Theory indicates that a fourth, the emergent, reading level may be even more important in understanding the process of reading development than the three previously designated levels: the independent level, at which students have no difficulty reading on their own; the instructional level, at which students need assistance; and the frustration level, at which students cannot gain information from the material even with assistance. The emergent level is the level of highest performance within the zone of proximal development, the area created by the difference between students' unaided performance and the level that could be achieved with aid. To determine students' emergent reading levels, dynamic reading assessment sessions rather than static testing procedures must be used. The level at which students gain information with assistance can be established if teachers provide needed demonstrations, modeling, and coaching during the evaluation session. With adult mediation, students are more likely to be placed at the reading level where growth takes place. (MM)
MEDIATED (EMERGENT) READING LEVELS: THE CONSTRUCT

William R. Powell
University of Florida

An important yet little understood question is: What constitutes reading levels? The idea of reading levels has increasingly pervaded the field of reading since Betts first introduced the concept in 1943. Amalgamating ideas from the 1920's and 1930's, Betts created the informal reading inventory, with three reading levels, for a 'subjective' reading evaluation or diagnosis. Linguistically, the term level is understood to mean "a horizontal plane which presupposes the existence of another plane parallel to it" (Greimas & Courtes, 1982). Whether Betts' concept of levels
is parallel is less than clear (Powell, 1971; Smith & Smith, 1983), and whether there are just three reading levels is also problematic. Theory (Vygotsky, 1962) would suggest that there may be an additional reading level which is even more significant than the three previously designated reading levels. It is the purpose of the paper to discuss the construct of mediated reading levels which may have implications for a fourth reading level, the emergent reading level (Powell, 1984), or to offer a redefinition of the mode of obtaining the existing instructional reading level.

Betts designated his three reading levels as the independent or basal reading level, the instructional reading level, and the frustration reading level. The parameters of each level are defined in the label ascribed to each. The independent level is that level in which a reader can process written material without any significant other support. This level indicates the ability to function in activities like recreational reading, seatwork, and homework. The students can do it by themselves. The instructional level is that level in which the reader needs assistance, direction, or support from the teacher to adequately process a particular piece of prose. Information gain is greater at this reading level. (Bormuth, 1975) The frustration level is where the reader cannot effectively gain information from the material even with assistance and support from others.
The traditional concept of reading levels is measured by presenting lists of individual words and passages that become increasingly more complex due to the systematic manipulation of such variables as word frequency, sentence length, number of propositions, and semantic association value. The assumption here is that levels of linguistic complexity are synonymous with levels of reading processing complexity. Grade norms are defined in terms of the level of linguistic complexity mastered; with "mastered" being defined in terms of accuracy and speed in relationship to the level of difficulty of the material, i.e., the operational criteria indigenous to hierarchical theories of word recognition. (Betts, 1943; Cooper, 1952; Powell, 1971, 1981; Lovett & Hansen, 1976; Starlin, 1971).

Reading levels have traditionally been defined in terms of reading models based on assumptions of hullean psychology of learning and structural linguistics (Fodor, Bever, & Garrett, 1974). These assumptions include: (1) language is hierarchically organized, (2) to learn to read, one must first learn to process the lowest level and (3) one must then learn to process each successive level; (4) as lower levels become processed more efficiently, more time may be spent in processing higher levels; the results are faster and more accurate word recognition (LaBerge & Samuels, 1974) and more cognitive resources available for the comprehension process (Perfetti & Hogaboam, 1975).
A different notion about the causative nature of reading levels can be extrapolated from the work of Vygotsky (1962, 1978). Vygotsky's theory is embedded in his general genetic (developmental) law of cultural development and his concept of internalization. For Vygotsky, the formation of higher mental functions, (i.e., cognitive development) involves social interaction, movement from other-regulated behavior to self-regulated behavior, semiotic mediation, and the zone of proximal development (Wertsch, in press). It is the later concept, the zone of proximal development, that has significant implications for diagnostically determining reading levels in the placement of pupils for instruction.

The zone of proximal development is defined as the difference between a student's "actual developmental level as determined by independent problem solving" and the higher level of "potential development as determined through problem solving under adult guidance or in collaboration with more capable peers. (Vygotsky, 1978, p. 86) More informally, this zone is the range created by the difference between the level of unaided performance a child can achieve, and the level he could achieve with aid. Not only are the levels within the zone of importance, so is width of that zone, with a greater zone range indicative of greater learning potential.
To instantiate a zone of proximal development, a dynamic testing versus a static testing style becomes of significant value (Budoff, 1972; Feuerstein, 1979; Cioffi & Carney, 1983). Dynamic testing methods measure the level of performance a student may achieve via teacher/student interaction. Most present testing techniques use static testing procedures, (i.e., actual developmental level which can be performed without direction or assistance.) To derive an instructional reading level which fosters a child's growth potential, testing procedures must examine each level with mediated activity, -- within the range where growth takes place, the zone of proximal or potential development.

