

Commentary

Preventing Illiteracy: Improving the Practice of Selecting Reading Assessments for Early Learners

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Introduction

The inability to read well is associated with social ills such as dropping out of school, delinquency, inadequate health care, unwanted pregnancy, and chronic underemployment (Moats & Tolman, 2009). Inadequate reading skills are especially prevalent in urban schools. Teachers utilize many tools to combat illiteracy to include instruction and assessment. It is important for teachers to have a thorough understanding of the nature of young children's learning and development as well as an understanding of what research tells us about the purpose and methods of assessments with young children (Howard, Cooke, Agnamba & Bornfreund, 2014).

The use of assessments to determine students' needs and for effective instructional planning and delivery is an important element of the teaching and learning process. The selection of the most appropriate form of assessment is also important. Considerations for selecting an assessment include its technical quality (e.g., psychometric properties); feasibility; and credibility with parents, education constituencies, and the public; and students' learning styles (Silver, Strong, & Perini, 2000).

Contrary to views of some researchers that assessments during preschool (pre-k) and prior to formal literacy training do not yield reliable results (Rathvon, 2004), another school of thought is that early reading screenings conducted in the pre-k and kindergarten (k) years are critical because they can be used to initiate preventative reading strategies and interventions that can lead to positive changes in children's early reading skills (Brooke, 2007). Johnson, Pool, and Carter (2009) suggested that the screening measure should be accurate; therefore, reducing the number of less reliable cases (i.e., false negatives and false positives). Pool and Johnson (n.d.) concluded the following:

Sensitivity (accuracy in identifying at risk students who in fact later perform poorly on a future measure) and specificity (accuracy in identifying not at risk students who later perform positively on a measure) are key aspects to consider in evaluating the validity and reliability of a screening measure for identifying students who are at risk for later reading problems. (para. 6)

In other words, high levels of sensitivity and specificity, along with other psychometric properties such as validity and reliability, are critically important aspects of standardized screening tests for accurate identification, prevention and intervention of early reading difficulties.

This review will discuss The *Early Growth Indicator Benchmark Assessment (EGIBA)* and the *Mississippi Curriculum Test, second edition (MCT2)*, two widely used reading assessments in Mississippi urban school districts. The *Early Growth Indicators Benchmark Assessment* is a publication of Houghton Mifflin and has been used nationwide since 2005. The assessment is administered at the pre-k level and consists of several brief assessment activities designed to measure preschool skills needed for later school years. The assessment contains subtests related to word parts, beginning sound, letter recognition, word knowledge, listening comprehension, oral counting, and number recognition. The *Mississippi Curriculum Test (MCT)* is based on the Lexile Framework® for Reading, a scientific approach to reading and text measurement. Lexile measures are based on two well-established predictors of how difficult a text is to comprehend: semantic difficulty (word frequency) and syntactic complexity (sentence length) (*Interpretative Guide for Teachers and Administrators*, 2007).

The research on student performance illustrates the importance of early and accurate assessments to identify children who may encounter difficulties in attaining language and literacy skills (Badian, 2000). Questionable is whether assessments used at the pre-k level serve to effectively predict the potential success of students in later grades and the need for referrals for enhancing language acquisition. Predictive validity, or the ability of a test to predict future performance on a later administered test, is an important property of assessment tests, particularly at the early grades (e.g., pre-k and k). Given that many school districts administer assessments at each grade level and multiple times a year, assessment tests that have high predictive validity are critical in identifying students who are on the path to poor performance or reading failure so that academic enhancements can be implemented. Although some studies have traced student performance and referrals from pre-k through elementary grades (Henry, Gordon, Henderson, & Ponder, 2001), gaps remain in the literature on this issue and in some districts, such as districts in Mississippi, no studies have been conducted on the predictive ability of pre-k assessments on the future performance of elementary students despite the usefulness of this type of information.

Special Education: Disproportionate Referrals and RTI as a Prevention Model

Special education referrals are recommendations that students are assessed for placement in special education programs. Recommendations from teachers making initial referrals for special education services are based on several factors. Among them are the perception of the need for special education and belief of the inability or the atypical ability of a student to learn; the belief that a student will not benefit from regular education instruction; ineffective practices to improve student achievement; and the inability of a student to make academic progress (Diamond, 2006). Referrals for special education services have also been attributed to influences of cultural and racial bias (Noguera, 2008) which have been observed with the disproportional number of Black males and other minorities referred to special education (Rodriguez, 2010).

