

Assessment of Reading Difficulties

Within Multi-Tiered Systems of Support (MTSS)



It is recommended that dyslexia assessment occurs within the context of a Multi-Tiered System of Supports (MTSS). MTSS is a comprehensive framework for providing services and supports (academic, social-emotional, and behavioral) to meet the needs of all students. Key principles of MTSS include assessment to determine student needs, effective core instruction and evidence-based intervention, the use of data to drive decision-making, fidelity of implementation, and shared leadership.

It is recommended that the most effective assessment processes occur within the context of instruction and intervention and are requisite to the prevention, identification, and/or treatment of dyslexia. The assessment of dyslexia is supported by the use of a “hybrid” approach using reliable and valid methods that capture (1) low reading achievement (specifically accurate and fluent word reading and spelling), (2) inadequate instructional response to generally effective reading instruction and intervention, and (3) consideration of contextual factors and other disorders. This hybrid approach to the assessment of dyslexia is aligned with recommendations of the 2001 LD Summit and the statutory regulations of IDEA 2004 (Bradley et al., 2002; for a full discussion of the proposed hybrid approach, see Fletcher & Miciak, 2019). Data relevant to documenting the above criteria may also be found in the Rose Report, the definition of the International Dyslexia Association (IDA), and the DSM-V. In addition, these data are required by U.S. federal statutes, regardless of a given state or district’s approach.

In order to enhance early literacy outcomes and mitigate reading risk, the following dyslexia assessment guidance is offered within the context of MTSS.

What Measures Will Be Used and How Often?

Universal Screening

In Multi-Tiered Systems of Support for Reading (MTSS-R), all students (K-3) are screened in the fall, winter and spring using a technically adequate screening measure. Technically adequate, universal screening measures are widely available and are efficient indicators of research-based foundational early literacy skills. Foundational early literacy skills are skills that must be mastered in order to become a proficient reader. Foundational early literacy skills include phonemic awareness, phonics and word recognition, and fluency, to support comprehension. For each grade and time of year, the component measures that correlate highly with later outcomes are usually combined to form a reading composite score, which is the best overall predictor of later outcomes. It should also be noted that it is recommended that LEAs add

a rapid automatized naming (RAN) measure as part of kindergarten fall screening.

Example: Universal screening is conducted with all students in Grades K-3 at Green Elementary School during October, January, and May of each school year. According to the most recent screening results, 50 percent (50 out of 100) of Green Elementary’s kindergarten students are considered to be “healthy developing readers,” while 50 percent exhibited difficulties in the areas of letter-naming fluency, phoneme segmentation and correct letter sounds. Overall, core reading instruction from fall to winter does not appear to be “generally effective” in assisting most Green Elementary’s kindergarten students with attaining desired

levels of proficiency. As a result, Green Elementary School will adopt Enhanced Core Reading Instruction (ECRI) to help kindergarten teachers deliver more explicit, integrated core reading instruction with fidelity to support students in meeting with proficiency.

Resource:

[National Center on Intensive Intervention: Academic Screening Tools Chart](#)





Progress Monitoring

Progress monitoring is a standardized method of formative assessment that is conducted within a tiered system and used to (a) compare the impact of different forms of instruction, (b) identify students who are not demonstrating adequate progress, (c) estimate student rates of growth or responsiveness to reading instruction and supplemental intervention over time, and (d) determine when an instructional change is needed. For students who are showing mild to severe reading risk, progress monitoring may be conducted bi-weekly, weekly, and/or monthly.

