Teacher Instructional Emphases and Student Achievement in Reading.

Samples of third- and sixth-grade teachers were classified as associated with students of high or low achievement in reading. Significant differences between grade levels were found in responses to a survey of teacher emphases in reading instruction. There were no significant differences in emphases for teachers of high- or low-achieving students. Differences between grade levels reflect word-attack skill development in the primary grades and comprehension skill development in the intermediate grades.

(Author/AA)
TEACHER INSTRUCTIONAL EMPHASES
AND STUDENT ACHIEVEMENT IN READING

PAPER PRESENTED AT
THE 20th ANNUAL CONFERENCE
OF THE COLLEGE READING ASSOCIATION,
Miami, Florida 1976

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ABSTRACT: TEACHER EMPHASES AND ITS RELATIONSHIP TO STUDENT ACHIEVEMENT IN A DEVELOPMENTAL READING PROGRAM

Purpose:

This study compared the mean reading instructional emphases reported by teachers associated with high achieving students of reading with the mean reading instructional emphases reported by teachers associated with low achieving students of reading. Also compared were the mean reading instructional emphases reported by third-grade teachers with the mean reading instructional emphases reported by sixth-grade teachers.

Methods:

Samples of third- and sixth-grade teachers who taught reading in a self-contained classroom were classified as teachers associated with high achieving students in reading or low achieving students in reading through the use of a least squares prediction line.

The teacher's responses to each item on the Survey of Teacher Emphases in Reading Instruction (STERI) were totaled for each of seven subcategories. Data were collected on the summated scores for each subcategory on the STERI. The data were analyzed using a 2 x 2 multivariate analysis of variance design.

Results and Conclusions:

Significant differences were found between grade levels for reading instructional emphases in the areas of oral reading, word attack, and double categories. No significant differences were noted for instructional emphases between the reading instructional levels of classes. However, further exploration of these data were conducted and an argument against methodological incarceration was presented.

Educational Applications:

The role of the teacher in effective reading instruction has been suspected as the primary factor in relation to the students' success in learning how to read. The results of this study identified three significant areas of difference between what third-grade teachers of reading emphasize and what sixth-grade teachers of reading emphasize. The differences reflect what reading authorities have stressed as important considerations at each level--word attack skill development in the primary grades, comprehension skill development in the intermediate grades.

In addition, there were varying emphases reported between the teachers associated with high achieving and those associated with low achieving students of reading. Although these differences were not at the traditional level of significance, they do warrant further investigation and provide a point of reference for future studies aimed at identifying the effective teacher of reading.
The purpose of this study was to determine the effects of selected teacher instructional emphases on pupil achievement in self-contained developmental reading programs.

One general conclusion that seems to have been reached in the area of teacher effectiveness and reading instruction, is that the most important variable with respect to differences in student achievement is the teacher. However, Rutherford (1971) indicates that those factors indicative of the effective teacher of reading have not yet been empirically identified. This viewpoint is further supported by the editors of the Reading Research Quarterly (1974-75). They contend that much of the reading research is narrow in its focus and fails to address some of the more important research issues - one of which is the teaching of reading.

One possible explanation for one teacher being more effective than another in reading instruction could be the emphases that the effective teacher gives to the various aspects of a typical reading program, that is, levels of comprehension, individualized instruction, language development, oral reading, diagnosis, and decoding.

Although the following hypotheses were tested in this study, a secondary aspect of this research was considered exploratory--moving toward a better understanding of what constitutes an effective teacher of reading.

A sound reading program should enable students to become competent in reading as defined by authorities and in the previously mentioned areas of reading skills. However, the varying emphases that a teacher places on these selected areas of reading instruction could account for variance in pupil performance. Thus, the following hypotheses are tested in this study:
1. Teachers teaching high achieving students report a greater emphasis on individualized instruction than do teachers teaching low achieving students.

2. Teachers teaching high achieving students report a greater emphasis on language development than do teachers teaching low achieving students.

3. Teachers teaching high achieving students report a greater emphasis on comprehension skills than do teachers teaching low achieving students.

4. Teachers teaching high achieving students report a greater emphasis on diagnosis than do teachers teaching low achieving students.

5. Teachers teaching high achieving students report a greater emphasis on word attack skills than do teachers teaching low achieving students.

6. Teachers teaching high achieving students report less emphasis on oral reading skills than do teachers teaching low achieving students.