Referrals, based on cultural and racial biases, have historically led to the disproportionate representation of Black males and other minorities in special education programs. A Response to Intervention (RTI) approach is an approach from a prevention model that is designed to help distinguish between those students whose achievement problems are due to a learning disability and those students whose achievement problems are due to other issues such as lack of prior instruction. As applicable to provisions stipulated in IDEA 2004, RTI is a strategy designed to not only prevent learning difficulties, but to also serve as a developmental intervention through tiers of intervention (Brozo, 2011). The basic premise of RTI involves three tiers of support. Tier 1 includes universal screenings and core classroom instruction. Tier 2 includes targeted, small group, and individual interventions. Tier 3 involves intensive individual instruction as prescribed by an individualized education plan (IEP). Referrals for special education evaluations are often reduced through use of this approach. “RTI techniques have been favored for reducing the likelihood that students from diverse racial, cultural or linguistic backgrounds are incorrectly identified as having a disability” (Klotz & Canter, 2007, p. 2).

Referrals may be linked to specific types of assessments used in RTI and the referral process. Methods used to assess student learning have been classified as direct and indirect (Maki, 2004). Direct methods are those most frequently employed in schools. Direct methods have been characterized as appropriate sources for identifying student learning and include standardized tests, performance-based assessments, and locally designed tests. According to Maki (2004), standardized instruments provide “evidence of what students know or can do within the universe and framework of questions, prompts, and tasks of an instrument; evidence to track student learning... assessing student learning through multiple lenses” (p.1). However, the National Research Council (2001) suggested that in selecting or designing assessments, consideration should be placed on the linkage of the assessment to cognitive learning and its ability to enable inferences to be drawn for decision making.

Maki (2004) suggested that locally designed tests are more likely closely aligned with expected learner outcomes of the school or district and are formatted to reflect the types of tests students are administered in the classroom setting, which is an advantage of this form of direct assessment. *The Mississippi Curriculum Test* (MCT) is a form of direct assessment designed in accordance with expected learner outcomes for students in the state of the proposed study. The test measures expected student outcomes in reading at the third grade level. In concert with district expectations, students are assessed for their abilities to apply specific skills that would suggest they are capable of experiencing success in later grades. For example, students scoring at the advanced level are said to consistently perform at a level beyond that required for success; proficient level scorers demonstrate mastery on the measures required for success; while students scoring at the basic level demonstrate partial mastery and may have some difficulty with content at the next grade level (Simmons, 2008).

Direct assessments are employed to make special education referrals. The second criterion requires the administration of research-validated interventions and frequent monitoring of academic progress. Evidence of a learning disability is the failure of the student to demonstrate significant improvement in academic skills through RTI strategies (Kratochwill et al., 2007).

A Need for Assessments With Predictive Validity

Problematic in selecting assessments for reading, literacy, and screening for special education services is the lack of predictive validity data in the instructional manuals of the tests (Rathvon, 2004). Brown and Coughlin (2007) examined the predictive validity of five benchmark assessments used in the Mid-Atlantic Region. They were *4Sight Math and Reading*, *Measures of Academic Progress (MAP) Math and Reading*, *STAR Math and Reading*, *Study Island Math and Reading*, and *TerraNova Math and Reading*. According to the researchers, “the report finds that evidence is generally lacking of their predictive validity with respect to state assessment tests” (Brown & Coughlin, 2007, p. iii). Although the *TerraNova* showed evidence of predictive validity, it was limited to one state assessment. Brown and Coughlin (2007) concluded from their review of literature that few studies have examined the predictive validity of benchmark assessments used in schools across the country. No studies have examined the predictive validity of the *Early Growth Indicators Benchmark Assessment* and the *MCT 2*, two tests that are commonly used in Mississippi’s urban elementary schools.

Summary

The research reviewed here identifies important gaps in the existing literature and highlights the importance of selecting assessment instruments appropriate for accurate referrals and identification, and for planning and implementing instructional interventions. Basic to both the selection of assessments and intervention measures is knowledge of child growth and development as well as evidence of acceptable psychometric properties such as predictive validity. This knowledge is key in identifying measures and practices that address theoretically sound expectations of actions that a given learner is potentially ready to perform.

Although debatable, frequently accepted among educators is the importance of beginning screenings in the early years. We theorize that screening assessments with good predictive validity used in the early years paves the way for teachers to more effectively plan and implement the additional instruction and interventions that children need to learn. Likewise, such assessments support other data that teachers use to make referrals for special education services.

Implications of Findings

Assessment tools are used to guide student learning and also to refer students for special services such as those designed to enhance language acquisition. The existing literature shows that studies that have examined the predictive accuracy of the standardized instruments used to assess young children’s literacy skills is limited. This is unfortunate because being able to predict how a student may perform is critical in planning instruction to accommodate the student’s needs so that the potential for achieving is maximized. The findings of this literature review highlight the need for future studies that examine the psychometric properties (e.g., sensitive, specificity, validity) of standardized tests used in school districts. This type of information can be used to identify and recommend the use of those that best identify students who are likely to struggle academically so that supportive instruction and interventions can be implement to prevent reading failure and maximize learning.

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