Traditional reading placement tests, determining the level at which students can read without teacher mediation, frequently lead to student underplacement. Diagnostic teaching practices, however, can be used to determine students' emergent reading level, the reading level that can be achieved through instruction. After preteaching part of a lesson—providing motivation, background, vocabulary assistance, and purpose—the teacher has students read first silently and then orally. During the oral reading, the teacher records the number and kinds of reading miscues made and notes student affect. By leading students through progressively more difficult lessons, the teacher can determine (1) at what levels the pupils can read comfortably without help, (2) when reading becomes so difficult that the experience is more harmful than helpful, and (3) what range of materials the pupils can handle effectively in a teacher-guided situation. Diagnostic testing, reflecting the original intent of diagnostic teaching, gives students the assistance and motivation needed to master increasingly complex conceptual structures. (MM)
THE EMERGENT READING LEVEL: A NEW CONCEPT

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My area of focus this afternoon will be on the diagnostic teaching of reading. Diagnostic teaching, if we could exercise it properly, would certainly be one of the brighter lights of classroom reading instruction. I'm sure we have all heard of diagnostic teaching, but it appears to be a popular label without operational identity. We need to give the concept substance so that it can be functional and practical. I am going to explain what this term means to me and then something about how teachers can go about it.

Nearly all teachers will agree that quality reading instruction (1) provides learning experiences for all youngsters to meet their instructional needs; (2) proceeds at a pace in keeping with their ability; (3) induces effective motivation; (4) and both satisfies present interests and encourages the development of broader and more mature interests. The desirability of these outcomes seems beyond question. Accomplishing them, however, is still only partially realized in most of our schools today.
Before one can meet individual needs, one must find out what they are. The first step is to find out what one needs to know in order to plan for effective learning. However, the following observation basically will deal with the question of how teachers can find out what they need to know in order to plan for really effective individual learning in reading.

The Meaning of Diagnostic Teaching. What does diagnostic teaching mean? To me, diagnostic teaching is the teacher's ability to accurately, efficiently, and effectively respond immediately on the basis of what is known about a pupil's reading behavior and the potency of cues in a pupil's given reading performance. But, let's first take a moment or two to examine the word diagnosis. It comes from two Greek roots — dia and gnosis. Dia means through or across, and gnosis means know, so it really means to know through or to know thoroughly. Invented primarily by physicians, to them it means identifying a disease condition and its causation in order to know what treatment to use. But in education we are not concerned with disease, and a definition that may fit us better can be found in Webster's New Collegiate Dictionary: an investigation or analysis of the cause or nature of a condition, situation, or problem. This view permits the division of the focus of diagnosis. It is possible either to put emphasis on the search for causation — why did the present situation happen? — or to put the main emphasis on
the nature of the present condition or circumstances, or to combine the two. From a practical standpoint of what teachers and other educators can do and need to do, diagnostic study must stress the analysis of a child's present functioning and its implications for instruction.

In short, diagnostic teaching, is therapeutic in focus. The teacher must assimilate her knowledge of sound, symbol, cognition, error, and feelings to a preconscious level with which to make quick and efficient responses during teaching. The teacher's conceptual or knowledge maps are the resources or the templates upon which a pupil's reading behavior is compared.

Characteristics of Diagnostic Teaching. Now what are some of the characteristics of a classroom diagnostic approach to reading? We have first of all the question of how important are tests. I am sure you all have had your blood pressure taken at one time or another, probably several times. You know it is a simple technique, the soft part of the instrument is wrapped around the arm, air is pumped into it, and you take a reading from the dial. Anyone with the capabilities of a fifth grader could probably be taught to do that in thirty minutes or less. But to understand and interpret what the numbers mean takes a long period of learning. (I am told that there are five grades of sound there, each detecting different functions of the heart.) In other words, the important thing in getting a blood pressure reading is not just to get the accurate numbers from the
dial, but to understand and interpret what they mean in understanding the condition of the individual. Second, one sometimes can get a great deal of insight and understanding from the simplest technique. It is also possible to get very little useful information from more elaborate devices, if one does not happen to know enough about the child's educational background, what he has been exposed to, what he has not been exposed to, and so on. In diagnostic teaching, it is not the depth, but the obviousness and potency of cues that matter. (O'Donnell, 1972) The ability to interpret is far more important than any particular testing procedure. Often we can get excellent diagnostic understanding from very, very simple straightforward types of inquiry and observation.

