Early Detection and Intervention

My name is Jeffrey L. Black, M.D. and I am a developmental-behavioral pediatrician. For the past twenty years I have been the Medical Director of the Luke Waites Center for Dyslexia and Learning Disorders at the Texas Scottish Rite Hospital for Children in Dallas. The Waites Center provides diagnostic services for children, trains teachers, develops curricula and conducts research on specific learning disabilities, with a major focus on dyslexia. Except for intervention materials, our services and programs are provided without charge to the families and teachers who come to us from every region of the state. The scope and reach of our activities gives us a broad view of how the state is serving children with dyslexia.

Ample evidence exists on how to identify and appropriately teach early struggling readers, including those with dyslexia. Methods of identification and intervention are more fully developed for children who are five years-kindergarten level and older. Most students are now educated according to a Response to Intervention (RTI) model that consists of multiple levels of evaluation (universal screening, progress monitoring, diagnostic assessment) and instruction (three tiers). Dyslexia intervention is generally considered tier three and is provided after identification.

Students with dyslexia - word reading problems that are unexpected given the student's educational opportunities, language environment and other higher cognitive abilities - are included in the larger group of poor readers that represent 25 to 30% of the general population. When schools provide appropriate regular classroom instruction (tier one) and small group, supplemental, accelerated reading instruction (tier two) approximately 5% of the student population will remain "at risk" and require more intensive intervention.

The provision of systematic, explicit instruction as described in the state's dyslexia mandates has the potential to "close the gap" or normalize reading skill, particularly if the instruction begins prior to the end of the third grade. Largely due to statutes, rules and procedures related to dyslexia, Texas public schools are among the most effective in the nation in helping students with dyslexia, the most common specific learning disability.

Challenges

- Unfortunately our schools too often fall short of providing intensive intervention to the 5% of the student population who need it. Also, too few teachers have the knowledge and skills necessary to teach reading, particularly those needing intensive (tier three) level instruction.
- Dyslexia identification and special education diagnostic testing are usually done in schools and districts by different individuals who often do not share evaluation results.
 Many of the students with dyslexia who have the most severe reading impairments are

designated Learning Disabled (LD) in reading and are placed in resource classes that do not deliver the intensity of instruction that the students need to make meaningful gains.

- State regulations for the implementation of the Individuals with Disabilities Act-2004 indicate that a student can be identified as having a learning disability (LD) if they meet criteria according to a Response to Intervention model and/or exhibit a pattern of strengths and weaknesses in cognitive function and achievement relative to age, grade level and intellectual ability. The Cross Battery Assessment (XBA) has been the approach taken by many school districts to identify this pattern of strengths and weaknesses. In the XBA approach, evidence of weakness, a reading-related skill in the case of dyslexia, usually follows normative criteria. This means having a standard score of less than 85. A XBA evaluation is supposed to produce educational management recommendations that match cognitive ability profiles.
- There is concern that the XBA approach could influence dyslexia identification to adopt a strict cut-point at less than or equal to 84. This would make it more difficult for students, experiencing less severe but still significant reading problems associated with dyslexia, to receive needed intervention. Another potential problem of XBA is the increased use of unproven cognitive interventions. These are therapies that aim to improve academic skill by trying to build a cognitive function like working memory, auditory or visual processing.

Opportunities

- 1. The passage of HB461 with its provisions that establish licensure of dyslexia practitioners and therapists is an important step toward ensuring that more children with dyslexia receive early detection and intervention. The effectiveness of these license holders in the public schools largely hinges on the knowledge and skills of school administrators, curriculum directors, assessment professionals and classroom teachers. A coordinated and sustained staff development initiative is needed to make sure that district and campus leaders are familiar with evidence-based methods for helping struggling readers at all tiers of instruction in the early grades.
- 2. Training of assessment professionals should include sessions that involve both those who perform special education diagnostic evaluations and dyslexia identification. This would promote a shared base of knowledge and communication across programs and disciplines. Assessment training should also enable evaluators to discern the characteristics of dyslexia using all reliable sources of information. In this way evaluators will not be bound by rigid cut-points or be swayed by a single test score.
- 3. Early elementary classroom teachers who face the large burden of screening, providing differentiated instruction and monitoring progress are most in need of staff development. A concerted effort is needed to bring evidence-based services into the classroom on a large scale. The Knowledge and Practice Standards for Teachers of Reading of the International Dyslexia Association will have relevance not only for dyslexia practitioners and therapists, but for all teachers of reading in early elementary classrooms.

