr>
<tr>
<td>3. Sounds by phonograms or large phonic units</td>
<td>_____</td>
<td>_____</td>
</tr>
<tr>
<td>4. Sounds by syllables</td>
<td>_____</td>
<td>_____</td>
</tr>
<tr>
<td>5. Blends easily</td>
<td>_____</td>
<td>_____</td>
</tr>
<tr>
<td>6. Blends laboriously</td>
<td>_____</td>
<td>_____</td>
</tr>
<tr>
<td>D. Identifies shorter words within a word</td>
<td>_____</td>
<td>_____</td>
</tr>
<tr>
<td>E. Gives up; will not try</td>
<td>_____</td>
<td>_____</td>
</tr>
<tr>
<td>F. Expects teacher to supply words</td>
<td>_____</td>
<td>_____</td>
</tr>
<tr>
<td>G. Other problems:</td>
<td></td>
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</table>
Mary was on her way to school.
She came to the corner.
She saw a red light.
Then she saw the green light.
Then she went on to school.

1. What was the girl's name? (Mary)
2. Where was the girl going? (to school)
3. What did she see at the corner? (red or red and green)
4. What did she do when she got to the corner? (she stopped or waited for green light)
5. Why did she stop at the corner? (red light was on or to wait for green light)
6. Where did she cross the street? (at corner or at light)
7. Where did she go then? (to school)
The cow lives on the farm.
She eats grass all day long.
At night she is very tired.
Then she slowly comes home.

"I want to be milked," she says.

The farmer milks her.
She is glad to give milk.

The farmer drinks the milk.
His children drink the milk.
Then the cow sleeps in the barn.

1. Where does the cow live? (farm)
2. What does she do all day? (eats grass)
3. Why does she come home at night? (tired or to be milked)
4. How does the cow feel about being milked? (likes it)
5. Who milks her? (farmer)
6. Who drinks the milk? (farmer, children)
7. What does the cow do at night? (sleep)

A boy had a dog.
He wanted to feed the dog.
He put some meat outside, but the dog did not come.
Another dog came along and took the meat.
Then the boy’s dog came home, but it was too late.

1. Who had a dog? (boy)
2. What did he want to do for his dog? (feed him)
3. What did the boy give the dog? (meat)
4. Where did the boy put the meat? (outside)
5. Who ate it? (another dog)
6. Did the boy’s dog come home? (yes)
7. Why didn’t the dog have any supper? (too late or it was eaten)

*Two facts must be given to receive full credit. Half credit is given for a partial answer. In all other questions, full credit is given for any one of the possible answers.
2A Time Errors (9) Comp (4)

Bob has a little red wagon.
He likes to ride in it.
He pulls it slowly up the hill.
Then he rides it quickly down again.

One day he took his dog with him.
He pulled the dog up the hill.
Then they rode down the hill.
But the dog did not like to ride down.
He jumped out of the red wagon.
Bob went down by himself.

Now he does not try to take his dog in the wagon.

1. What was the boy's name? (Bob)
2. What color was his wagon? (red)
3. What does he do with his wagon? (pulls uphill, rides down; or goes up and down hill)
4. Whom did he take for a ride? (dog)
5. Does the dog like to ride? (no)
6. What happened then? (dog jumped out)
7. Whom does Bob ride with now? (no one or himself)

*Two facts must be given to receive full credit. Half credit is given for a partial answer. In all other questions, full credit is given for any one of the possible answers.

2B Time Errors (10) Comp (4)

Bob was eating his dinner.
"Ding-dong," went the fire bell.
The firemen were going to a fire. The engine went quickly down the street.

Bob jumped up and left his dinner.
He ran into the street.
The fire was on the next corner.
Bob watched the men put the fire out.
"Ding-dong," went the bell again.
The engine started back down the street.
Bob watched the engine go.
Then he went back home and ate his dinner.