Example: As indicated above, 50 out of 100 kindergarten students at Green Elementary School are exhibiting mild to severe risk in the areas of phonemic awareness/analysis, phonemic blending/synthesis, rapid automatized naming, nonsense word reading, and letter-sound knowledge acquisition. Each of these students will be monitored on a weekly basis using progress-monitoring measures that are sensitive to

weekly growth in these areas. Instruction and intervention intensity will be adjusted by the classroom teachers as part of Enhanced Core Reading Instruction (ECRI) adoption and implementation within the 90-minute core reading block. Recent progress-monitoring data indicated that of the 50 students who were showing mild to severe early reading risk, 35 out of 50 students were found to be responding to ECRI. Specifically, above typical weekly growth occurred on phoneme segmentation fluency, letter naming fluency, and nonsense word fluency probes. The explicit delivery of phonemic awareness, phonics, fluency, vocabulary, and comprehension routines (ECRI) within an integrated core reading lesson resulted in helping Green Elementary's kindergarten core reading instruction change to "generally effective" within 6 to 8 weeks of implementation.

Mastery Measures

Mastery measures are designed to identify when a student is able to

Resource:

[National Center on Intensive Intervention: Academic Progress Monitoring Tools Chart](#)



master a single skill within a series of short-term, instructional reading objectives. Mastery measures represent a logical hierarchy of skills in reading development and may not reflect whether a student has maintained or generalized the skills that were acquired. Mastery measures in reading are useful because they let teachers know whether students are learning the reading skills that are currently being taught.

Example: The remaining 15 out of 50 kindergarten students at Green Elementary School with below typical weekly growth rates were administered the Press Phonemic Awareness Inventory. Small groups were established by the kindergarten classroom teachers who used the inventory to identify common entry points for teaching underdeveloped phonemic awareness skills. The classroom teachers used specific ECRI routines in the form of daily small groups with these students. In addition, these 15 students were also deemed in need of a Tier 3 level of support (supplemental to classroom reading instruction). Each of the 15 students was placed in a small group of 3 students and received an additional 30 minutes of daily intensive intervention, which was provided by the reading specialist.

Standardized, Norm-Referenced Individually Administered Measures (Reading and Language)

Many individually administered, norm-referenced measures of

literacy and language achievement are designed to identify language and literacy disorders, document patterns of relative strengths and weaknesses, and track changes in language and literacy skill development over time.

Example: Of the 15 students at Green Elementary School who were receiving core reading instruction and supplemental intensive reading intervention, the progress-monitoring data indicated that 12 out of 15 students were responding adequately as measured by above-typical weekly growth. For the three students who were still exhibiting below or well-below typical weekly growth, the reading specialist and speech/language therapist administered the Comprehensive Test of Phonological Processing (CTOPP-2) and the Peabody Picture Vocabulary Test (PPVT-5) to identify specific strengths and weaknesses related to phonological processing and receptive and expressive language development. These two specialists used this information to inform additional changes to intensive intervention for these three students.

Each of these students was found to have significant difficulties with phonological processing and expressive and receptive language. A change was made to the methodology that the reading specialist was using during intensive supplemental intervention. The reading specialist replaced the evidence-based phonemic awareness intervention (The Lindamood Phoneme Sequencing Program – LIPS) with a comprehensive evidence-based intervention that targeted early literacy skills and foundational language skills using explicit design and delivery methods.

In addition, each family was asked to complete the Colorado Learning Disabilities Questionnaire - Reading Subscale (CLDQ-R) and participate in a Tier 3 Problem-Solving Process with their child's kindergarten teacher, reading specialist, speech/language therapist and the school psychologist. Each family was provided with an overview of their child's daily reading instruction and intervention, the methods being used, and their child's



responsiveness to instruction and intervention. In addition, each family was provided with information from the National Center on Improving Literacy (NCIL) regarding dyslexia. Each family agreed to support their child's reading and language growth at home using activities from NCIL's Kid Zone area. The reading specialist and speech/language therapist were responsible for prescribing reading, writing, speaking, and listening activities that each child would complete at home at least three times per week (5 to 10 minutes) with support from their parents.

Follow-up Tier 3 problem-solving meetings were scheduled in 6 to 8 weeks with each family to assess their child's RTI to determine the new changes to instruction and intervention.

Measures/Information Related to Exclusionary Clauses

Example: One of the three kindergarten students at Green Elementary School who continued to exhibit well-below typical growth was an English Learner. In lieu of the PPVT-5, this student was administered the Woodcock-Munoz Language Survey – Revised (WMLS-R). The student's performance on the WMLS-R supported the change to a comprehensive intervention that targeted early literacy skills as well as foundational language skills.