- 4. Early detection and intervention of dyslexia would be enhanced if school districts were kept accountable for following the mandates of the state's dyslexia-related legislation. Parameters should be developed that could be used to determine when a district is failing to identify a sufficient number of students or use evidence-based methods.
- 5. Despite the requirements of the No Child Left Behind Act and Individuals with Disabilities Education Act-2004 for evidence-based methods, many of our schools utilize therapies that violate these guidelines. School officials and teachers need support in recognizing what constitutes acceptable scientific design and evidence. There are now available to educators several excellent resources for evaluating reading research reports, instruction and intervention. Training is needed for them to be fully understood and appropriately used.^{5,6,7}
- 6. A number of technology-based programs currently exist for early instruction and intervention, and more are under development. They cannot replace but can supplement good teaching. The rapid creation of new technology resources and revision of existing computer programs presents another challenge. Schools would benefit from regularly updated guidelines on how to incorporate technology in their plans for teaching young struggling readers.
- 7. Parent education is a required element of the state's dyslexia services mandate. Parents are often underutilized partners in reading instruction, especially reading intervention at the tier three level. Student reading outcomes could be improved if more instruction and intervention curricula clearly specified the parent's role.
- 8. The challenge facing Texas public preschool programs in early literacy is similar to the one confronting the state's elementary schools. More teachers of preschool children need to be trained to deliver explicit phonological awareness and alphabetic skills. These activities should be balanced with those directed at oral language enrichment. More research is needed to develop brief but accurate screening tools of emergent literacy that will allow educators to identify "at risk" students prior to kindergarten.

National Research Council panel prepared this report to translate research-based findings into advice for parents, teachers and child care providers. Instructional techniques and lists of books and resources for use with children in kindergarten and early elementary are available in a companion document, Starting Out Right: A Guide to Promoting Children's Reading Success.

NRP report summarized research selected to answer the question of what works in reading instruction. The panel focused on five components of reading: phonological awareness, phonics, fluency, vocabulary and comprehension. The report is a landmark document for evidence-based educational practice.

¹ Preventing reading difficulties in young children (1998). http://www.nap.edu/catalog.php?record_id=6023

² The National Reading Panel Report (NRP) (2000). http://www.nationalreadingpanel.org

³ The National Early Literacy Panel (NELP) (2009). http://www.nifl.gov/publications/pdf/NELPReport09.pdf

The NELP report is a synthesis of research on the development of early literacy skills in children up to 5 years of age. The report was intended to provide the basis for the creation of materials that could be used by parents and educators to support young children's language and literacy development.

Assisting Students Struggling with Reading: Response to Intervention (RtI) and Multi-Tier Intervention in the Primary Grades. http://ies.ed.gov/ncee/wwc/publications/practiceguides/

This 54 page practice guide from the What Works Clearinghouse (<u>www.whatworks.org</u>) is a reference tool for educational decision makers setting up public school early reading programs. Others interested in the research support for the assessment and instruction components of Rtl will find it informative.

⁵ The Florida Center for Reading Research (FCRR). <u>www.fcrr.org</u>

The Florida Center for Reading Research (FCRR) disseminates information about research-based practices related to literacy instruction and assessment for children in preschool through 12th grade. The Center conducted careful reviews of reading programs, which are available under "FCRR Reports." FCRR decided to discontinue research reviews in June 2008 but maintains posted reports as a resource for educators.

⁶ The What Works Clearinghouse (WWC). <u>www.whatworks.ed.gov</u>

The What Works Clearinghouse (WWC) was established by the U.S. Department of Education's Institute of Education Sciences. Through a set of easily accessible Web-based databases, the WWC provides decisionmakers with the information they need to make choices based on high-quality scientific research. Reviews on reading instruction are recent additions.

⁷ Identifying and Implementing Educational Practices Supported by Rigorous Evidence. www.ed.gov/about/offices/list/ies/news.html#guide

The purpose of this site is to assist educators in finding and using strategies that have been validated in rigorous studies. This site allows users to order the Department of Education's Institute of Education Sciences (IES) user-friendly guide: Identifying and Implementing Educational Practices Supported by Rigorous Evidence. The 19-page publication offers evaluation factors to help determine the effectiveness of educational reading interventions and new educational technologies.