7. Teachers teaching high achieving students report a greater emphasis on desirable but not easily classifiable reading skills than do teachers teaching low achieving students.

Samples of third and sixth-grade teachers who taught reading in a self-contained classroom in a large midwestern city, were classified as High Achieving teachers of reading or Low Achieving teachers of reading through the use of least squares prediction line (Glass and Stanley, 1970). Teachers whose class means fell one-half a standard error of estimate or more below the prediction line were deemed Low Achieving teachers of reading. The predication line was generated through the use of class mean IQ scores and class mean total reading achievement scores.

The mean IQ score was determined by the Otis-Lennon Mental Ability Test, Form J, administered in the fall. The mean reading achievement score was determined by the SRA Achievement Series, administered by the school system in the spring. The reading score used was the mean total reading score for each class.
One-half a standard error of estimate above and below the prediction line was considered necessary to account for the standard error measurement, to account for the lack of a cutoff point on the SRA for the chance guessing probability score, and to increase the degree of confidence in identifying a teacher as High or Low Achieving in relation to actual vs. expected class achievement.

Figures I and II present an example of the procedure used for the identification of High and Low third- and sixth-grade teachers of reading.

Each third- and sixth-grade teacher in the school system was administered the Survey of Teachers Emphases in Reading Instruction (STERI) questionnaire.

The STERI was designed by the researcher for the purpose of obtaining information about the varying emphases teachers gave to the different areas of a developmental reading program. The subcategories comprehension, diagnosis, word attack skills, oral reading, language development, and individualized instruction were identified as the commonly accepted important areas of a developmental reading program as identified by experts, basal readers, and previous research. Items were written that reflected these subcategories. Figure III is the questionnaire used to gather data on teacher's instructional emphases.

These items were submitted to a panel of five reading experts for determination of content validity. As a result of the judges' evaluation, the questionnaire contained 56 items each of which had an 80 percent or greater agreement among the judges concerning what the item was measuring.
Reliability coefficients for the questionnaire with a pilot study were 0.78 for test-retest over a two week interval, and .083 for Kuder-Richardson Formula 20. The split-half reliability coefficient for the teachers sampled (n = 64) was 0.85.

A random sample of 21 High Achieving and 21 Low Achieving teachers was drawn from the third-grade teachers identified as High Achieving and Low Achieving. However, all of the sixth-grade teachers identified as High and Low Achieving were used due to the small number of these who taught in self-contained classrooms.

Analysis of variance was used to explore the difference between the responses on the questionnaire of the total sample of third-grade teachers and the total sample of sixth-grade teachers. The MANOVA data for the grade level difference are shown in Table 1.

Insert Table 1

Significant differences were observed between responses of third-grade and sixth-grade teachers for the subcategories word attack skills emphases, oral reading emphases, and desirable but not easily classifiable emphases. Looking at the means for these subcategories it appears that the third-grade teachers place more emphases on oral reading and word attack skills than did the sixth-grade teachers.

A 2 x 2 multivariate analysis of variance was performed in which the mean emphases reported for teachers identified as Low Achieving on the seven subcategories of the questionnaire. Table 2 presents the results of that analysis.

Insert Table 2

No significant differences were noted between the reported emphases for High and Low Achieving reading teachers, however these data do warrant further discussion.
The significant differences between what third-grade teachers emphasized and what sixth-grade teachers emphasized in reading instruction supports the concept of sequential development of reading skills. The development of oral reading skills and word attack skills have been identified by reading authorities as skills which should be initiated in the primary grades and logically should receive greater emphases. However, the use of oral reading as a teaching technique has been discouraged by many reading authorities. Evidently, the admonition made by these writers has not been adopted by teachers of primary reading, since oral reading is still being used as a basic means of reading instruction.

In the area of word attack skill emphases the mean score reported was 26.45 for the primary teachers compared with a total possible score of 30.00 in this subcategory. This result gives credence to the concept that primary teachers of reading consider work attack skill development an important aspect of their reading program. Although, the idea that children learn to read in the primary grades and read to learn in the intermediate grades has been attacked by reading authorities, it appears that teachers of intermediate reading do not emphasize or reinforce word attack skills instruction to the degree which primary teachers do.

The significant difference noted in the area of double categories is more difficult to explain; however, because these were double categories, i.e., individualized instruction and diagnosis, primary teachers may have been teaching only one particular skill rather than combining skill instruction as it appeared the intermediate teachers were doing.

