

reading instruction and will no longer be considered at risk. Progress-monitoring models have resulted in high levels of accuracy in studies examining their use, especially for students in the first grade (Compton, Fuchs, Fuchs, & Bryant, 2006). Although this model has a higher predictive value, it also postpones interventions during the monitoring phase.

- *Risk index models:* Identifying students at risk with this model involves looking at all variables collected on a student, including assessment results and other related factors, such as when the student is an English language learner, and the education level of the student's parents. The probability for risk is reported as a percentage of students who have similar profiles and who later performed poorly on some measure of reading skills. Thus, the higher the risk index, the greater the likelihood that the student may encounter difficulties when learning to read. Because risk index models take into account the impact of numerous variables, they tend to be more accurate than screening processes that rely on only a single measure (Johnson, Jenkins, Petscher, & Catts, 2009).

Screening Measures. Some screening measures have a higher predictive value of future reading ability than others. A comprehensive review of research studies found the following screening tools effective for Grades 1 to 3:

- Grade 1: Word identification fluency (WIF), letter knowledge, and phonological awareness are the common measures. Studies show that WIF is one of the strongest predictors of reading ability at this grade level (e.g., Compton et al., 2006).
- Grades 2 and 3: ORF and WIF are the measures regularly used. Although there are fewer studies of screening measures for these grades, both of these tools are strong predictors, especially for second-grade students.

Studies that tested this approach provided children in primary grades with incremental periods of instruction, usually through RTI, and moved them out when they made adequate progress. One study used data from nearly 400 linguistically diverse students to examine the usefulness of RTI measures in Grades 1 and 2 for predicting reading difficulties at the start of Grade 3 (Beach & O'Connor, 2013). Reading skills measured in first grade included oral reading fluency, phoneme segmentation fluency, and nonsense word fluency. Measures in second grade included tests of word identification, word attack, and word and passage comprehension. Students at both grade levels who met the intervention criteria were placed in small groups of two to three students and received support as needed for 25 to 30 minutes, four times per week. The instruction focused on letter-sound correspondence, sight word identification, decoding, and reading of sentences and decodable books. Some of the second-grade students needed practice in word study with multisyllabic words, vocabulary, and comprehension activities. They also received support in reading and rereading books at the students' current reading level, as well as opportunities for short spelling and sentence writing. English language learners were also included in these groups and received the same instruction.

The students were assessed at the beginning of third grade using tests of written spelling, ORF, picture vocabulary, word attack, WIF, and passage comprehension. The results showed that measures of first-grade WIF and second-grade ORF had correctly identified nearly 89 percent of students with reading difficulties (including English language learners), compared to 86 percent for average readers. Other measures, such as passage comprehension, also contributed to the identification, but to a lesser degree. This multifaceted identification process ensured that students with reading difficulties were monitored and given extra support in third grade, as needed. The study reaffirms the value in using multiple measures in the early primary grades to identify children at risk for reading difficulties.

Predictive Power of the Measures. One critical element of identifying children at risk for future reading difficulties is deciding which screening measures to use. As we mentioned earlier, many measures are commercially available, but not all have the same degree of predictive power. If an RTI model is to be effective, the screening procedures need to include measures that accurately identify all students at risk for reading problems (true positives), while reducing the number of students who are incorrectly identified (false positives). Practitioners who perform such screening should use care in selecting these measures. Some studies have evaluated the predictive power of the more commonly used measures for assessing the students' level of reading skills (e.g., Petscher, Kim, & Foorman, 2011).

Remember that all children make errors in spoken language and while reading. But the number of errors should decrease with time, and there should be clear evidence of growth in vocabulary and reading comprehension. Determining whether a child has consistent problems with reading requires careful and long-term observation of the child's fluency in speaking and reading. Most children display obvious improvements in their speaking and reading skills over time. Researchers, clinicians, and educators who study dyslexia and who work with poor readers look for certain clues that will show whether a child's reading ability is progressing normally.

The checklists that follow contain indications of reading problems commonly found in struggling readers, including those diagnosed with dyslexia. The indications have been gathered from several sources (e.g., Birsh, 2005; Brady & Moats, 1997; Clark-Edmands, 2000; IDA, 2003; Munro & Dalheim, 2008; NAEYC, 1998; Shaywitz, 2003; Stinson, 2003) and are separated into grade-level groupings. **The lists are not intended to be used for final diagnosis. Diagnosis of dyslexia or any other learning disorder can be made only by experienced clinicians.** However, the lists will help you to assess the degree of difficulty a child may be having in learning to read and to determine whether additional testing and consultations are required.

Use the following checklist to determine whether a child may be displaying problems. Circle the appropriate response to the right of each indicator. Those indicators marked "often" should be discussed among parents, teachers, and specialists in speech and language pathologies.