

## Data-Based Decision Making and the Need for a New Screener

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# INTRODUCTION

To make measurable progress in closing performance gaps, students experiencing reading difficulties need to be identified early and receive supplemental, evidence-based instruction. Early universal literacy screening makes early identification possible. Foundational reading skills (e.g., phonemic awareness, knowledge of letter-sound correspondences), which are early precursors to word reading/decoding and language knowledge and skills (knowledge of vocabulary and syntax), that develop in the earliest grades are essential for later reading achievement. Early identification of students who are having difficulties in these areas and immediate provision of targeted supplemental instruction are core tenets of multi-tiered systems of support (MTSS) that seek to prevent later reading difficulties.

To be effective, an early literacy screener should collect data that is predictive of later reading outcomes. Comprehensive early literacy screening should assess both early foundational skills in decoding, such as phonemic awareness, alphabet knowledge, and letter sounds, as well as skills related to language, such as knowledge of semantics, morphology, and syntax.



# THE PURPOSE OF **EARLY LITERACY SCREENING**

Screening data serves several purposes. Universal screeners, when implemented with fidelity, can assist in identifying students who may be at risk for future reading difficulties. As teachers identify patterns in scores across students, they can use that information to form small groups of students who need extra instruction on the same or similar skills. If a large percentage of students are not proficient in one or more subskills, teachers can use that information to shape their own instruction (i.e., recognizing the need for more explicit modeling, more opportunities for practice, or more scaffolds to support student success). Screening data can guide teachers' efforts to teach more explicitly those skills students need to strengthen.

Additionally, screeners can identify specific strand(s) of reading development (i.e., phonemic awareness, phonics, fluency, vocabulary, oral language development) that supplemental instruction should address for individual students (Hosp, 2016; St. Martin et al., 2020). Screeners, typically implemented at the Tier 1 (core classroom instruction) level in schools that employ MTSS, identify which students are at need for enhanced support and progress monitoring, which is implemented in the Tier 2 level of the MTSS framework (McIntosh & Goodman, 2016).

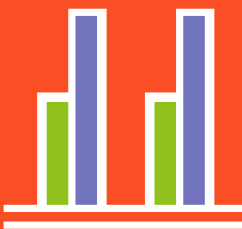
## DATA-BASED DECISION MAKING



When classroom instructional practices are aligned with science-based reading instruction, teachers use screening data to identify groups of students with common areas of need for intervention, allowing them to increase the intensity and explicit nature of their instruction. Additionally, screening results allow teachers to act proactively with students meeting minimal scores on benchmarks, providing them increased opportunities for practice in those skill areas.



Early screening data provides teachers with valuable information for making instructional decisions. Students' performance on measures of early literacy skills have been shown to accurately predict their mastery of later, more complex reading skills (Missall et al., 2019). Identifying and intervening early in foundational skills that need to be strengthened can provide the necessary groundwork for more advanced skills, such as reading fluency.



Research shows when schools employ data-based decision making to guide instruction, students make significant gains. When examining impact within subgroups, economically disadvantaged students receive substantial benefit (Van Geel et al., 2016). Using data-based decision making to guide instruction, teachers can help close these gaps in achievement.



## EIRI INITIATIVE

Virginia is fortunate to have existing infrastructure that is specifically designed to support the provision of supplemental early reading instruction to students who are identified as at high risk for reading difficulties. The purpose of the Virginia Early Intervention Reading Initiative (EIRI) is to reduce the number of students with reading problems by detecting those problems through early diagnosis and immediate intervention.

The initiative requires that all students identified as at high risk for reading difficulties receive intervention services in addition to their regular classroom instruction. Identified students must receive a minimum of two and one-half hours of additional instruction each week, at a student-to-teacher ratio of no more than five to one.



## DATA-BASED INDIVIDUALIZATION

Assessment data can also be a useful tool to monitor progress and adjust instruction for students with persistent learning difficulties. Initial screening data allows a teacher to identify students in need of supplemental instruction and pinpoint the skills they need to work on. After receiving intensive intervention on the target skills, teachers may then use a progress-monitoring measure to determine whether or not the extra instruction has improved the student's skills. Students who do not show sufficient growth may be referred for more specific diagnostic assessment, which allows teachers to identify more intensive interventions that match the student's specific needs. Data from screening, progress-monitoring, and diagnostic assessments can be used to individualize instruction for the students who need it most.



# PROFESSIONAL DEVELOPMENT IN **SCIENCE-BASED READING INSTRUCTION**

Training teachers in science-based reading instruction not only improves teacher knowledge but, when applied, improves student reading skills (Podhajski et al., 2009). As educators use data to identify gaps in student reading abilities, they can apply explicit instruction techniques to improve targeted skills.



In partnership with the University of Virginia and the Virginia Department of Education, Virginia Literacy Partnerships is developing more than one hundred instructional protocols addressing individual reading subskills that will be made freely available for public use. Additionally, webinars, professional learning guides, short informational videos, and infographics will be available on topics such as data-based decision making, working with special populations, and the skills needed to read and understand text fluently (e.g., phonemic awareness, phonics, vocabulary, fluency, comprehension). Strategically aligned with the same skills assessed by the new screener, this information will provide teachers with specific lessons they can use to build missing or weak reading skills.



## REFERENCES

- Hosp, M. K., Hosp, J. L., & Howell, K. W. (2016). *The ABCs of CBM: A practical guide to curriculum-based measurement* (2nd ed.). The Guilford Press.
- Missall, K., Reschly, A., Betts, J., McConnell, S., Heistad, D., Pickart, M., Sheran, C., & Marston, D. (2007). Examination of the predictive validity of preschool early literacy skills. *School Psychology Review*, 36(3), 433-452. <https://doi.org/10.1080/02796015.2007.12087932>
- National Reading Panel (U.S.) & National Institute of Child Health and Human Development (U.S.). (2000). *Report of the National Reading Panel: Teaching children to read: an evidence-based assessment of the scientific research literature on reading and its implications for reading instruction*. U.S. Dept. of Health and Human Services, Public Health Service, National Institutes of Health, National Institute of Child Health and Human Development.
- National Center for Education Statistics. (2019). National Assessment of Educational Progress (NAEP) Reading Assessment. U.S. Dept. of Education, Institute of Education Sciences, National Center for Education Statistics.
- Podhajski, B., Mather, N., Nathan, J., & Sammons, J. (2009). Professional development in scientifically based reading instruction: Teacher knowledge and reading outcomes. *Journal of learning disabilities*, 42(5), 403-417.
- St. Martin, K., Vaughn, S., Troia, G., Fien, H., & Coyne, M. (2020). *Intensifying literacy instruction: Essential practices*. MiMTSS Technical Assistance Center, Michigan Department of Education  
[https://intensiveintervention.org/sites/default/files/Intensifying\\_Literacy\\_Instruction\\_Essential\\_Practices.pdf](https://intensiveintervention.org/sites/default/files/Intensifying_Literacy_Instruction_Essential_Practices.pdf)
- Van Geel, M., Keuning, T., Visscher, A. J., & Fox, J. P. (2016). Assessing the effects of a school-wide data-based decision-making intervention on student achievement growth in primary schools. *American Educational Research Journal*, 53(2), 360-394.