Although no significant differences were identified between the reported instructional emphases of High and Low Achieving teachers of reading, some of the findings in the areas of diagnosis, oral reading, and language development warrant further discussion.
If investigators are going to make progress in identifying what constitutes effective reading instruction a basis for identifying credible variables must be established. In addition, the historical concept of setting an alpha level at .05 or less may be inappropriate for research dealing with effective reading instruction. The data base which is presently available for looking at effective reading instruction is minute when compared with the plethora of reading research being conducted. It might be better to say with a seventy percent degree of certainty that effective reading teachers do certain things in their reading instruction, than to say with a ninety-five percent degree of certainty that the characteristics of teacher effectiveness in reading instruction have not been identified.

The results of this study indicate, with a seventy percent degree of certainty, that the effective teachers of elementary reading place greater emphases on diagnosis and less emphases on language development and oral reading than do the less effective teachers of reading.

These differences could contribute to higher pupil achievement in reading on the basis that effective reading teachers use diagnosis to identify their students' strengths and weaknesses in reading and subsequent reading instruction is determined by student needs rather than the curriculum; are less concerned with changing the language patterns of their students than they are with providing the opportunity for learning how to read; and rely less on oral reading as their primary method of reading instruction.

The use of diagnosis is generally recognized as a good practice for teachers of reading if they are to meet the instructional needs of their pupils. The items on the questionnaire which measured teacher's use of diagnosis, incorporated several aspects of reading diagnosis. Among these aspects were items which measured teachers use of informal measures, standardized tests, and ongoing methods of diagnosis. To further speculate, effective teachers may not view diagnosis as pre
and posttesting, but view diagnosis as an integral part of their reading instruction. As a result these teachers may continually monitor the process (their reading instruction) and the product (student progress) and make needed instructional changes.

The differences in the area of language development warrant further study. One logical tack for investigation in this area would be that over emphasis on language development may preclude reading instruction. If teachers concentrate on obtaining a close match between a child's language and the language of the school then students may not have the opportunity to learn how to read. This view of reading and language then becomes cyclical - students are weak in language development, thus they need language instruction to be good readers and reading instruction is delayed. The point being that the students' poor reading achievement may be more related to lack of opportunity to learn to read than it is to lack of language development.

Finally, the differences in oral reading emphases may be related to how a teacher views reading. If a teacher views reading as the correct pronunciation of words, then oral reading would receive greater emphasis. However, if comprehension is the goal of reading instruction, then oral reading would receive less emphasis. It appears that effective teachers are those who do not emphasize oral reading to a degree which precludes developing silent reading skills and comprehension skills.
Teacher Instructional Emphases -

References


Table 1

MANOVA Data for Grade Level Differences on the Questionnaire

<table>
<thead>
<tr>
<th>Variable</th>
<th>Grade 3</th>
<th>Grade 6</th>
<th>Univariate</th>
<th>P</th>
</tr>
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<tr>
<td></td>
<td>X</td>
<td>X</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>Comprehension</td>
<td>35.81</td>
<td>35.44</td>
<td>0.01</td>
<td>0.93</td>
</tr>
<tr>
<td>Diagnosis</td>
<td>30.19</td>
<td>29.25</td>
<td>0.58</td>
<td>0.44</td>
</tr>
<tr>
<td>Word Attack</td>
<td>26.45</td>
<td>24.24</td>
<td>6.86</td>
<td>0.01</td>
</tr>
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<td>Oral Reading</td>
<td>23.01</td>
<td>20.22</td>
<td>8.04</td>
<td>0.01</td>
</tr>
<tr>
<td>Language Development</td>
<td>21.80</td>
<td>22.20</td>
<td>0.15</td>
<td>0.70</td>
</tr>
<tr>
<td>Individualized Instruction</td>
<td>28.95</td>
<td>29.64</td>
<td>1.82</td>
<td>0.18</td>
</tr>
<tr>
<td>Double Categories</td>
<td>21.50</td>
<td>23.22</td>
<td>4.34</td>
<td>0.04</td>
</tr>
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</table>
Table 2

Analysis of Variance Test on the Mean Emphases Scores for the Subcategories of the Questionnaire