1. What was the boy doing? (eating dinner)
2. What did he hear? (fire bell or ding-dong)
3. What was happening? (fire, or fire engine, or firemen going down street)
4. What did Bob do then? (ran into street)
5. What did the firemen do? (put fire out)
6. What did Bob do after the fire? (went home or ate dinner)
7. How do you suppose Bob's mother felt about his leaving dinner? (angry or annoyed)
Mary was nearly hit by a car last week. She was on her way to school in the morning. She walked down our street to the corner. Mary looked both ways and then began to cross.

A car was coming down the street very quickly. Mary saw the car and ran the rest of the way.

The man in the car was angry because he had to put on the brakes.

Mary was afraid, but she was glad she wasn't hurt.

1. Where was Mary going? (school)
2. What happened to Mary? (nearly hit by car)
3. How long ago was this? (few days or last week)
4. What did she do when she came to the corner before she crossed? (looked both ways)
5. What did the driver of the car do? (put on brakes)
6. How did the driver feel? (angry)
7. How did Mary feel? (frightened or glad)

Mary was playing alone at the rear of her house. She was waiting for her father to return. He was going to bring her a birthday present. Then she heard a truck stop nearby. Quickly she ran around to the front.

There was a big truck with its back toward the house. She wondered whether it had brought her present. Her father opened the rear of the truck. Out walked a small brown and white pony. This was her birthday present.

1. Where was Mary playing? (rear of house or back yard)
2. What was she waiting for? (father)
3. What did she hear? (truck stop)
4. Then what did she do? (ran to front of house)
5. What did she see? (truck)
6. What was in the truck? (pony)
7. Why did her father bring Mary a pony? (for birthday present)
Bob has a brown and white dog named Freckles. He is called Freckles because he has brown spots on his nose. Bob always takes Freckles on his trips to the woods. Freckles helps to scare up the rabbits. Bob walks slowly, but Freckles scampers through the leaves.

One day Freckles left Bob and went off by himself. Bob called and whistled, but Freckles did not come back to him. After a while Bob heard Freckles barking a long way off. Bob walked toward the sound of the barking until he found Freckles. Freckles thought he had caught a black and white kitten. But it wasn't a kitten, it was a skunk. That night Freckles had to sleep outside.

1. What was the dog called? (Freckles)
2. Why did he have that name? (brown spots on nose)
3. Why did Bob take the dog to the woods? (to find rabbits)
4. What happened one day? (Freckles ran off)
5. How did Bob find Freckles? (heard him barking)
6. What did Freckles think he had caught? (kitten)
7. What did Freckles really catch? (skunk)
8. Why did Freckles have to sleep outside? (he smelled)
Mary was going downtown to watch the parade. She skipped and ran along the street because she could hardly wait to get there. She was early and found a good place to stand.

Pretty soon she could hear the music of the bands coming down the main street. The men of the first band were dressed in scarlet, with white feathers in their hats. The men of the second band were clad in dark blue, with red feathers in their caps.

After them came the trucks loaded with flowers or fruit. Then there were cars filled with officers and their friends. Next came a company of soldiers in dark green uniforms. Last of all was another band dressed in white suits and yellow feathers.

1. Why did Mary go downtown? *(to see the parade)*
2. Had the parade started before she got there? *(no)*
3. What did she hear after she found a place to stand? *(music or bands)*
4. What came first in the parade? *(band)*
5. What else did she see besides bands? *(trucks, soldiers, or officers)*
6. What was in the trucks? *(flowers or fruit)*
7. What was the color of the soldiers' uniforms? *(green)*
8. How many bands did Mary see? *(three)*
One day Bob took a trip to the zoo. First he went to the great big lion house. He was a little frightened when the lions began to roar. The cages were clean but the lions didn’t seem to like them because they kept walking up and down, roaring and switching their tails. Bob was glad that there was a strong fence around the lions.

On the way out of the park, Bob stopped to watch the other animals. He saw a black wolf and a red fox in their cages. The keeper was feeding the wolf from a pail of food. The keeper didn’t enter the cage, but he pushed the food through the bars to the wolf.