The third attribute of diagnostic teaching is that of alertness to pupil performance, not just in a testing situation, but whenever he is in any situation involving reading. Marie Clay (1982) calls this "sensitive observation."

1. What kinds of errors does he make?
2. What was he trying to do when he made them?
3. What particular habit pattern seemed to underlie these particular forms of errors?
4. How does he feel when he is placed in a reading situation; does he feel enjoyment or dislike?
5. Does he show effort or attempt to avoid or evade the situation?
6. Does he seem at ease or is he anxious, tense, or fearful (although a non-chalant exterior may appear).

These are some of the questions that a teacher with a diagnostic attitude has in the back of his or her mind all
the time during all reading activities, and not just during test situations or just in the reading books. Every bit of reading performance helps to build up a diagnostic understanding if you are paying attention to it in that way.

A fourth point about diagnostic teaching is that it implies that the teacher is taking responsibility for the child's learning and is not just turning the youngster loose and hoping for the best, which is what sometimes happens in certain types of reading programs. It takes more than a set of books, practice exercises, or a particular approach to or organization for reading to create the framework for the diagnostic teaching of reading.

DETERMINING INSTRUCTIONAL READING LEVELS

I am going to turn now to a rather common experience of mine. It involves some of the images or false originals of our field. Frequently, I have the opportunity to visit classrooms and advise teachers and administrators about the particulars of their reading program. Upon visits to the classroom, I observe the reading lesson in its usual setting. Often, but not always, the teacher will conduct the expected pre-teaching functions of a reading lesson (motivation, background, vocabulary, guidance, and purpose).

Then, as in a good developmental reading activity, the material is read silently first, before any oral reading.
The rule we all remember is, "silent before oral, except for diagnosis." Growing out of the discussion that follows the silent reading, the teacher asks the various members of the reading group to read orally. This affords a golden opportunity to diagnose performance in the context of the lesson. I use a finger-count system which I taught myself growing out of my understanding of the informal reading inventory (IRI). (Powell, n.d.)

The diagnostic teacher in the reading circle does not have the time nor the need to always record the errors, whether they be scoreable or recordable. But the teacher can mechanically tally the scoreable errors as they occur in any oral reading sample. As the children read, I count mechanically on my fingers the scoreable errors (omissions, insertions, mispronunciations, substitutions, transpositions, and unknown words) as they are observed. Then I estimate the number of consecutive words read and divide the number of "fingers" or miscues into the total number of estimated words. This produces the number of errors per running words which can be compared to any guideline for acceptable reading performance.

What do I find out in such situations? I find out first of all, that some of the children in a reading group are reading the material independently with quite good accuracy, understanding, and fluency. The question then is: are these children under placed? I find out that a few of the youngsters are experiencing fluency problems, word
difficulties, and lowered understandings, i.e., their count and their comprehension percent correct are outside the lower limits of the standards for the given level. The question now for this group is obvious: are they over-placed or was this an artifact of the lesson development? And as one would expect, I find out that many of the pupils are reading within the tolerance limit for placement — that is, of course, accurately placed students.

We need, first of all, the technique of learning to observe and to listen to pupils as they read — anywhere, anytime — in all types of materials, not just in "reading books". We want three types of information simultaneously, if possible.

1. At what levels can the pupil read comfortably without any help or guidance? We know that unless he does a substantial amount of independent reading, he is not likely to ever become fluent reader. "How are they ever going to learn to read, if we don't let them read?"