Identification of Dyslexia (Specific Learning Disability)

Example: Of the three students who were referred to an individual problem-solving team, one of the students was an English Learner, who responded adequately to the last changes made to instruction

and intervention. This included the use of a comprehensive, evidence-based methodology at Tier 3 in a group size of 1:3 for 30 minutes per day in addition to core reading instruction and English Language Development (ELD) services. Two of the students continued to exhibit well-below typical weekly growth rates, limited progress on the PRESS mastery measures, and no change in performance (achievement levels) in language or literacy skill levels as measured by the Comprehensive Test of Phonological Processing – Second Edition (CTOPP-2) and the Peabody Picture Vocabulary Test - Fifth Edition (PPVT-5) at the conclusion of the intervention. In addition, both families indicated that there was a family history of significant reading and writing difficulties and provided documentation of each child's early development that was consistent with characteristics associated with dyslexia on the Colorado Learning Disabilities Questionnaire – Reading Subscale (CLDQ-R).

The school psychologist and members of the individualized problem-solving team had worked with each of these families to deepen their understanding of dyslexia, co-construct reading and language goals, and empower the families to be meaningfully engaged in supporting their children's learning. The problem-solving team, in concert with each family, agreed that each child was eligible and in need of specially designed instruction as students who were exhibiting characteristics of severe dyslexia as evidenced by intractability despite generally effective core instruction and supplemental intensive evidence-based reading intervention.

Resources:

[National Center on Improving Literacy \(NCIL\)](#)



[National Center on Intensive Intervention \(NCII\)](#)





Who is the School Expert?

"A diagnosis of dyslexia begins with the gathering of information gained from interviews, observations, and testing. This information is collected by various members of a team that includes the classroom teacher(s), speech/language pathologist, educational assessment specialist(s), and medical personnel (if co-occurring difficulties related to development, health or attention are suspected). The task of relating and interpreting the information collected should be the responsibility of a professional who is thoroughly familiar with the important characteristics of dyslexia at different stages in the development of literacy skills (IDA Testing & Evaluation Tip Sheet). This professional should also have knowledge of the influence of language development and behavior on literacy learning" (Sawyer & Jones, 2009).

School psychologists understand and utilize assessment methods for identifying strengths and needs; developing effective interventions, services, and programs; and measuring progress and outcomes within a multi-tiered system approach. School psychologists use a problem-solving framework as the basis for supporting the needs of all students. School psychologists systematically collect data from multiple sources as a foundation for decision-making at the individual, group, and systems levels and consider ecological factors (e.g., classroom, family, and community characteristics) as a context for assessment and intervention (National Association of School Psychologists, 2020). School psychologists, in collaboration with other members of an interdisciplinary team, conduct assessments to determine students' need for services, including eligibility for special education, and to provide information relevant to the development of individual service plans.

Resources:

[National Association of School Psychologists: The Professional Standards of the National Association of School Psychologists \(2020\).](#)



[International Dyslexia Association Testing and Evaluation Tip Sheet](#)



Who Collects, Analyzes, and Interprets the Data?

Best practice in the assessment of dyslexia occurs within an MTSS framework. A well-implemented MTSS will involve various professionals who possess complementary skills, unique training, and expertise. Assessment within an MTSS framework is conducted for four purposes: universal screening, progress monitoring, diagnostic assessment, and program evaluation. Universal screening and progress monitoring data are often obtained through brief, standardized assessments. These data may be collected by any school professional who receives adequate training with periodic review and fidelity checks. The collection of universal screening data will likely require the use of a team of individuals, so that the data can be collected efficiently and with minimal disruption to instruction.

Diagnostic assessment is conducted for the purpose of identifying specific skill areas that need to be targeted via instruction and intervention.