1. Where did Bob go one day? (zoo)
2. What did he visit first? (lions or lion house)
3. How did he feel when the lions roared? (frightened or afraid)
4. How did he know that the lions didn’t like their cages? (walked up and down, roared or switched their tails)
5. Where did Bob go after the lion house? (watch other animals)
6. What other animals did he see? (wolf or fox)
7. What was happening to them? (being fed)
8. Why didn’t the keeper go into the cages? (afraid they’d bite)
One day Mary's father took her to the circus. It was very thrilling and Mary enjoyed it very much. A big clown rode around one ring on a little pony. He carried a big whip in one hand and an umbrella in the other. The ringmaster kept cracking a big whip to make the horses go faster.

Mary saw other things, too—elephants, zebras, and lots of clowns. There were little monkeys that tried to jump up on the elephants' backs. Mary thought the most thrilling thing was the man who made the wild animals do tricks. He must be very brave to train lions and tigers to do what he wants.

1. Where did Mary's father take her? (circus)
2. What did she see first? (clown or pony)
3. What did the clown carry in his hands? (whip or umbrella)
4. What else did she see? (any two — clowns, ringmaster, elephants, monkeys, zebras, etc.)
5. Who made the horses go fast around the ring? (ringmaster)
6. Who rode on the elephants? (monkeys)
7. What was the most thrilling thing Mary saw? (animal trainer or man who made animals do tricks)
8. What did Mary think about the man who trained wild animals? (brave)

*Two facts must be given to receive full credit. Half credit is given for a partial answer. In all other questions, full credit is given for any one of the possible answers.
Yesterday Bob took a trip to a city market that was somewhat like a store but a great deal bigger. It didn’t have any bread or canned goods like the grocery stores. But there were a great many big boxes of vegetables and fruits.

Bob was hungry and wanted just one plum or cherry to taste. He wondered if one of the men would sell him just one plum. Everyone was buying the fruit and vegetables by the whole crate. When Bob asked the man to sell him one plum, he laughed and gave Bob an extra large plum wrapped in paper but wouldn’t take any money.

As he walked along eating the plum, Bob watched the men unloading the trucks and big trailers. They would chop open the top of the crate so that anyone could see the fruit. If a buyer liked the fruit, and was willing to pay the price, he might buy the entire truckload.

1. What is a city market like? (store, but bigger; big store)
2. What does the grocery store have that the city market doesn’t have? (bread or canned goods)
3. What did he ask the man for? (plum)
4. What did the man do? (gave plum to him)
5. How much did Bob pay for the plum? (nothing)
6. What were the men doing to the trucks and trailers? (unloading)
7. Why did they open the crates? (so anyone could see the fruit)
8. If a man liked the fruit, what might he do? (ask price or buy it)
Mary's teacher took her class for a nature walk one sunshiny day last week. Every time the group came to a new plant, they would stop and examine it while the teacher explained its parts. She showed them how a bee gets its honey from flowers and how a bug had eaten part of the leaves from some plants. On a few plants, the flowers had fallen off, and seeds had begun to form.

Later, while they were looking at some blossoms, one boy spied a nest hidden in a tree. They were very quiet, hoping that the mother would return to feed her young ones. Sure enough, she quickly came back with a fat, juicy worm in her bill. She fed the young ones, chirped a little, and then flew away after more worms. Mary's teacher said that birds eat a great deal every day. They help us by eating insects that would destroy our plants and by eating weed seeds.

