Several factors which often invalidate the obtaining of independent, instruction; and frustration reading levels with informal reading inventories are discussed. The classroom teacher's inability to note and evaluate errors in performance was noted in research studies by Kender, Millsop, Ladd, and others. The oral reading at sight which is typically required in the informal inventory is indicated as conflicting with suggested curricular practice for reading instruction. The errors on four rereadings for an 11-year-old boy are tabulated and show a dramatic improvement on rate and accuracy, as would be expected. Such factors as the individual's interest in the content and desire to read are discussed. Using standardized individual or group tests of reading performance is suggested for initial grouping and for the assignment of materials to pupils. (CM)
Problems in Identifying Reading Levels with Informal Reading Inventories

Symposium IV May 1, 1969

Purpose The purpose of this paper is to present several arguments which attack the concepts of independent, instruction, and frustration levels of reading. Special attention is directed at challenging informal methods of identifying levels of reading performance. An attempt is made to clarify understandings of the ways in which children's reading performance can be identified, and how reading evaluation data can be interpreted. Pitfalls of interpretation of informally gathered evidence of reading performance pointed out by Kender (4), Millsap (6), and Sipay (7) are examples of sources which support the following challenges.

Background Identification of instruction, frustration, and independent reading levels by methods of informal analysis has been advocated as a desirable practice for several years. In general, textbooks used in pre-service preparation of teachers suggest the use of
informal reading inventories. Teachers of pre-service courses in reading reveal their belief in these concepts to the extent that they have students construct reading inventories. Despite the value placed on the concept of informal analysis, the practice of using informal reading inventories by classroom teachers is not widespread.

A possible explanation for the lack of attention to informal analysis may be found in the evidence reported by Emans (2). He rated twenty teachers enrolled in a graduate course in remedial reading and diagnosis on their ability to distinguish reading skills needed by pupils they had tutored for one hour a day for five weeks. It was his conclusion that teachers were not viewing individual needs but were working with predetermined biases. That is, teachers tended to have answers before asking questions. In this evidence there also appeared to be an indication that the broader concept of reading held by the teachers was not sufficiently developed to be able to include the actual ways children perform, or permit variations in interpretation of individual performance. Ladd (5) also found teachers to be inadequate at evaluating reading performance by informal methods unless given intensive training. She was able to improve teacher competency in evaluation of reading with a thirty hour training program.

Discussion The first argument attacking the concepts of independent, instructional, and frustration reading levels involves the criteria used in identifying each level and the reliability with which individual performance can be judged.

Important to establishing teacher accuracy in identifying pupil performance are the criteria used. The standards for each performance level vary considerably. Betts (1) suggests ninety-five per cent word
accuracy and seventy per cent comprehension to establish an instructional level. Spache (8) believes these and other standards are arbitrarily high. In fact, Spache only uses oral reading performance as the source for determining independent level and silent reading for instructional level. The criteria for satisfactory comprehension is about sixty per cent and the word error standards drop to as low as seventy-five per cent in order to be rated unsatisfactory.

Standards for acceptable performance at independent, instructional, and frustration reading levels appear to have been handed down from generation to generation, study to study, text to text, and there appears to be ample evidence pointing out the fallacies of their use. Also, we are lacking substantial evidence to support using the criteria which we tend to believe.

Regardless of whatever standards are used, the evaluation of reading performance by informal procedures requires one to note errors in oral reading, judge correctness of answers, and decide on overall adequacy of performance. Adequacy of reading must be based upon the concept of reading held by the person doing the evaluation. Ladd (5), and Emans (3) give support for the argument that teachers are unreliable at identifying degrees of reading performance and that they may not have a well developed concept of reading.

Emans provided evidence that teachers were not able to evaluate the individual needs of pupils, but instead, tended to form judgments based on skills they thought children needed. This evidence suggests an inadequately developed concept of pupil performance in reading on the part of the teachers he evaluated. It would seem one should have a well
developed concept of reading before one can adequately measure and interpret reading performance. Ladd found teachers to be inaccurate in identifying oral reading errors. Although the teachers in her study improved with training, they still missed thirty-three to thirty-seven per cent of the errors after thirty hours of training. With this amount of error factor for trained examiners it would seem to follow that informal scoring by an inexperienced person would be even more unreliable.

Millsap (6) also found that classroom teachers could not identify reading performance as accurately as remedial teachers, with classroom teachers correctly identifying inadequate reading performance only seventy per cent of the time.

A recent article by Kender (4) presented a review of the practice of reading evaluation by informal methods. He concluded that informal inventories could be of instructional value, but only when used by one thoroughly skilled in administration of inventories and thoroughly informed about the reading process. It seemed unlikely to him that classroom teachers could adequately use informal inventory procedures.

