This paper suggests several techniques and instruments which can be used and/or adapted for classroom use to gather diagnostic data on each child's reading levels and reading skills. The contents include: a look at some of the factors which impede a teacher's development and use of skill in diagnostic procedures for reading; a discussion of some facilitating forces for the potential benefits of diagnosis; suggestions for establishing reading levels compatible with children's instructional reading levels, including the cloze technique, oral reading from graded passages, and the use of commercially prepared tests; a discussion of some means for determining the reading skills needs of the students, including checklists, pupil response cards, sample products of children's work, further analysis of the student's performance on informal assessments, and criterion referenced inventories; and a discussion of the importance of keeping accurate records of pupil progress. (WR)
INFORMAL DIAGNOSIS: THE NUCLEUS OF INDIVIDUALIZED READING INSTRUCTION

Symposium: The Forgotten Years - Grades 4 - 5

Thursday, May 15, 1975 (2:00-4:45 p.m.)

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For the last decade and a half, the concept of individualized instruction has kept educators in constant turmoil: engaging in discussions, considering possibilities, making varying degrees of commitment, and generally intellectualizing. The philosophizing and theorizing have resulted in too little actualizing. Even though most educators accept the philosophy underlying individualized instruction, particularly for the skills areas of the curriculum, they appear to lack the organizational-management skills necessary to actualize an individualized program. Skill in diagnosis of learning is a prime requisite in implementing individualized instruction. Without such skill, the classroom practitioner can never bridge the gap between theory and practice. Diagnosis must be the pivot point, the basic ingredient in a system which facilitates and supports individualized instruction.

Reading is one area of the curriculum in which there is keen need for individualization of instruction. The very nature of the reading process with its intricate network of skills almost demands that an instructional program be based upon the skills needs of the reader or potential reader. Such an instructional
program cannot exist in the absence of diagnosis, the results of which must determine program goals and directions, program content, program materials, and organizational procedures. Diagnosis is increasingly becoming the "password" for effective reading programs at all levels - school system, school, and individual classroom. Because of this, diagnosis must be added to the list of competencies required of the effective classroom teacher of reading. Each teacher must develop the understanding of and skill in applying basic diagnostic techniques which enable her to determine the reading strengths and weaknesses of each member of her class.

Despite the recent treatment of diagnosis in reading in professional meetings, books, and journals, there remain several factors hindering progress in teachers' development and use of skill in diagnostic procedures for reading. The hindering factors must be offset by facilitating forces for the potential benefits of diagnosis as the means to the end of individualized reading programs to be realized. Hindering and facilitating factors are given below.
1. Hindering: Traditional views have focused on diagnosis as a negative term and process. Diagnosis has been accepted in the past as something done to the reader by a reading specialist in a private setting after the reader had begun to show obvious evidence of reading problems.

1. Facilitating: The positive aspects of diagnosis must be stressed. Diagnosis must be understood as the process for determining reading skills of all pupils and as the basis for instructional decisions on goals, methods, materials, and organizational designs.

2. Hindering: In traditional views, diagnosis was almost exclusively a highly formal process. The extensive series of tests designed to determine the complex causes of reading disabilities created an aura of mystery about diagnostic procedures which could be solved only by highly trained reading specialists.

2. Facilitating: Diagnosis must be expanded to include the informal procedures which can be implemented quickly and accurately in the regular classroom setting by the classroom teacher with all children - not just those who are experiencing problems. The purposes of informal diagnosis must focus more on the identification of the student's immediate reading needs than on the identification of and causes for a reading problem.
3. Hindering: The diagnostic data reported to the teacher were in highly technical jargon. The case reports sent to teachers from the specialist further served to overwhelm the teacher with technicalities and convince her of her inadequacies, not only in applying diagnostic techniques but also in understanding and utilizing diagnostic data to provide more meaningful instruction.

3. Facilitating: Informal diagnostic procedures must yield data which can be employed readily in making such instructional decisions as which skills must receive high priority for instruction and how should they be sequenced, which materials are most appropriate, and how can the class be organized most effectively.

4. Hindering: Usually only rather limited benefits resulted from the indepth diagnosis. Too frequently, the case report and the detailed diagnostic analysis was the end product and not the means to the end of more meaningful instruction for the child.

4. Facilitating: Diagnosis in reading must be viewed as a vehicle through which more meaningful, personalized instruction may be provided for each child in the class. In order for this to be workable, the vehicle must be constantly in operation - shifting gears, changing directions, and changing speeds as dictated by the signals present in the classroom scene.
5. Hindering: Diagnosis has been accepted as the exclusive domain and responsibility of a specialist. The teacher referred the child for diagnosis, but there ended her responsibility. She and the child just "marked time" in the classroom until such time as the child might have his turn for testing in the overcrowded schedule of the diagnostician.

