Massachusetts Dyslexia Guidelines
- a brief outline -

The following outline focuses on key points in the Dyslexia Guideline document released by DESE. I encourage everyone to read the entire document, perhaps a section at a time, and consider how we can improve our service delivery in general and special education settings as; professionals, parents, community members and students. The guidelines were created with the assistance of over 100 stakeholders invested in improving education to all our students.

The Massachusetts Dyslexia Guidelines serve three purposes:

- To provide a set of screening guidelines for all students, including students demonstrating one or more potential signs of a neurological learning disability including, but not limited to, dyslexia;

- To provide a framework of intervention for students at risk of dyslexia and other learning difficulties that is timely and responsive; and

- To provide a comprehensive resource of evidence-based practices aimed at all educators to support students at risk of dyslexia and those identified as having dyslexia, consistent with and linked to other guidance from DESE

Equitable and immediate access to reading support
The stakeholders who created the guidelines emphasize the critical importance of universal screening of all students in Massachusetts and access to high quality, evidence-based literacy instruction across all three tiers of instruction:

Tier 1: universal support in general education setting
Tier 2: targeted support in general education setting
Tier 3: intensive support in general education and/or special education setting

Early screening and prompt interventions for all students
Stakeholders emphasized that guidance on selecting and implementing screeners was essential to practitioners collecting valid and reliable data regarding risk of dyslexia for all students.

Addressing risk of dyslexia begins early and in general education
Many participants noted the important role of a robust core curriculum and universal support (Tier 1) in preventing and addressing reading challenges. Stakeholders described a critical need for research-based curricula that feature clear and systematic instruction in foundational reading skills, including phonemic awareness and phonics.

Evidence-based practices for students with dyslexia will be a key concept for districts
Stakeholders acknowledged that increasing educators' knowledge and capacity around evidence based reading practices, including phonemic skills and phonics. Stakeholders want to see professional development practices growing out of a variety of sources.

Integrate the Dyslexia Guidelines with other DESE guidance
The Dyslexia Guidelines have drawn upon the Early Literacy Screening Assessments, the Mass Literacy Guide, the Massachusetts multi-tiered system of support (MTSS) Blueprint, and the Blueprint for English Learner Success so that districts can confidently and consistently build upon existing evidence-based best practices.

Common Misconceptions about Dyslexia: From Fiction to Fact

Several misconceptions about dyslexia have long been perpetuated despite a body of evidence that disavows them.

Misconception: Dyslexia is a Visual Issue. One of the most common misconceptions about dyslexia is that it is a visual processing problem characterized by weaknesses in tracking or letters "moving around" the page. The root cause of dyslexia is a deficit in the accurate and/or efficient correlation between the sounds in language (phonology) and their spelling patterns (orthography)

Misconception: Letter Reversals are Indicative of Dyslexia. Letter reversals are common among children with or without difficulties learning to read, and represent an early phase of reading development. Although many students with dyslexia struggle to accurately represent letters in writing, letter reversals are not the cause of reading impairment and should not serve as the primary diagnostic tool.

Misconception: Some Readers are Simply Immature. Educators are often hesitant to refer students for reading services in the hope that they will outgrow difficulties in sufficient time. Yet, intervention studies confirm that the critical window during which remediation is most effective is between the ages of 6 - 8 years old.

Risk Factors for Dyslexia Can Be Detected Prior to Formal Instruction

A series of studies that examined the effectiveness of reading intervention at different grade levels found that, although targeted intervention brings 50-94% of at-risk first graders into the average range, the same impact is not observed in third grade students - particularly in regards to their reading fluency.

Screening Is Not An Eligibility Determination

Universal screening for dyslexia risk is designed to reliably indicate each student's unique risk for experiencing later difficulties with accuracy and/or fluency in word reading. Screening for dyslexia risk is not the same as evaluating a student for special education eligibility, as screening tools are designed to predict the likelihood of reading challenges without the presence of targeted interventions and support. Additionally, students in the bottom quartile should be considered for additional diagnostic assessments such as phonemic awareness, phonics, and sight word inventories.