1. When did the class go for a nature walk? (last week)
2. What did the class do with each new plant? (stop and look at it)
3. What did the teacher show them about bugs? (how bugs eat plants)
4. What did one boy see? (nest)
5. What did the class do then? (waited for mother bird or kept quiet)
6. What did the mother bird do? (any two—brought worm, fed young, flew away, chirped)
7. Why was the mother bird so busy? (baby birds eat a lot)
8. How do birds help us? (eat insects or weed seeds)

Two facts must be given to receive full credit. Half credit is given for a partial answer. In all other questions, full credit is given for any one of the possible answers.
As a ship's boy, John Paul had all sorts of odd jobs on board. Sometimes he scrubbed decks or helped the cook. He cleaned the captain's cabin and ran errands, but he had other duties that pleased him more. He helped to clean the guns, which the merchant ship carried for protection. And several times he stood behind the big wheel to steer the ship.

Captain Benson wrote in the ship's log, or daily record, that the trip was calm and smooth-sailing. Nothing unusual happened, but every day was real adventure for the new ship's boy. At the end of the voyage it was a thrill to sight land. When the ship docked near Fredericksburg, Virginia, John Paul was waiting to go on shore.

John Paul's brother had a tailor shop in Fredericksburg and was very happy in his new home. He was eager to talk about the wonderful country, but John Paul already loved America. During the next few years John Paul visited America often. He became used to the free and democratic ways of the new country. Meanwhile he had learned to be an expert sailor. Although he was not tall, he was strong and quick. With his long arms he could haul or trim a sail with the best of men.

1. What was John Paul's job called? *(ship's boy)*
2. What did John Paul do on the ship? *(any two — scrubbed, helped cook, cleaned cabins, ran errands, cleaned guns, steered)*
3. What duties did he like? *(clean guns or steer ship)*
4. What kind of a trip did the ship have? *(calm or smooth-sailing)*
5. Where did the ship dock in America? *(Fredericksburg or Virginia)*
6. What kind of work did John Paul's brother do? *(tailor)*
7. How many trips to America did John Paul make? *(several or many)*
8. What did John Paul look like? *(any two — not tall, strong, quick, long arms)*

*Two facts must be given to receive full credit. Half credit is given for a partial answer. In all other questions, full credit is given for any one of the possible answers.*
Suppose that you have some beautiful poppies growing in your garden. Suppose, too, that you want to get some seed from them so that you can have more poppies like them next year. You must be sure, then, not to pick all the poppy flowers. If you do not leave some of the flowers on the plants, you will not have any seeds, for the flowers are the part of the plant that produces the seeds. There will not be any seeds if all the flowers are picked.

Most seeds come from flowers. The seeds of pine trees and of the trees and bushes of the pine family are formed in cones. But most other seeds come from flowers. More than 190,000 kinds of plants produce seeds, and all but about 700 produce their seeds in flowers.

Not all flowers are large and bright-colored like poppies. Probably you have seen many flowers that you did not know were flowers. Did you ever see any cottonwood flowers, or willow flowers, or grass flowers? Cottonwood trees and willow trees and grass have flowers, but their flowers are small and are not bright-colored. Many other plants have small flowers much like these.

1. If you had some poppies, where would you look for seeds? (in the flowers)
2. What would happen if you picked all the flowers? (have no seeds)
3. Where do most seeds come from? (flowers)
4. What kind of tree produces seed some other way than in flowers? (pine tree)
5. Where are the seeds from these trees found? (in cones)
6. About how many plants do not produce seeds in flowers? (700)
7. What kind of flowers do poppies have? (large or bright-colored)
8. Tell me one plant that produces a flower so small that it is seldom seen. (cottonwood, willow, or grass)
Elephants are found wild today only in warm regions – in tropical Africa and in India. The story was very different 50 thousand years ago. Then, two species of the elephant family roamed North America and Europe in vast numbers.

One of them was the mastodon. The mastodon lived in the eastern part of our country during the period of the Great Ice Age. In the swamps that were formed when the ice disappeared, many of the huge creatures were trapped and killed. We have found some of their skeletons. At a glance the mastodon must have looked much like the elephants of today, except that it was covered with coarse, woolly hair and its tusks were much larger. It was probably heavier than the elephants we know, but not taller. Its head was flatter and its lower jaw longer. Its teeth were not like the teeth of the elephants of today.