2. We want to know at what level reading becomes so difficult for them that the experience is more disruptive than helpful. We know that information gain is lost with increasing disruptions.

3. But most of all, as a teacher, we want, need,
and must have some idea of the range of materials that pupils can handle effectively in a teacher guided situation in which the words the teacher expects to be unfamiliar can be pretaught, in which they are helped when they run into problems, in which the comprehension is guided, and any difficulty that appears can be checked further and something done about it.

We know that if children are placed correctly in material, and given instructional support, learning can follow.

In training myself to use the finger count system, I first started out with a mechanical count on each finger. After a while, I unconsciously began counting mentally, instead of mechanically, and have been doing so for the past 16 years. Of course, to obtain a reasonably accurate count is like my blood pressure illustration earlier. It is how the count is interpreted that matters most. Historically, in the reading field, there have been three major standards or guidelines for interpreting error ranges. The three standards have been identified by the author supporting a given set of guidelines. In order of increasing stringency, they are: the Cooper criteria, the Betts criteria, and the Powell criteria. It does not serve my purpose here to debate the adequacy or inadequacy of a given set of criteria. However, it is worth noting that the Cooper and Powell criteria are differentiated according to level while the
Betts criteria assumes a uniformity for all levels and all conditions. The use of differentiated criteria requires cognitive flexibility on the part of the teacher. Whatever criteria a teacher uses (she must have some criteria for the judgment of the quality of reading behavior), it should be emphasized that criteria are guidelines, not requirements, for placement. They set limits, subject to sensitive adjustment by the diagnostic teacher.

Is there any evidence about the way pupils are placed using different criteria? Does it make a difference if different sets of criteria are used for final judgement in reading placement levels. Yes, it does.

Yes, it does make a difference in the guidelines used in determining levels, and fortunately, a study by Susan Homan of the University of South Florida gives some idea of how to answer this question. Her research asked whether students placed by the Betts and Powell criteria would result in similar placements. Fifty-one percent of the time, they did give the same placement. Of course, this means that in 49 percent of the her cases, different placements resulted. Of that 49 percent, the Powell criteria always placed the students at a higher instructional reading level. Fifty-five percent of the time the Powell criteria placed the students one grade level above the Betts criteria placement; 38 percent two levels above, and 7 percent three levels above the traditional criteria. Therefore, it does make a big difference what set of guidelines are used in placing pupils.
in material for instruction.

However, all sets of existing guidelines for placement suffer from a potentially serious weakness, namely, the level derived is not obtained under the conditions of instruction. The levels produced represent what a student can do without supporting instruction. In administering an IRI, there is no pre-teaching of the elements of a good reading lesson. In other words, the placement from all existing sets of criteria may produce too low a level of placement for effective growth through instruction.

The issue of over or under placement is one that needs more serious examination today. During the past twenty years as I have observed the concept of the instructional reading level becoming more common place in classroom reading instruction. Basal reading systems, reading management systems, and commercially prepared informal reading inventories have proliferated in the market place. Pupils are being instructed more today in accordance with what is known about the match between reader and material. Yet I have had this growing impression that a large number of children are being under-placed more than ever before. We used to worry about over-placement and still should because frustration clearly inhibits learning. But so does under-placement because an organism without some stress and challenge is not encouraged to grow and develop. Boredom is the antithesis of frustration and produces the same result.