Screening Administration Guidelines

Screening Time Frame: Preschool

The preschool years are marked by significant growth in all domains of development for children – physical, social, emotional, language and cognitive. In order to be responsive to the varying development needs of young children, it is important that preschool programs have systems for implementing developmental screening.

Screening Time Frame: Kindergarten - Second Grade

In light of the rapid development of reading skills over the first three years of school, it is critical to universally screen students multiple times annually from kindergarten to second grade. Universal screening entails the administration of measures to all students in kindergarten, first, and second grade. The initial kindergarten screening can be completed between the beginning of school and the end of December, with the follow-up completed at the end of the school year.

Skills To Assess During Screening

- **Phonemic Awareness** refers to students' knowledge of individual sounds in language.

- **Alphabetic Knowledge** refers to students' familiarity with the names and sounds of letters and letter patterns.

- **Rapid Automatized Naming** refers to students' ability to rapidly name a limited set of repeatedly presented known objects or letters.

Multi-Tiered System of Supports (MTSS) - providing appropriate instruction

Assessment cycle - using data to improve student achievement requires a commitment to analysis, planning and instructional adjustments.

Data team meetings - held at least five times a year to review benchmark data and progress monitoring data.

The Instructional Focus Area

The Instructional Focus Area is determined for at-risk students by analyzing the individual areas of weakness(es). Data collected through early literacy and dyslexia screenings will provide information about the three broad domains of reading-related skill development. These include accuracy, automaticity/fluency, and language comprehension. Focus areas can be further refined as educators consider the severity of students' risk and their performance on additional diagnostic assessments such as phonemic awareness, phonics, and sight word inventories.

The Importance Of Universal Core Reading Instruction at Tier 1

For Students At Risk For Dyslexia The success of MTSS rests squarely on the effectiveness of Tier 1 instruction for all students. Small-group interventions can be logistically untenable when a large proportion of students falls in the at-risk range. From kindergarten to second grade, a robust, universal evidence-based Tier 1 ELA curriculum is critical for preventing and addressing word reading challenges.

The strategies employed in interventions at the Tier 2 and 3 level are predicated on the same evidence-based practices that drive core instruction and are delivered to all students. These strategies reflect the accumulating research on how the brain develops a reading circuit, including the relationship between oral language skills (e.g., vocabulary, text structure, and background knowledge) and word reading ability, including the development of orthographic mapping, which facilitates sight word recognition and decoding.

Targeted Reading Intervention at Tiers 2 and 3

Tiers 2 and 3 are designed to supplement the core curriculum so that students who perform in the at risk range on a screener receive a "double dose" of reading instruction, participating in both classroom teaching (Tier 1) and intervention supports (Tier 2 or Tier 3). This model is designed to prevent students from missing grade-level instruction that often involves the introduction of background knowledge, new vocabulary, and rich conversation about literature.

Identifying Students' Instructional Focus Areas

The guidelines for screening risk of dyslexia incorporate the reading skills that contribute to achievement in word reading accuracy and fluency from kindergarten to second grade. The use of screening data to inform instructional planning for at-risk students typically improves the targeted nature of Tier 2 and Tier 3 interventions. In order to plan instruction that appropriately addresses students' needs, additional assessments may also be needed. The following sections outline best practices for each instructional focus area, as well as the use of supplemental assessments such as inventories and surveys.

1. **Phonemic Awareness**

Phonemic awareness instruction (PA) is not optional if the goal is for students to become good readers. PA not only significantly develops students' immediate knowledge of the sounds in words but also has a broader impact on their decoding, spelling, and sight word recognition. Students in kindergarten and first grade who perform in the at-risk range on screening /supplemental assessment measures of PA (such as phoneme segmentation) have been found to improve their decoding and encoding skills as a result of targeted PA intervention.

Additionally, students in second grade who perform in the at-risk range on measures of word reading and oral reading fluency have been found to benefit from an assessment of their phonemic awareness knowledge, via survey or inventory, to confirm whether PA is a “hidden bottleneck” in their reading acquisition.