5. Facilitating: In order for diagnosis in reading to make a positive contribution for the child, the responsibility for informal diagnosis must be assumed by the classroom teacher. The reading specialist may serve 1) to guide the teacher in the development of competencies in utilizing informal diagnostic procedures and 2) to undertake indepth diagnosis of certain reading problems, but the real responsibility for diagnosis on a day-to-day basis must be accepted by the classroom teacher. The success of an individualized developmental program in reading is contingent upon the teacher's acceptance of this role.

A second dimension of reading diagnosis appears emerging as a facilitating factor. This new dimension is in the domain of the classroom teacher, utilizes informal procedures, is provided for every child in the program, is continuous in nature, and is the nucleus for a reading program which caters to the needs of all
readers. The focal point of this paper is the described second dimension of diagnosis in reading.

Informal Diagnostic Procedures

It would be unrealistic to expect that the same diagnostic techniques which have proved successful in clinical settings with individual children would be appropriate for classroom use in large group settings without adaptations and revisions. The teacher needs access to rapidly implemented procedures which yield relatively accurate data.

Establishing reading levels. One of the significant tasks for the teacher, particularly as she first meets the pupils, is the proper placement of the pupil in instructional materials. There is a grave need for the teacher to identify the level of reading materials at which the child can profit most from instruction — his basal or instructional level. Establishing basal reading levels of the students and providing instructional materials at a level compatible with the child's instructional reading level is the point of departure for the program, a first step. Other steps in the process include 2) observing the child's response
to the materials, noting obvious tell-tale signs of frustration and/or lack of challenge, and 3) making the indicated adjustments in the level of difficulty of the materials.

The classroom teacher usually has access to information concerning the child's performance on standardized reading survey tests. This information may prove useful even though the grade equivalent scores provided by many standardized tests are not reliable indexes of the child's appropriate reading level. A rough index of the child's instructional level, which can be used as a beginning point, can be determined by subtracting one year from the child's grade equivalency rating scored on a standardized reading survey test (Dallmann, and others, 1974). The teacher must supplement the suggested rough index with additional data in making the determination of each child's instructional reading level.

The cloze technique may be quickly used to estimate reading levels. The cloze exercise consists of a passage of about 250 words from which every fifth word has been deleted, except for the first and last sentences which remain intact. The student's task is to read the
passage and reinsert the exact deleted item in each case. The child's levels can be determined from the following range of correct responses (Zintz, 1972).

<table>
<thead>
<tr>
<th>Level</th>
<th>Percent of Correct Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent</td>
<td>Above 50</td>
</tr>
<tr>
<td>Instructional</td>
<td>Between 40 and 50</td>
</tr>
<tr>
<td>Frustration</td>
<td>40 or below</td>
</tr>
</tbody>
</table>

An exact determination of the reading levels established by the cloze technique as compared to those determined by graded oral reading paragraphs on an informal reading inventory may be made through the following procedure (Miller, 1974).

1. Divide the number of words exactly replaced by the total number of blanks.

2. Multiply this figure by 1.67 to determine the average comprehension.

The teacher must then compare the derived comprehension score with the comprehension criteria for levels established by the given school system, etc. Commonly accepted criteria for the levels are as follows: 1) Independent level - at least 99 percent
accuracy in word recognition and at least 90 percent average comprehension, 2) Instructional level - at least 95 percent accuracy in word recognition and at least 75 percent average comprehension, 3) Frustration level - below 90 percent accuracy in word recognition and below 75 percent average comprehension.

The cloze technique has distinct advantages for the classroom diagnostician since it can be adapted for either individual or whole group use. The teacher may have the child read the cloze exercise onto tape for future analysis.

Oral reading from graded passages also gives the teacher valuable information about the child's reading levels. In order to quickly determine whether or not the materials are at a level too difficult for the child, the teacher need spend only 2-3 minutes having the child read orally at sight a short passage from any material noting the word recognition errors he makes. The criteria for accuracy in word recognition previously described may be used for decision-making. The following is a list of errors to be considered in determining word recognition accuracy:
substitutions, insertions, omissions, reversals, mispronunciations, and refusals to try to say the word or teacher pronunciations for the child. The major concern with the quick oral reading assessment for determining reading levels is the total number of word recognition errors. However, notations of the types of errors offer valuable diagnostic data for analysis of skills needs.

Another quickly-administered device for determining approximate instructional levels is the commercially-prepared Slosson Oral Reading Test. However, the same procedures can be applied to any graded list of words. Having the students read isolated words from the list and applying criteria for accuracy in word recognition to the students' performance will yield approximate reading levels.