More than 200 years ago, the people of New England found bones of the mastodon when they dug ditches to drain swamps. At first they thought that the bones they found were bones of giant people. When they found teeth that weighed more than four pounds apiece, they decided that the giants were giants indeed.

1. Where are elephants found today? (Warm regions, or Africa, or India)
2. Where were elephants also found long ago? (North America, or Europe, or New England)
3. What happened to the mastodons when swamps were formed by melting ice? (Trapped, or drowned, or killed)
4. Tell me two differences between the mastodon and the elephants we see today. (Any two – hair, tusks, weight, head, jaw, teeth)
5. Why do you suppose that the elephants of today do not have woolly hair? (Live in warm regions or do not need it)
6. Where were some bones of the mastodon found about 200 years ago? (Swamps, or New England, or eastern U.S.A.)
7. What kind of bones did the people think they had found? (Giant people or giants)
8. How heavy were some of the teeth they found? (Four pounds)

*Two facts must be given to receive full credit. Half credit is given for a partial answer. In all other questions, full credit is given for any one of the possible answers.
When the early settlers came to America, trade was carried on by barter or by using such things as tobacco, sugar, and furs as money. Sometimes the settlers used Indian wampum. Wampum was shells that were made into beads and was used by the Indians as decoration and as money. Of course, when more people came from Europe to settle in America, they found they would need money to pay workmen. A mason did not always want to take furs for his pay. A furrier did not always want his wages in grain or tools. People had to have coins, so they used whatever was available — English shillings, Swedish and Dutch money, and Spanish dollars or “pieces of eight.” The colonists soon found there were not enough of these to go around.

England would not let her colonists make any money of their own. But in 1652, Massachusetts set up a mint and made her own coins anyway. Among these were the famous “pine-tree shillings.” They were called this because the picture of a pine tree was stamped on them. These pine-tree shillings were made for thirty-four years, but they all had the same date on them. In this way the colonists pretended that they were obeying England.

1. What did the early settlers use in place of money? (any two — tobacco, sugar, furs, wampum, or shells)
2. What kind of money did the Indians use? (wampum or shells)
3. How might a workman have been paid? (any two — grain, tools, furs, tobacco, sugar, wampum, money)
4. Since they had no coins of their own, what kind of money did the colonists use? (any one — Spanish, Dutch, Swedish, English, Indian, or wampum)
5. What did the colonists finally do about money? (made their own)
6. Where was this money made? (Massachusetts)
7. What was the design stamped on these coins? (pine tree)
8. What were the coins called? (pine-tree shillings)

*Two facts must be given to receive full credit. Half credit is given for a partial answer. In all other questions, full credit is given for any one of the possible answers.
Just as in driving a car, we use at least three speeds in reading. High gear in reading is called skimming, while studying is reading in low gear. Between these two, at second gear, is what might be called a moderate speed of reading. As you may have heard, the good reader adapts his rate to the purpose of his reading. The rate he uses is determined by how much he wants to get out of the material he is reading. His rate is also influenced by the difficulty of the reading material. Thus, he shifts from gear to gear according to the amount he wants to retain or how difficult he finds the going.

Skimming is useful for a number of situations in reading. We can use it when looking for a particular fact on a page or in a table. It is also appropriate when we have to cover a large amount of material that is not too interesting or too important. Skimming may also be used to determine the general trends or ideas of a selection when we do not have to know the fine details. It is also helpful when we are making a quick brush-up before recitation. Finally, it is very useful as the speed at which we would do pre-reading before studying intensively.