These measures are typically administered by professionals who have acquired unique training and expertise related to effective reading instruction and comprehensive assessment. Diagnostic assessment often encompasses the use of standardized, norm-referenced achievement measures, curriculum-based assessment methods and informal skills inventories. The type of diagnostic assessment being administered informs who is best positioned to gather and interpret specific information. Reading specialists, general and special education teachers, speech/language pathologists, occupational and physical therapists, and school psychologists each have requisite training and expertise to inform different aspects of a comprehensive data gathering process. However, school psychologists and speech/language pathologists receive specialized training in the assessment of dyslexia and devote a

considerable amount of their role and function within schools to dyslexia prevention, treatment, and diagnosis.

When highly trained, cross-disciplinary teams of school-based practitioners collaborate with contributing family members and the medical community (as needed), the assessment of dyslexia should ultimately lead to enhanced systemic, grade level, and individual outcomes over time. The formal analysis of the above efforts is commonly referred to as “program evaluation,” an important component of a well-implemented MTSS. Formal, ongoing program evaluation efforts help teams to continuously assess the health or general effectiveness of core reading instruction and supplemental intervention for all students, notwithstanding the most vulnerable students who exhibit significant reading and writing difficulties.



How Do Schools Improve Data Analysis and Instructional Matching?

Data-based decision-making and instructional matching are fundamental components of multi-tiered systems. A continuum of reliable and valid data is used to inform reading instruction and intervention at the systems, grade, and individual levels and requires extensive knowledge and fidelity of implementation of the science of reading and empirical reading research. Collecting and analyzing data at each tier of an MTSS allows for teachers and other school personnel to carefully match instruction to groups of learners as well as to individual students who are not making sufficient progress in reading.

As indicated above, best practices and research indicates that the early prevention, treatment and/or identification of dyslexia occurs within the context of an instructional-response framework. This approach requires that students receive generally effective core instruction and evidence-based intervention to verify that consistently low reading achievement is not primarily attributable to low quality reading instruction and intervention.

Following routine screenings, school teams should analyze screening data in a timely manner to determine how many students are responding adequately to core reading instruction (Hyson, Kovaleski, Silbergliitt, & Pedersen, 2020). The goal is for all students to reach early reading benchmarks on time, using thresholds that have been empirically derived and tied to both short- and long-term

reading health. Understanding how students in general are responding to the core reading curriculum allows teachers to plan specific instructional methods to ensure that all students reach proficiency goals on time. These methods include whole-group instructional strategies, differentiated instruction in small groups, and classwide interventions that target specific skills needed by all students. Analyzing collected data to enhance core instruction not only allows schools to maximize the likelihood that large numbers of students will meet reading proficiency standards, it also prevents long-term reading difficulties for most students and allows schools to equitably allocate critical supports and services to the most vulnerable students.

More advanced knowledge and problem-solving skills are needed for those individual students who present with specific needs or deficiencies that cannot adequately be met through high-quality core reading instruction alone. Since there is not a “one size fits all” evidence-based reading intervention for learners who have different skill problems, several factors are important to consider during the intervention-matching process. First, it is important to identify the underlying skill deficit(s) that are contributing and/or causing difficulties with reading acquisition for each individual student. Second, these students will need explicitly designed reading instruction and intervention that are based on the specific skill deficit(s). This two-step process is known as the

skill-by-treatment approach in which intervention strategies are precisely matched to the student’s unique pattern of skills (Burns, VanderHeyden, & Zaslofsky, 2014). The ability to acquire any new skill, including the ability to learn to read, follows a consistent process. The learning process initially includes inconsistent and poor accuracy with the skill and advances to increased accuracy and consistency in response or acquired skills across time, people, and settings. When students are accurate with respect to early reading skills, they are ready to increase their speed and fluency with which they apply a given early reading skill or skills. Finally, when students are both accurate and fluent readers, they need to have planned opportunities to practice acquired skills in new or different situations. Progressing effectively and efficiently through each stage of learning is dependent upon different types of evidence-based instructional strategies that match that stage of learning. Therefore, teams need to use data to identify the specific early reading skills that need to be further developed, as well as where the student is on the instructional hierarchy (i.e., accuracy, fluency, or generalization/adaptation; Haring & Eaton, 1978). Inherent in the development of advanced data-analysis and instructional matching skills is context-embedded professional learning that includes assessment literacy, the science of reading, and sound application of research and best practices as it relates to the identification of specific learning disabilities.

