Your Struggles Are Real: Finding Children with Dyslexia in a Sea of Struggling Readers

The push to transform what reading instruction looks like in classrooms across Tennessee and many parts of the nation has left some people wondering what this means for students with dyslexia. The push for change is good news for students with dyslexia. This is due in larger part to the change underway having been motivated by an honest acknowledgment of reality. The majority of children in Tennessee and the nation struggle to read — a fact that breaks the hearts of parents, the backs of teachers, and causes untold suffering for children. It also disrupts systems intended to identify students with learning disabilities.

When you really break things down to their nuts and bolts, concerns for the interests of students with learning disabilities are bound to the welfare of all students. And the bond is simple. We know a lot about reading disabilities. We know a tremendous amount about how to teach all children to read. But we cannot find the ones who will need the most intense instruction and allocate resources to this end when the educational systems are overtaxed with most children struggling to read. To sum up, our research reveals that schools struggle to find kids with reading disabilities, like dyslexia, when most children in a school struggle to read. Their reading struggles are not exceptional in the context of a sea of struggling readers who are all drowning.

Put simply, all the science in the world cannot help when the base systems needed to translate it are overtaxed or nonexistent. Efforts underway in Tennessee and other states to address these challenges are vital. We need trained educators instilled with the knowledge and practical skills to teach reading when they leave college. Achieving this goal requires hard work on the part of institutions of higher education like MTSU. As pre-service teachers leave higher education and enter the workforce, there is a need for robust systems to support their continued professional development. These efforts are not just for teachers. We need opportunities for educational leaders...
Introduction

to understand their role in these efforts and receive preparation and continued support in carrying out their role in these systems.

When it comes to building healthy systems and keeping them that way, we need early indicators of student success. The earliest indicators that we have in reading are provided by universal screenings. We start getting these data at the beginning of a child’s time in our public schools. These data provide vital information at the individual student level, and they can also be shared in a way that offers invaluable information for all layers of a system.

In this issue, we provide some thoughtful pieces on aspects of universal screening. These articles set the stage for the training we will offer starting in the fall. This training will get underway with a full-day workshop, “From the District to the Reading Teacher: A Roadmap for Using Screeners to Identify Students With Characteristics of Dyslexia.” The workshop will take a big-picture perspective about how screeners support identifying risk indicators to support how best to enrich and intervene for the betterment of all students. It will also take a perspective that moves beyond what screeners tell us about individual students. When leveraged, these data provide important indicators of the overall health of the literacy practices in a grade, school, district, and state.

The workshop can be a stand-alone event. Yet, we find that many educators are hungry for more. And for those wanting to continue the conversation and learn more, we are providing the “Dyslexia Success Series”, a series of workshops that will take place across the 2021-2022 academic year. The continued training will focus on differentiating instruction to target skills deficits for students with characteristics of dyslexia identified through universal screening data. Educators will gain hands-on training in using instructional materials that we have developed for students in the early grades.

Timothy Odegard, Ph.D.
Chairholder, Murfree Chair of Excellence in Dyslexic Studies
Recent Findings

Researchers examine past efforts to support teachers with data-based decision-making

Research scientists strive to identify problems and find solutions for them. Scientists tackle the problem of how to find children who struggle to read from many angles. Researchers continue to develop bigger and better tools. Some tools can screen students for reading problems. Others track the development of students’ reading skills. Some researchers conduct theory-driven work. They refine theoretical models and guidelines for classifying students with reading difficulties. Findings get published in peer-reviewed journals and presented at scientific conferences. But more work must happen to put these findings in place in school-based settings. This translational work occurs in part through the provision of professional development.

Our center provides such professional development (PD) opportunities to educators and parents. We strive to present research findings in a straightforward and meaningful way. We want to support educators with literacy instruction in their schools and classrooms. We often ask educators to reflect on their current practices. Then they may see how to change their instruction to better align with the existing research. The goal is to build educators’ knowledge and confidence. In turn, they will be better able to support their students’ literacy development.