- **Important Aspects of Phonemic Awareness Intervention.** The development of phonological skills typically follows an increasingly complex path, moving from larger units of language (whole words) to smaller units of language (individual sounds or phonemes). Although some skills may develop out of order, generally students develop abilities along this continuum Phonological . Some students, especially those at risk for dyslexia, become “stuck” at the onset-rime or even phoneme segmentation level at the end of first grade, negatively impacting their ability to advance in their decoding and sight word recognition. To be a fluent reader, a student needs to achieve proficiency in the manipulation and substitution of individual sounds (phonemes) in three-letter (e.g., sip) and four-letter (e.g., slip) words. Instruction in phonemic awareness does not have to be lengthy for students to derive considerable benefit. Sessions that are less than 15-minutes per day can be effective. Some students will require multisensory scaffolds such as manipulatives or Elkonin boxes as their skills develop. The greatest benefit of phonemic awareness knowledge is derived when students can perform advanced phonemic awareness skills, like manipulation and substitution, automatically—without the presence of any manipulatives or scaffolds. When advanced phonemic awareness is achieved, students are better able to develop their sight word recognition through the orthographic mapping process.

2. Phonics

Students who struggle to learn the alphabetic principle (the connection between letters and sounds) and subsequent phonics skills require targeted instruction in sound-symbol correspondences for reading and writing.

Phonics instruction is most effective when it is delivered in a systematic manner. Students taught through explicit phonics methods score six to seven standard score points higher on measures of single word reading than students who are taught in an incidental manner. Phonics not only improves word reading but also has great benefit for comprehension.

- **Important Aspects of Phonics Intervention**. As students are developing their understanding of the alphabetic principle, several strategies have been found effective in supporting those at risk for dyslexia. Introducing the letters whose names contain the initial sound (b, d, j, k, etc.), is more effective than letters whose sounds are in the last position in the name (f, l, m, r, etc.). Additionally, using letters that have embedded picture mnemonics, or drawings of letters embedded in a picture of something containing that sound, has facilitated more efficient sound symbol knowledge than the letter alone.

- **Comprehensive phonics programs** can follow substantially different protocols. Some programs teach sound-symbol correspondences and blending. In the absence of formal rules, these programs rely heavily on immediate corrective feedback and are used most

frequently in kindergarten and first grade. Others teach the basic rules of phonics in addition to sound-symbol correspondences and blending. The final group teaches a set of elaborate rules that govern almost all words, and students are taught to think in a metalinguistic manner as they learn to read. Text annotation strategies like “marking-up” are prominent. To date, many of the programs that abide by these approaches have an evidence base, but the efficiency of each approach has not been compared to the others. Regardless of the program, the most effective phonics interventions concurrently address phonemic awareness to the level of advanced skills and offer a multitude of opportunities to apply knowledge in controlled and uncontrolled connected text.

3. Fluency

Fluent readers can recognize words automatically, giving them time to focus on the comprehension of a text, rather than struggling to decode individual words. Though fluency allows for ease in reading, the process itself—or rather, the network of processes—is complex. Students achieve fluency by becoming automatic across all underlying word-related skills and brain processes.

- **Sight Word Recognition**

Sight word recognition is an important contributor to overall reading fluency. Sight word recognition is developed through a process of orthographic mapping. Orthographic mapping occurs when students “map” frequently occurring letters and letter patterns onto their related sounds. The process of orthographic mapping is not simply reliant upon sound-symbol awareness; rather, it is an integration of several key oral and written language skills, which include advanced phonemic awareness, letter-sound knowledge, and phonics skills.

It is important to note that orthographic mapping and sight word recognition are not simply memorization of key, non decodable words. In orthographic mapping, a person’s knowledge of the individual sounds in words (i.e., phonemic awareness) and the particular sequence of sounds in words serve as the “anchoring points" with which to map letter sequences. Segmenting sounds in words allows students to map individual letters.

- **Passage Reading Fluency**

Passage reading fluency represents much more than the rate of reading speed. Fluency represents a complex network of processes that bridge basic decoding skills, including increasingly sophisticated comprehension and analytical processes. Any approach to remediating fluency needs to take this underlying complexity into account.