How is Fidelity of Reading Instruction and Intervention Assessed?

“Reading Health” ultimately rests on the ability to meet specific benchmarks and goals within a reasonable period of time as a function of exposure to high-quality core reading instruction and intervention matched to student needs. Therefore, it is important to look for systems-level indices of effective or healthy reading instruction and intervention. One systems-level indicator of overall reading health is indicated by the overall percentage of students in a given cohort who reach benchmark status “on time” and maintain their relative standing or overall performance level as a function of core reading instruction alone. Further, if the median student’s performance is situated below benchmark or well below benchmark status at any given time of the year, this is an indication that core reading instruction lacks general effectiveness. Another systems-level indicator of fidelity of core instruction and intervention is when the majority of students who receive supplemental reading intervention “realize” above-typical and/or well above typical weekly growth. Finally, fidelity of core instruction and intervention is evidenced when decreasing percentages of students are in receipt of the most intensive intervention and/or referred for eligibility determination. Ultimately, the goal is to assist 100 percent of students with attaining benchmark status at the K-2 levels through fidelity of instruction and intervention using an MTSS (Lyon, 1998).

School administrators should routinely analyze these metrics to determine if the reading curriculum (including both core instruction and evidence-based intervention matched to student needs) is serving the reading needs of all students. Overall attainments of the entire student population should be disaggregated by performance of critical subgroups, including English-Language Learners, students from low-income environments, and students with disabilities. Attaining expected levels of reading proficiency for each of these subgroups should be the basis for determining the effectiveness of a school’s overall reading program.

When data on reading performance indicate that there is not alignment with expected outcomes, the first determination to be made is whether the core instructional program and targeted interventions are being delivered with appropriate fidelity. Any program that is supported by empirical research will only work on a local level if it is delivered according to the parameters designed by the program developers. For example, when school districts implement a new, standards-aligned core reading program, intensive training must be provided to all implementers. This training needs to occur over a multi-year period, so that teachers have an opportunity to learn the new program, receive feedback on its implementation, and work through implementation obstacles. In addition, teachers who

are new to the school district or even new to a grade level, need the same level of training that was provided to the initial group of implementers.

Once initial training is provided, school administrators need to assess how the various instructional and intervention aspects of the reading program are being implemented. Methods for assessing the fidelity of program implementation range from simple procedures, such as self-appraisal by the implementers themselves, to direct observation by reading specialists and/or practitioners who have expertise in the program. When there are indications that any aspect of the reading program is not being implemented according to the parameters of the program, implementers often require and benefit from coaching and related support to improve implementation. The school teams described in the previous section may also be able to assist with fidelity of implementation efforts. It should be emphasized that systemic and systematic efforts to improve the implementation of evidence-based reading instruction and intervention apply to all facets of education, including special education. Finally, if reading outcomes are not improving despite strong fidelity of reading instruction and intervention, it is incumbent that school leaders consider replacement options.

Summary

The identification of dyslexia, or risk of dyslexia, occurs through the lens of dynamic assessment, prevention, and treatment and within the context of a multi-tiered system. Strong consideration should be given to low achievement in reading and spelling and a student's intractability, despite generally effective reading instruction and intensive intervention. Dyslexia assessment should also include consideration of other risk factors, co-occurring conditions, and the ruling out of exclusionary factors.

Because there are currently decades of research related to the etiology, prevention, and treatment of language-based deficiencies and disabilities, school communities have a strong foundation upon which to bridge existing knowledge and practice gaps. Therefore, it is incumbent for all states, administrators, practitioners, and families to continue to work together to access and demystify the science of reading, engage in early prevention and treatment, and implement the evidence-based practices that produce the best results for children and adolescents.



References

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Commonwealth of Pennsylvania

Josh Shapiro, Governor