The testing procedure for functioning within the zone of proximal development and those techniques used within the present framework of the informal reading inventory stand in stark contrast to one another. One uses social interaction; the other does not. One uses mediation; the other does not. One tries to find a level where a child can learn with assistance; the other derives a level where the student functions with minimal support. One operates in the realm of where optimum growth takes place; the other indicates a baseline where growth may begin. A further contrast in testing styles illustrates the differences in the results obtained.
In giving an informal reading inventory, an examiner begins by establishing a basal or independent reading level, a level with a high degree of accuracy and fluency. Then successively more difficult passage levels are presented without any assistance or mediation. An instructional reading level is arrived at by an acceptable performance within a given set of criteria for accuracy, performed without guidance or instruction. The child simply reads with only a suggestive or general motivating statement as an introduction to a given passage. The derivation of reading levels is accomplished by students answering a pre-specified percentage of questions correctly by themselves and maintain a criterion level of oral reading proficiency without any assistance.

To determine an emergent reading level, that level of highest performance within the zone of proximal development, a markedly different approach is undertaken. Once an independent level of performance (synonymous with the instructional level in the informal reading inventory framework) is established, the teacher begins to provide more complex material and assists the student(s) in dealing effectively with that complexity. The types of intervention and instructional aid Vygotsky implied includes demonstration, modeling, coaching, and/or asking leading questions (Camperell, 1981). In other words, the teacher actually teaches a child how to process and understand the
difficult arose in order to establish a level which the student can gain information, if given assistance.

In a cognitive-developmental model of reading with dynamic assessment, the assumption is an interaction among reader variables, activity variables, material variables, and the criterial tasks (Brown, Bransford, Ferrara, & Campione, in press). Static testing excludes these variables except perhaps the change in material complexity. In utilizing a cognitive-development approach, the notion of mediation is such that as instruction proceeds the child should become less dependent upon an adult and begin to plan, monitor, and control their own processing for information gain. There should be a gradual movement from the inter-psychological plane to the intra-psychological plane, from the other-regulated behavior to self-regulated behavior. (Wertsch, 1979)

Mediation, social-verbal-interaction, is aimed toward increasing self-regulation. Other-regulation techniques attempt to modify the characteristics of the learner, re-design the material, or lead an activity for assisting in development of self-regulation. In a dynamic reading assessment session, the change in materials is usually done by increasing the linguistic complexity. In essence, the material response becomes an extraneous or classification factor. (Calfee, 1975) However, mediation can be
incorporated in a dynamic testing situation by focusing on changing the learner via activating schema, building interest, structuring and organizing words and stored concepts, skill transformation, semiotic mediation, and setting the direction for comprehension activities. (Beck, McKeown, McCaslin, & Burkes, 1979) Mediation can also involve the changing of the activity. Activity may include strategy training (Hansen & Pearson, 1980), modeling, guidance through a task, leading with questions, reciprocal questioning (Palincsar, 1984; Manzo, 1969), suggesting alternative responses, semiotic dialogue, demonstrating solutions, explaining, rehearsal, elaboration, etc. Whatever task is selected for focus, it must be framed in a coaching, verbal-interactive style.

Whereas Vygotsky proposed his zone of proximal development for use in mental assessment dyads, the same concept appears to be appropriate for determining placement in reading. Instead of using a static business-like manner in determining placement, a more dynamic style involving mediation is likely to result in leading the student into the zone of proximal development. With adult support and assistance, youngsters are likely to receive higher placements under a dynamic testing pattern. Placement can then result in placing a child where growth takes place and let "instruction lead development" (Vygotsky, 1962, p. 104). The highest level obtained within the range of potential
development would be the emergent reading level. If instruction leads development and if dynamic assessment provides higher placement than static testing, then the present method of assigning students to reading levels is likely to result in underplacement. The static assessment of reading levels, without mediation, provides an underestimate of the level of functioning a child can perform with assistance. (Powell, 1982; Campione, Brown, Ferrara, & Bryant, 1983.)

At the emergent reading level, new higher mental structures (Vygotsky, 1981) and new strategies for learning emerge. With continued support and encouragement, these new structures and strategies raise the student's level of functioning to where they can be used with minimal direction. Further practice, with knowledge of results, accommodates these new structures and strategies and they then can function automatically. These new higher mental structures can then be fully utilized to learn more complex structures. A cycle of learning from the emergent level to the instructional level to the independent level is created. What emerges is the gradual cycle of internalization which is recycled for new and higher cognitive functions.

The call for instructional placement at the emergent reading level, within the zone of proximal development, is beginning to appear in the educational literature (Campereii,
What is needed is for the construct to be supported by empirical data. Should empirical evidence support this construct, it could have socio-political significance, as well implications for assessment and instruction.

REFERENCES


Powell


Smith, L. L., & Smith, L. C. (1983). Comparing the recreational reading levels of second and fifth grade students with the reading levels determined from an informal reading inventory. Paper presented at the International Reading Association Convention, Anaheim, CA.