1. What does the author compare reading to? (driving or shifting gears in a car)
2. What is reading in high gear called? (skimming)
3. What is reading in low gear? (studying)
4. Is skimming done very quickly or very slowly? (quickly)
5. When does the good reader change his rate? (any one — purpose, or need for comprehension, or difficulty of material involved)
6. Can we skim in all kinds of reading? (no)
7. Why not? (some too hard or not enough comprehension)
8. In what situations can you use skimming? Name at least two. (any two — looking for facts, material not important, looking for general trends, brush-up for recitation, pre-reading before study)

*Two facts must be given to receive full credit. Half credit is given for a partial answer. In all other questions, full credit is given for any one of the possible answers.
One of the most beautiful and lasting kinds of building stone is marble. Marble may be pure white or colored, or it may have streaks in it. It can be polished so that it has a very smooth surface. All marble was once limestone. Limestone, deep under the ground, may be changed to marble by heat and pressure.

Granite is another very good building stone. It is formed from rock so hot that it is liquid. You may have seen pictures of liquid rock, or lava, pouring out of volcanoes. Lava cools and becomes rock rather quickly. But granite is made from the hot liquid held underground. This rock cools very slowly. The liquid rock from which granite comes cools so slowly that the different materials in it separate from one another and form crystals. Granite is always a speckled rock because the different crystals in it are of different colors. Two minerals are always found in granite. They are quartz and feldspar. The dark speckles in granite are usually some other mineral. Granite makes very good building material because it is so hard. It can be beautifully polished, and the weather does not harm it.

*1. Is marble always white? (no) How else may it look? (colored or streaked) (both answers)
2. What does marble come from? (limestone)
3. What happens to limestone under heat and pressure? (changes to marble)
4. What happens to liquid rock that cools slowly? (forms granite)
5. What happens to the minerals in liquid rock that cools slowly? (separate to form crystals)
6. Why is granite speckled? (different-colored crystals or minerals)
*7. What two minerals are always found in granite? (quartz, feldspar)
8. Why does granite make a good building stone? (hard, or can be polished, or doesn't wear away)

*Two facts must be given to receive full credit. Half credit is given for a partial answer. In all other questions, full credit is given for any one of the possible answers.
One very important reason for slow reading is lack of pre-planning. Many slow readers have not learned to adapt their rate to the difficulty of the material they are reading. They can see objects quickly with their eyes, as in looking through the window of a moving car, but when they read, the same quick movements are not present. They stop to look at each individual word as though that were necessary for gaining ideas. They tend to read their textbooks, magazines, and even the newspaper at about the same rate of speed.

It has been shown by many studies of good readers that the rate in fiction material should be two or three times as fast as that in non-fiction. Slow readers tend to “study” everything they read, while good readers vary their rate consciously according to the kinds of facts they want to get. For example, if a student is trying to find only one fact on a page, he certainly does not need to read the entire page. He can skim quickly over the page until he finds the fact he is seeking. If, on the other hand, he is expected to report critically on a piece of prose, he will need to read much more slowly and analytically.

1. Why do many people read slowly? (any one — lack of pre-planning, read each word, ignore difficulty, study everything, or not change rate)
2. What can slow readers do with their eyes that proves they could read faster (see quickly or see moving things)
3. How do slow readers read textbooks, magazines, or newspapers? (same slow rate)
4. Which should be read faster, fiction or non-fiction? (fiction)
5. Do good readers always use the same fast rate? (no)
6. How do you know? (vary rate; or sometimes fast, sometimes slow; or according to purpose)
7. When would it be good to read slowly? (studying or reading critically)
8. When would it be good to read quickly? (skimming or looking up a fact or reading fiction)
President Thomas Jefferson, in 1804, commissioned an expedition to go into the Northwest Territory to explore the land that was bought in the now-famous Louisiana Purchase. Meriwether Lewis, private secretary to the President, and Captain William Clark of the United States Army headed the 26 men who started up the Missouri River from St. Louis on May 21, 1804. On July 18 of that year the group reached the southwest corner of the present state of Iowa, proceeded northward along the Missouri, and traversed parts of Iowa many times. The Lewis and Clark State Park west of Onawa was named in honor of these explorers.

Sergeant Charles Floyd, a Kentucky backwoodsman and one of the most competent men of the party, became ill on August 19, 1804, and died the following day. His body was laid to rest upon a high bluff near the present site of Sioux City, where it is marked with a tall monument. The Floyd River and Sergeant Bluff were named in his honor.