It just may be that the concept of instructional reading
level, as we have known it for the past forty years, is incomplete and inadequate for the proper placement of students into learning materials. Vygotsky, a Soviet psychologist, contends that "instruction precedes development and leads it; it must be aimed not so much at the ripe as at the ripening function." (1962, p.104)

If the assumption that instruction precedes development is true, and somehow my visceral instincts tell me it is, then what we want and need for placement, for instruction is not the instructional reading level, but a new concept I call the Emergent Reading Level:

THE EMERGENT READING LEVEL

What is an Emergent Reading Level? It is the level a pupil can sustain under direct guidance and support by the teacher. So you ask, how is that different from the instructional reading level? The difference is best illustrated by the way the two distinct levels are obtained. The instructional reading level is a misnomer, a false image. This is because with an instructional level score, the pupil obtains his or her level score by themselves without any teaching or mediation by the teacher. It represents a level where the youngster's skill performance is acceptable by a given set of criteria but it is achieved without guidance or instruction. The youngster just reads with only a suggestive introduction to the printed material or with no introduction to the material at all; "just read from here to here." The
emergent reading level would be that level achieved under and through instruction. The teacher would teach the vocabulary and concepts and set a purpose for reading just like in a regular reading lesson. Then the pupil's reading measure would be taken. The emergent reading level would be obtained by using the pre-teaching part of the lesson and then the procedure would follow the usual format of administering the informal reading inventory (IRI). The level achieved with guidance and mediation (pre-teaching aspects) is the emergent reading level.

The closest function of this type of level determination we have in the field of reading instruction today is the concept of "trial lessons," as described by Albert Harris (1975). Trial lessons have typically been used for verification of skill needs, not for level of placement. This is the procedure that is sometimes used in corrective and remedial instruction. By a simple modification it can obtain the emergent reading level. It is simply teaching upward level by level (not by skill type) until the desired level of functioning is obtained. The pre-teaching procedures and the techniques of the IRI need to be interfaced to create a new strategy for obtaining the Emergent Reading Level.

What will be discovered by the above process will be a range of performance levels. This range will be from the instructional reading level, as we use the term today, to the emergent reading level, the level just prior to a sudden drop
in information gain (frustration for learning level). These new levels are obtained after direct teaching prior to reading. The range of potential learning levels represents a continuum upon which reading-learning assignments can be made. The greater the range of levels, the greater the learning potential of the youngster. This range also approximates the "zone of proximal development" concept of Vygotsky, except his levels were for mental assessment, and the emergent zones are for reading-learning levels.

Kay Camperell (1982) of the University of Southern Mississippi has succinctly described the testing procedures developed by Vygotsky. Once an independent level of performance (our instructional level) is established, the examiner then gives more complex material and helps the student deal with that complexity. The types of intervention and instructional aid Vygotsky describes include demonstrating solutions, asking leading questions, or suggesting possible answers. Thus the examiner actually teaches a student how to understand challenging material in order to establish a level which the student can learn if given assistance.

With most of the informal reading devices we use today, however, students can answer a pre-specified percentage of questions correctly by themselves or maintain a criterion level of oral reading proficiency without any assistance. Teachers do not teach them the information in a passage, help them with word difficulties, or help them find answers to a
similar type of question task. Therefore, the method we use to establish instructional levels may actually underestimate students capacity to benefit from instruction. More importantly, since we do not now provide instructional assistance during the informal test sessions, we cannot use these assessments to obtain information about the type and amount of instructional support individual students need to improve their reading-learning performance.

Instruction pushes students to master more complex and abstract conceptual structures. The new structures awakens in them new capacities for learning and reading. Students cannot operate on this new structure by themselves, but they can do so if they are given direct assistance and support from others. This method of diagnostic assessment more closely reflects the original intent of diagnostic teaching.

An independent study project by Lisabeth Dixon dealing with this process is now underway at the University of Florida. Ms. Dixon's preliminary data, with about 25 third and 25 sixth grade students in a non-urban school district, tends to support the procedure as described here.

Perhaps the concept of the instructional reading level needs to be retired. Or better yet, the instructional reading level as we know it today and have known it from the past needs to be replaced by a more viable concept.

Should this turn out to be so, it will explain that nagging and knowing feeling I have had since my public school teaching days about the match of reader and materials.
knew, because I had experienced it many times then and even more since then, that the data from tests, formal and informal, did not match my findings in the instructional lesson setting. The emergent level may well fill the void of information we lacked in the past. I certainly hope so.
REFERENCES