As PD providers, our practices are also informed by research. This research examines how to share information in ways that promote sustained changes. A recent meta-analysis in the Journal of Learning Disabilities by Samantha A. Gesel, Ph.D., and colleagues reviewed studies of teacher PD. These PD opportunities were intended to increase teachers' knowledge of curriculum-based measures. A curriculum-based measure (CBM) is a brief, skills-based assessment for tracking student progress. Teachers were also taught how to use data from CBMs to make instructional decisions. For example, teachers must make decisions about placing individual students into intervention. Data are also used to identify appropriate instructional targets for the students. And they guide how to use school personnel for student instruction and intervention.
Recent Findings

After training, the educators could correctly answer questions about their students’ data. Yet, they still struggled to act based on that knowledge. One implication from this study is that teachers are like their students. Both groups need continued support and many opportunities to practice their developing skills.

Another new review article highlights the benefits of ongoing educator support. Lynn S. Fuchs, Ph.D., and colleagues reviewed studies of teacher PD. In these studies, teachers received sustained support from research personnel. The teachers learned how to interpret data they acquired from their students. They also learned how to make decisions using that data. Again, findings revealed that receiving more support helped teachers to use data. They were better able to make instructional changes to increase their students’ performance. Additionally, their students exhibited gains in academic skills. Students whose teachers did not receive ongoing data-based decision-making support exhibited smaller gains.

This article also discussed how studies varied in the types of support provided. Some studies used computer platforms to show student data from the CBMs. Many educators may be familiar with such reports. Yet, the reports vary in how helpful they are. Reports vary in information provided about the types of errors students made. Further, some reports provide instructional recommendations, and some do not. The authors concluded with a discussion of the need for more research. We need to continue to refine technological tools. The tools should offer readily accessible and actionable data. Efforts could also focus on how to add other sources of data in the decision-making process — for example, combining CBM data with how the student responds to intervention activities. It is also important to provide clear directions to guide instructional changes.

A key finding from both recent reviews is the importance of sustained interactions. It is not enough to communicate ideas one day in one workshop. Instead, translational science can likely be most effective by building ongoing relationships. These interdisciplinary relationships need open lines of communication. This communication and support should not only occur between researchers and practitioners. There also needs to be open communication and support throughout a school system.

Our center encourages educators to refine their practices. We study the research on professional development to refine our methods too. Our translational research center creates spaces to foster communication between educators. One opportunity occurs as part of our Educator Knowledge Norming Study. Schools or districts can take part. We need you to help us learn about differences in educator knowledge and perceptions. Each school or district in our study
releases an anonymous summary report. The report combines information received from each participating educator at that site. The report describes participating educators’ knowledge in different domains of literacy. It also describes the educators’ perceptions of their knowledge. Administrators can use it to plan future staff training opportunities. As the study progresses, we will combine data across sites. This will allow us to learn about differences in educator knowledge and perceptions. Our webpage will tell you more: https://mtsu.edu/dyslexia/research/EducKnowNormstudyinfo.php.

Our upcoming professional development offerings are also geared toward fostering communication. We have lots of research to share with you in support of best practices. We also want to listen to you so we can continue to refine our understanding of your realities in your schools. Please join us as we work to increase our ability to support educators. We all are striving to provide better support to students.


Peer-Reviewed Publications


Accolades

Congratulations to our student affiliates who have won awards or are graduating!

Research assistant and psychology major Lauren Hunsicker graduated in May 2021. Lauren will be staying with us as she begins the MTSU School Psychology graduate program and her new position as a graduate assistant at the center.

Graduate assistant Hannah Morley will begin her school psychology internship this fall in Williamson County in Tennessee.

Jessica Dainty was awarded the Sawyer-Rudler research grant and Ethel Bowden Stricklin Merit Scholarship from the Literacy Studies department.

Center lab members swept the poster awards at the university-wide Scholars Week in April. URECA scholars and psychology majors Lauren Hunsicker and Esmeralda Ramirez won first and second place, respectively, for undergraduate students from the College of Behavioral and Health Sciences. Literacy Studies Ph.D. student Pam Shewalter won second place among the graduate students from the College of Education.