The expedition proceeded westward to the mouth of the Columbia River, and returned to Washington during the early months of 1807. Lewis was appointed governor of the Louisiana Territory and Clark was named governor of the Northwest Territory.

1. Which president sent an expedition into the Northwest Territory? (Thomas Jefferson)
2. Who were the leaders of the expedition? (Lewis and Clark)
3. From where did the expedition start? (St. Louis)
4. What river did the expedition follow? (Missouri)
5. Where was Sergeant Floyd buried? (near Sioux City)
6. How is his death remembered? (monument, or naming a river, or a bluff after him)
7. How far west did the expedition go? (mouth of the Columbia River)
8. How long did the trip of the explorers take? (three years)

*Two facts must be given to receive full credit. Half credit is given for a partial answer. In all other questions, full credit is given for any one of the possible answers.
SUPPLEMENTARY PHONICS TESTS

Test 1 — Consonant Sounds

Reading from left to right, tell pupil to pronounce each letter. Ask, “How do these sound? What do these letters say?”

\[
\begin{array}{cccccccc}
\text{z} & \text{x} & \text{v} & \text{s} & \text{q} & \text{n} & \text{l} & \text{j} & \text{g} \\
\text{(kw, k)} & \text{(g, j)} \\
\text{d} & \text{b} & \text{c} & \text{f} & \text{h} & \text{k} & \text{m} & \text{p} & \text{r} \\
\text{(s, k)} \\
\text{t} & \text{y} & \text{w}
\end{array}
\]

Test 2 — Vowel Sounds

Have pupil read each word, first with the long sound of the vowel and then with the short sound. Say, “Read this word for me as though it had the long sound of the vowel. . . Now, say the word with the short sound of the vowel.” Illustrate with “plād” (played) and “plād” (plaid).

\[
\begin{array}{ll}
\text{brad} & \{\text{brād (a as in ale)} \\
\text{brād (a as in add)} \\
\text{tred} & \{\text{treed (e as in eve)} \\
\text{tread (e as in end)} \\
\text{grid} & \{\text{grid (i as in ice)} \\
\text{grīd (i as in ill)} \\
\text{plut} & \{\text{plūt (u as in cube)} \\
\text{plūt (u as in up)} \\
\text{drot} & \{\text{drōt (o as in old)} \\
\text{drōt (o as in occur)}
\end{array}
\]

Test 3 — Consonant Blends

Reading from left to right, have pupil read each combination. Ask, “How do these sound?” or “What do these say?”

\[
\begin{array}{cccccccc}
\text{cl} & \text{tr} & \text{ch} & \text{br} & \text{sh} & \text{gr} & \text{sp} & \text{st} \\
\text{pr} & \text{th} & \text{wh} & \text{pl} & \text{dr} & \text{ck} & \text{fl}
\end{array}
\]
Test 4 — Common Syllables

Reading from left to right, have pupil pronounce each syllable. Say, "Read these for me." Score according to the following pronunciation key.

<table>
<thead>
<tr>
<th>As in:</th>
<th>As in:</th>
<th>As in:</th>
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<tbody>
<tr>
<td>ail — pail</td>
<td>est — best</td>
<td>ake — make</td>
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<tr>
<td>op — stop</td>
<td>ate — gate, climate</td>
<td>ill — pill</td>
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<tr>
<td>ell — bell</td>
<td>er — better</td>
<td>di — didn’t</td>
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<tr>
<td>tion — action</td>
<td>ay — day</td>
<td>ile — pile</td>
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<td>eep — sleep</td>
<td>ite — bite</td>
<td>al — almost, allow</td>
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<td>ter — after</td>
<td>con — conduct</td>
<td>ight — fight</td>
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<td>en — enter</td>
<td>it — itself</td>
<td>ent — sent</td>
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<td>se — seat, set</td>
<td>ain — pain</td>
<td>ide — ride</td>
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<td>all — call</td>
<td>ing — sing</td>
<td>ock — clock</td>
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<td>ow — low, cow</td>
<td>ed — red</td>
<td>ick — thick</td>
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<tr>
<td>in — pin, fine</td>
<td>and — land</td>
<td>on — pond, lesson</td>
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Test 5 — Blending