The most common approach to building fluency, repeated reading instruction, is based on the premise that the rehearsal of text—in which students reread phrases, sentences, and selections of passages—will bolster automaticity and prosody (the patterns of stress and intonation in a language) with written language. Repeated reading provides a useful method for practice and is sufficient for improving fluency weaknesses in some students—typically those who do not score in the at-risk range on measures of rapid automatized naming (RAN). Yet, for some students, this is not enough because repeated reading does not explicitly develop students’ automaticity in and across the multiple linguistic processes that contribute to automatic word recognition. Therefore, more robust approaches include both repeated readings and novel passages for all students who demonstrate deeper weaknesses in fluency, as indicated by their at-risk scores on

measures of RAN. In order to achieve fluency, students with retrieval weaknesses must become automatic across all five aspects of word knowledge. These aspects include the retrieval not only of the knowledge of sounds in words (phonology) and common letter patterns (orthography), but also knowledge of sentence structure (syntax), word meaning (semantics), and roots and affixes (morphology). Together these linguistic processes—phonology, orthography, semantics, syntax, and morphology—are essential for fluency development. It is the interaction of these processes across single words, sentences, and passages that allows a student to simultaneously read and understand text with fluent comprehension. Within this view, fluency is no longer reducible to a matter of speed; rather, it represents multiple skills and a level of automatic processing in all the underlying word-related processes that allows readers to decode text fast enough and effortlessly enough to allocate their attention to the varied comprehension processes and skills involved in understanding and analyzing text.

4. Structured Literacy

Structured Literacy (SL) is a relatively recent term that is used to describe the targeted and systematic introduction of the multiple aspects of word knowledge and skills. In a structured literacy approach, students are taught the sounds in words, letter-sound relationships, syllable patterns, morphemes, vocabulary, sentence structure, paragraph structure, and text structure. Skill introduction follows a logical sequence wherein complex concepts build upon previously learned fundamental knowledge, and "the sequential nature of SL means that teachers design learning activities to require students to practice only what they have been explicitly taught." SL is also characterized by a high degree of teacher-student interaction, including modeling, gradual release of responsibility, and immediate corrective feedback. Early in skill development, SL instruction generally relies on controlled texts in which the majority of the content is decodable to provide an effective platform to directly apply phonics knowledge. Yet, in order to adequately develop reading fluency, exposure to a variety of sentence structures and content-area vocabulary through appropriately challenging texts, including uncontrolled passages, is essential.

5. Reading Comprehension

Reading comprehension requires the integration of reading fluency skills and listening comprehension. Reading comprehension difficulties, in the absence of decoding, sight word recognition, or fluency issues, often indicate weaknesses in oral language skills—not a risk of dyslexia. Oral language comprehension involves the interaction of many different linguistic and cognitive skills.

Progress Monitoring

Classroom teachers daily observe and determine what students have learned. Progress monitoring is designed to assess the fit among instructional planning, instructional delivery, and student's needs. Once students have been identified as at-risk for dyslexia through screening assessments, grade-level teams meet to determine the nature of tiered supports that are needed for each child.

Dyslexia and special education

General education provides evidence-based literacy instruction as well as academic, behavioral, and social emotional learning support to all students. Many students with dyslexia can and should make effective progress with general education support. However for students who may need special education services to make effective progress in the general education program, timely and appropriate special education evaluation eligibility determination is key. A student can be referred for a special education evaluation at any time.

Dyslexia and English Learners

Research indicates that English learners benefit from early screening and effective, early instruction. Therefore bilingual students and English learners should not be excluded from universal literacy screening. However while screening information is important in assessing whether English may be at risk for reading problems, the screening process should not end with a screening measure that focuses on decoding and phonemic skills. Additional data is needed to determine whether reading difficulty stems from a lack of oral language proficiency or a possible reading disability.

Conclusion

This 8 page summary of the 81 page guidelines document highlighted a few key points however I encourage everyone to read the entire document and determine how you can support the improvement of outcomes for all our students.