Another attack on the construct of varying performances in reading being called independent, instructional, or frustration can be made on the use of oral reading to determine suitability of material. For example, the typical procedures of testing call for oral reading at sight - a stressing situation for even the most proficient reader. The testing process is contrary to the general teaching process in oral reading in that teachers are admonished in pre-service training, in textbooks, and in teacher guidebooks to never have a pupil read orally at sight. It is believed that a pupil reads better orally after having read silently first. Yet, informal testing procedures measure a pupil's
oral reading at sight as a means of identifying levels of performance. This evidence is then used to differentiate between levels by a few percentage points to call one performance good, the other poor.

Oral reading testing appears to be an unreliable way of measuring reading because of the difficulties of judging word errors, noting phrasing, inflectional changes, and symptoms of difficulty. Added to this potential unreliability is the invalidity of the typical oral testing process, a technique which conflicts with curricular practice.

It is also possible to point out the fallacy of accepting oral reading at sight as adequate evidence of performance by permitting successive oral rereadings of a single passage. Table I shows the errors on four rereadings for an eleven year old boy.

### TABLE I

**ORAL READING ERRORS ON SUCCESSIVE READINGS OF A 149 WORD PASSAGE**

<table>
<thead>
<tr>
<th>Error</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repetitions</td>
<td>6</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Substitutions</td>
<td>11</td>
<td>6</td>
<td>6</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Omissions</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Additions</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Aided Words</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Errors</strong></td>
<td>22</td>
<td>11</td>
<td>11</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td><strong>Self Corrections</strong></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td><strong>Rate (w.p.m.)</strong></td>
<td>60</td>
<td>89</td>
<td>87</td>
<td>99</td>
<td>99</td>
</tr>
</tbody>
</table>

On the first reading, the one generally used to determine proficiency, he made twenty-two errors while reading at sixty words per minute. The second reading had only half as many errors as the first and the rate of reading was nearly half again as fast as the first reading. The third
reading was nearly identical to the second. The fourth reading showed a decrease in errors from eleven to six and an increase in rate to ninety-nine words per minute. It is obvious that oral reading performance, in terms of errors and rate, is improved by rereading. The reader's voice, inflectional variations, attention to phrasing, etc. were also improved with rereading.

There certainly is a question about which of these readings is the one which should be used to decide upon adequacy of performance. Depending on the criteria used, one could rate this pupil's performance as independent, instructional, or frustration. Regardless, the information in Table I demonstrates that oral reading at sight yields poorer performance than when there has been preparation for reading.

The interest or lack of interest of the subject in the content of the materials of testing is a strong influence on reading performance. For example, pupils generally read and comprehend passage 7B better than 7A in the Diagnostic Reading Scales. Passage 7A compares reading to driving a car while passage 7B is about formation of granite and marble. These two selections are about equal in difficulty according to readability estimates, but differ greatly in terms of content and potential interest.

Reading performance also varies considerably for an individual depending on his desire to read, with the desire to read at least partly due to interest value in the material being read. Motivation and interest in reading are generally accepted as being important determinants of success in reading. These factors certainly are potent enough to cause variations in reading performance greater than the differences generally used to determine independent, instructional, and frustration
SUMMARY

Weaknesses in informal testing procedures in reading appear to be strong enough to invalidate the concepts of independent, instructional, and frustration level. This seems especially evident because of the general inability of classroom teachers to organize, conduct, and utilize informal diagnostic procedures.

It would appear that standardized individual or group tests of reading performance have more potential value than informal measuring instruments because they offer greater reliability and validity than informal measures. Interpretations with degrees of variation in performance as fine as those suggested by the criteria for so-called independent, instructional, and frustration reading levels do not seem feasible or practical because the standard error of measure for highly reliable instruments would not permit such differentiations.

A reasonable suggestion for initial grouping and assignment of materials to pupils would be to use the suggestion of Daniels (3) which indicated accurate identification of appropriate group placement using the Gates test results with a constant of 2.0 subtracted the pupils score. This procedure is most appropriate when the teacher is not capable of administering or interpreting diagnostic tests.

Regardless of whether standardized or non-standardized tests are used to measure reading performance, there appears to be sufficient doubt about making fine discriminations between reading performances which indicate that teaching at one level will cause failure and teaching at a slightly different level will permit success to challenge the concepts
of independent, instructional, and frustration reading levels.

There is also evidence that the criteria used to identify the three different reading levels may be inappropriate, and as such, they tend to invalidate the concepts of three distinctly different reading levels being identifiable by these criteria.

A suggestion is made that more attention be given to identifying reading performance by ways which do not depend upon examiner judgment; make more use of interests of the reader; pay less attention to finely differentiated levels of performance; and place less importance on measurement of oral reading.