Determining reading skills needs. After the teacher knows the instructional reading levels of her students, she must determine the reading skills of importance at each level and diagnose each student for skills needs. Skill checklists, or objectives arranged in levels of difficulty, provide most valuable possibilities for securing diagnostic data relative to reading
skills. The checklist serves to structure the teacher's observation of the child's reading performance in varied settings throughout the school day. Through carefully-planned, purposeful observations which are based on the framework of a well-constructed checklist, the teacher can collect "reality-based" data on highly specific aspects of the child's reading skills as well as his reading behaviors in the affective domain.

Pupil response cards, used in a variety of reading settings, can be of immense value as a diagnostic technique. In order to use the technique, the teacher must structure a short exercise which focuses on a highly specific reading skill and which requires responses from the children. For example, in checking the child's skill in distinguishing between the hard and soft sounds of c, the teacher can give a list of words illustrating the patterns and have all children respond to each word by holding the appropriate response card, perhaps one colored card representing hard c and a different colored card representing soft c. The teacher can immediately identify by their color-coded responses those children who are proficient in the skill as well as those who need further work.
Many reading skills lend themselves to checking by this quick, group-oriented diagnostic technique.

Sample products of children's work over a period of time offer valuable data for noting patterns of errors and areas of progress in specific reading skills. Since one principle of diagnosis stresses that diagnostic decisions must never be made on the basis of a single performance, the teacher who utilizes sample products is more likely to make accurate diagnostic interpretations. The sample products can be placed in individual folders, or they can be catalogued in folders according to skills.

Further analysis of the child's performance on the informal assessments for determining reading levels can provide useful data on the child's reading skill needs and proficiencies. 1) The child's performance on cloze exercises provides data on his ability in application of context clues. 2) His oral reading of graded passages can be analyzed for patterns in two skills areas: a) oral reading behaviors, and b) word recognition in the major error categories of substitutions, insertions, omissions, mispronunciations, and refusals to try. A pattern of error in any one category can be further analyzed for specifics -
types of words, types of sounds, etc. Similar types of specific data can be gleaned from an analysis of the child's oral reading of graded lists of words.  

3) Analysis of acceptable standardized reading survey tests for the child's performance on individual items yields data useful in diagnosis. The teacher must ascertain that the actual test items measure a given skill before she attempts to analyze for patterns of strength and weakness, however.  

**Criterion-referenced inventories** can be highly valuable instruments for diagnosis of all reading skills. The criterion-referenced test identifies the skills which the child has mastered and those which he has not yet acquired, thereby enabling the teacher to make instructional decisions about specific reading skills. The teacher can quickly prepare criterion-referenced inventories for the reading skills of importance in her given classroom. The inventories need not be formal and the previously-described pupil response cards may be used in conjunction with the inventories to facilitate rapid decision-making.
Utilization of Diagnostic Data

Diagnosis cannot be divorced from prescriptive teaching in reading. After the teacher knows the reading skills of importance and the behaviors of the children in relationship to those skills, she must utilize that information in instructional decision-making.

In order for diagnosis to be a preventive measure as well as a remedial one, teachers must utilize all diagnostic data relative to reading needs of children to provide immediate instruction so as to prevent those reading needs from becoming reading problems.

Recording the diagnostic data in manageable forms is most important. One useful method is the group check sheet and/or profile sheet for each skill of concern. On the group profile sheet, the teacher lists the names of the children in the class in a column and identifies the major skill and its subsets of skills in a row. Throughout the day the teacher may record instances of each child's performances in the skill area. The group profile sheet is particularly useful when utilizing such diagnostic techniques as structured teacher observations, individual response cards, oral reading and sample products, or any combination of
these techniques. The information recorded on the group profile sheet can quickly be analyzed to identify children needing specific skills instruction and to group those children for provision of that instruction.

An individual profile sheet of specific skills may be kept for each student. However, it is more difficult and time-consuming for the teacher to record data on the individual sheets than on group sheets. Still, an analysis of individual profiles will make it possible for the teacher to identify children with similar patterns of need for grouping purposes.

Summary

If teachers are to bridge the gap between theory and practice in individualizing instructional programs in reading, they must have clear evidence of the various needs of each individual in the classroom. Diagnosis is the means for ascertaining the strengths and weaknesses of each child, not just for those children experiencing reading problems. Individualized reading instruction can be realized when skills in diagnosis are developed and utilized by classroom teachers in on-going classroom settings.
Various techniques and instruments can be developed and/or adapted for classroom use as the teacher gathers diagnostic data on each child in terms of his reading levels and his reading skills. The suggested informal, quickly-administered and easily-interpreted procedures yield diagnostic data. The diagnostic data can serve to guide the teacher in making instructional decisions about scope and sequence of reading skills, materials to be utilized, and classroom organization - management designs most congruent with instruction based on individual needs in reading.

References

