

Diagnosis of Reading Difficulties Following Inadequate Performance on State Level Reading Outcome Measures

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The *No Child Left Behind Act* of 2002 requires all states to assess student reading performance beginning in 3rd grade and to set objective criteria for adequate performance on the assessment that is given. Performance on the tests will be used as an important tool to evaluate not only individual progress, but also to judge the overall effectiveness of schools.

Although the tests used in various states to evaluate third grade (or higher) reading performance vary in many particulars, they are typically measures of reading comprehension. The focus on reading comprehension is appropriate, as there is universal agreement that the ultimate objective of reading instruction is to provide students with the skills and knowledge required to construct the meaning of text. Of course, we also want students to read fluently and to enjoy reading, but the single most important summary measure of reading skill in third grade and later is performance on a well-constructed test of reading comprehension.

Although the reading comprehension measures that will be used by states to evaluate their progress in teaching all students to read are appropriate as outcome measures, scores on these tests (even subscores that are sometimes available) provide little information to help guide remedial instruction when students obtain low scores on the tests. The problem is that students can struggle on these tests for many different reasons (i.e., poor word reading accuracy or fluency, low vocabulary, failure to apply appropriate reading comprehension strategies and thinking skills, etc.), and the summary score provides no information about skills that are most critically deficient. To be most helpful to students who struggle on these tests, teachers and schools need focused diagnostic information to help guide remedial efforts.

This brief article suggests one set of procedures that schools might use to identify the critical instructional needs for students who have failed to meet state performance standards on a group administered test of reading comprehension. In the figure below, we outline a diagnostic procedure that uses a branching formula to quickly identify potential sources of difficulty in performance on complex reading comprehension tests. It features very brief tests given to all students who struggle on the reading comprehension accountability measure, and more complex, time intensive tests given only when needed to plan for instruction. For purposes of illustration, we will use the names of specific tests in this figure, but these are meant only as examples of the kinds of tests that might be helpful in providing information relevant to specific points in the diagnostic process. The following text describes the procedures that are outlined in the figure.

A diagnostic sequence that includes a decision tree such as the one outlined below is based on specific assumptions about instructional priorities for older students with reading difficulties. The diagnostic decision tree we have outlined assumes that if students have serious word level reading problems, it is important to address them in order to lay the groundwork for instruction

in more efficient reading comprehension strategies. Thus, the first choice point in our decision tree sorts students into those who have word level reading problems that are serious enough to interfere with reading comprehension, vs. those for whom this is not likely to be a cause of their reading comprehension difficulties. One measure that can be used with students from 3rd grade through high school is the Test of Sight Word Efficiency from the *Test of Word Reading Efficiency* (TOWRE; Torgesen, Wagner, & Rashotte, 1999). This test takes only about 2 minutes to give, and provides a reliable index of word reading accuracy and fluency. If a child who has obtained an unsatisfactory score on a “high stakes” measure of reading comprehension obtains a score above the 39th percentile on this test, it is not likely that word reading difficulties are a significant problem, and remedial instruction can focus elsewhere. It is important to point out that the “cut points” associated with every choice point in the decision tree are arbitrary at this time, and may even vary depending on the specific nature of the reading comprehension test used in each state. These cut points will likely need to be adjusted up or down as experience is acquired with these procedures.

Students who obtain a score at or below the 39th percentile on a test of word reading accuracy and fluency should be administered a test of phonemic decoding such as the Phonemic Decoding Efficiency Test from the TOWRE. This test also takes about 2 minutes to give, and provides an index of accuracy and fluency in applying phonemic decoding skills to pronounce unknown words. Students who perform below at or below the 39th percentile on this test should be given a measure of phonemic awareness such as the Elision subtest from the *Comprehensive Test of Phonological Processes* (Wagner, Torgesen, & Rashotte, 1999). If students perform poorly on this test, they will require instruction in alphabetic reading skills (phonics) that pays careful attention to supporting the development of phonemic awareness as they are taught to become more proficient at applying phonemic analysis to words in text.

On the other side of the decision tree, students who score above the 39th percentile on the initial test of word reading efficiency could be administered a group test of reading comprehension and reading vocabulary such as the *Stanford Diagnostic Reading Test* (ref.) or the *Group Reading Assessment and Diagnostic Evaluation* (ref.). Weak performance on these tests would suggest the need for focused instruction to build vocabulary and fundamental reading comprehension strategies. More information to help focus this instruction might be provided by an informal reading inventory such as the *Qualitative Reading Inventory-3* (Leslie & Caldwell, 2000). If a student performed well on both vocabulary and reading comprehension measures, it would indicate the need for instruction and practice on a set of test taking, thinking, and writing skills that are part of proficient performance on many “high stakes” tests but which sometimes are not taught explicitly in classrooms.

References:

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Diagnostic decision tree for students who perform below standards on a measure of reading comprehension in third grade or later