<table>
<thead>
<tr>
<th>Variable</th>
<th>High Achieving</th>
<th>Low Achieving</th>
<th>Univariate F</th>
<th>P Less Than</th>
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<td>Comprehension</td>
<td>35.70</td>
<td>36.00</td>
<td>0.05</td>
<td>0.81</td>
</tr>
<tr>
<td>Diagnosis</td>
<td>30.40</td>
<td>29.40</td>
<td>0.95</td>
<td>0.33</td>
</tr>
<tr>
<td>Word Attack</td>
<td>25.00</td>
<td>24.80</td>
<td>0.04</td>
<td>0.84</td>
</tr>
<tr>
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<td>24.70</td>
<td>1.36</td>
<td>0.24</td>
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<tr>
<td>Language Development</td>
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<td>24.30</td>
<td>1.01</td>
<td>0.31</td>
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<td>Individualized Instruction</td>
<td>29.10</td>
<td>29.70</td>
<td>0.42</td>
<td>0.51</td>
</tr>
<tr>
<td>Double Categories</td>
<td>22.10</td>
<td>22.20</td>
<td>0.01</td>
<td>0.96</td>
</tr>
</tbody>
</table>
Figure I

Procedure Used to Identify High and Low Achieving Third Grade Reading Teachers
Figure II
Procedure used to Identify High and Low Achieving Sixth Grade Reading Teachers
FIGURE III: Survey of Teacher Emphases in Reading Instruction (STERI)

<table>
<thead>
<tr>
<th>Item</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Students are encouraged to select a particular reading selection.</td>
<td></td>
<td></td>
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<tr>
<td>2. Students are instructed in determining the meaning of unknown words by making connections to known words.</td>
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<tr>
<td>3. Students are introduced to unfamiliar sentence patterns that appear in context to the story.</td>
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<tr>
<td>4. Students are asked to summarize a particular selection.</td>
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<tr>
<td>5. Students are asked to participate in a reading group.</td>
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<tr>
<td>6. Each illustration in a particular selection is discussed with the students before they read the story.</td>
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<tr>
<td>7. Students are made aware that oral reading rates differ from written form.</td>
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<tr>
<td>8. Students are placed in reading groups based on an assessment of their reading skills.</td>
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<tr>
<td>9. Oral reading is one method used to increase the students' interest in reading.</td>
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<tr>
<td>10. Workbook pages are assigned to increase the students' interest in word attack.</td>
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<tr>
<td>11. Opportunities are provided for all students to participate in oral reading lessons over any six week period.</td>
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<td></td>
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<tr>
<td>12. Students are given the option to participate in reading lessons outside of their regular reading groups.</td>
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<td></td>
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<tr>
<td>13. Students are asked to participate in standardized testing.</td>
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<tr>
<td>14. Questions are asked that require students to infer character expressions can be represented in written form.</td>
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<td></td>
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<tr>
<td>15. Less than fifty percent of the students to increase the students' interest in oral reading rates.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Each illustration in a particular selection is discussed with the students before they read the story.</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

Please Answer Each Item. ONLY CIRCLE ONE RESPONSE FOR EACH ITEM.
Students are encouraged to read the way they speak.

Reading groups permit children to pursue interests, work individually, and work on specific skills.

Oral reading errors are corrected immediately following the error.

Story facts and details are discussed with the students following the reading of a selection.

Students are asked to locate or identify ideas using their books as tools for finding the information.

Questions are asked that require the students to make evaluative judgements regarding fact or opinion, adequacy, and validity and worth of their reading selection.

Students are administered an informal reading inventory for the purpose of determining their reading strengths and weaknesses.

Instruction is aimed at students' strengths and weaknesses.

A teach-test-teach cycle is used to provide an on-going evaluation of students' reading skills.

A reading period is scheduled in the afternoon only.

An on-going assessment is made of student's specific deficiencies in word recognition skills.

Error patterns of students are noted through evaluation of their reading achievement.

Sentence generalizations are taught to the students.

Students who are exhibiting difficulty in comprehension are assessed for word attack skill ability.

Correct responses and errors produced by the students on standardized reading tests are analyzed.

Syllabication generalizations are taught to the students.

Students are encouraged to follow along in their text as another student reads orally.

Students are asked to sound out unknown words they encounter in their reading and ask themselves if the word makes sense in isolation and then in context.

Students take turns reading aloud from their reading texts.

Survey of Teacher Emphases in Reading

Please list three supplementary materials you use to teach reading and indicate the approximate number of days used per week used in teaching each.

<table>
<thead>
<tr>
<th>MATERIALS</th>
<th>APPROXIMATE NUMBER OF DAYS USED PER WEEK</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
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<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
</tr>
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