Reading from left to right, have pupil sound each syllable of the nonsense words. Ask, "What do each of these say?" Then say, "Now, put them together and say them as one word." If necessary, illustrate with "win-dow." Accept any reasonable pronunciation of the units.

cl-ide  tr-est-ing  ch-ail-er  br-ock
sh-ay-ter  gr-ell-on  st-all-ite
ch-ate-d  tr-ill-ent  sp-ick-tion

Test 6 — Letter Sounds

Make the sound of each of the following letters and ask, "What letter does this sound like?" Accept any of the alternate answers given below.

<table>
<thead>
<tr>
<th>z</th>
<th>x (ks)</th>
<th>v</th>
<th>s</th>
<th>q (qw)</th>
<th>n</th>
<th>l</th>
<th>j</th>
<th>g (gate)</th>
<th>d</th>
<th>b</th>
<th>c (ceiling)</th>
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<td></td>
<td></td>
<td>(c, s)</td>
</tr>
</tbody>
</table>

f  h  k  m  p  r  t  w  y (yes)  a (at)  u (tube)  o (so)  i (it)  e (end)
A. Sight-Word Vocabulary

- Limited
- Adequate
- Good

- Slow, fumbling
- Adequate for Instructional Level
- Dependent upon context

B. Word Analysis Techniques

- Adequate
- Dependent upon spelling
- Substitutes for meaning

Uses phonics:

- Letter-by-letter
- In larger units
- Slowly, laboriously
- Easily, quickly

Weak in:

- Consonant sounds
- Consonant blends
- Vowel sounds
- Common syllables
- Blending

Guesses:

- By general shape
- By first letters
- Indiscriminately

C. Oral Reading

General:

- Head movements
- Loses place easily
- Ill at ease, tense
- Points to words
- Indifference or dislike toward reading
- Holds booklet incorrectly

Excessive errors in:

- Additions
- Omissions
- Repetitions
- Substitutions
- Words aided
- Self-correction
C. Oral Reading (continued)

Fluency:

_____ slow
_____ average
_____ rapid
_____ word-by-word
_____ some phrasing
_____ largely in phrases

Comprehension:

_____ weak
_____ average
_____ strong
_____ strong in details
_____ strong in main ideas
_____ adequate in both

D. Silent Reading

General:

_____ head movements
_____ lip movements
_____ ill at ease, tense
_____ points to words
_____ indifferent, superficial
_____ holds booklet incorrectly

Fluency:

_____ slow
_____ average
_____ rapid
_____ too rapid for accuracy

Comprehension:

_____ weak
_____ average
_____ strong
_____ strong only in details
_____ strong only in main ideas
_____ adequate in both
SUMMARY RECORD BLANK

Name ___________________________ Date ___________________________ Examiner ___________________________

School ___________________________ City ___________________________

Birthdate ___________________________ Age __________ Grade ________ Sex ___________________________

Test Summary

Word Recognition — List No. ___________________________ Score ___________________________ Grade Placement ___________________________

Instructional Level (Oral) ___________________________ Independent Level (Silent) ___________________________

Potential Level ___________________________

Comments ___________________________

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Word Analysis Techniques ___________________________

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Oral Reading ___________________________

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Silent Reading ___________________________

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General Observations ___________________________

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____________________________________
Summary of Case

Background Data (School history, medical history, home background, teacher's comments, parents' reactions):

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Recommendations (Sight vocabulary, word analysis, instructional materials, recreational materials, potential growth, emphasis upon silent vs. oral reading, suggested method of instruction — visual, auditory, kinesthetic):

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