Read our online version of this newsletter to learn more about Pam, Lauren, and Esmeralda’s research findings. www.mtsu.edu/dyslexia/newsletter
Dyslexia Screening in Tennessee Schools

When a child struggles to learn to read, parents and teachers often wonder why this is happening and what can be done to help. Fortunately, Tennessee schools have a process for answering these questions. Tennessee’s Say Dyslexia law was passed in 2016. It requires schools to screen all students for characteristics of dyslexia through their existing Response to Instruction and Intervention (RTI²) procedures. Newer state legislation about supporting students’ literacy development also highlights the importance of screening.¹

Universal screening includes a brief test or group of tests that are usually given to all students three times a year. Students in early grades are typically given tests that measure different skills than older students. However, older students may still struggle with skills that are usually mastered in earlier grades. Therefore, they may need to be given additional screening tests to determine their instructional needs.

Students who are found to be at risk based on their universal screening scores in reading may need additional screening tests to determine if they have characteristics of dyslexia. Parents, teachers, and other school personnel may request dyslexia screening at any time. According to the Say Dyslexia law, dyslexia screening must include the following skills³:

- Phonological awareness: a broad category comprising a range of understandings related to the sounds of words and word parts

The universal screening process is part of the RTI² framework. Screening is important because it allows schools to find the students who are at risk of having difficulties in reading, writing, or math. These students are placed in interventions designed to prevent learning problems from occurring later. When these children are identified early and provided with the right kind of intervention, they are less likely to fall further behind their classmates.
DYSLEXIA

In Focus

- Phonemic awareness: the ability to notice, think about, and work with the individual sounds in spoken words
- Sound symbol recognition: understanding that there is a predictable relationship between phonemes (sounds in spoken language) and graphemes (the letters that represent those sounds)
- Alphabet knowledge: understanding that letters represent sounds, which form words
- Decoding skills: using knowledge of letters and sounds to recognize and analyze a printed word to connect it to the spoken word it represents (also referred to as “word attack skills”)
- Rapid naming: ability to connect visual and verbal information by giving the appropriate names to common objects, colors, letters, and digits (quickly naming what is seen). Rapid naming requires the retrieval of phonological information related to phonemes (letter/letter combination sounds), segments of words, and words from long-term memory in an efficient manner. This is important when decoding words, encoding words, and reading sight words.
- Encoding skills: translating speech into writing (spelling)

Tennessee law states that students who have dyslexia characteristics (i.e., difficulties in areas listed above) must be provided a dyslexia-specific intervention, and their progress must be monitored to determine if the intervention is working. The school must notify parents about the screening results and give them dyslexia information and resources. A school team may also suggest accommodations or assistive technology to meet the needs of individual students.

Tennessee law requires dyslexia-specific interventions to be evidence-based and focus on reading, writing, and spelling instruction that is:
- Explicit: skills explained, directly taught, and modeled by the teacher
- Systematic and cumulative: introduces concepts in a definite, logical sequence; concepts are ordered from simple to more complex
- Multisensory: links listening, speaking, reading, and writing together; involves movement and hands-on learning
- Language-based: addresses all levels of language, including sounds (phonemes), symbols (graphemes), meaningful word parts (morphemes), word and phrase meanings (semantics), and sentence formation (syntax)
- Aligned to individual student need: should address the skill deficit(s) identified through targeted assessments

Dyslexia-specific interventions may be provided in a variety of settings, depending
on the needs of the individual student. Many students make good progress when these interventions are provided in Tier 2 or Tier 3 instructional settings. However, students who are not making adequate progress may need more intensive intervention provided through special education. Parents may request a special education evaluation at any time, regardless of where the child is in the RTI\(^2\) process\(^2\).

The Tennessee Dyslexia Advisory Council webpage includes many resources such as the Dyslexia Resource Guide, Say Dyslexia Frequently Asked Questions (FAQs), and additional information for schools and parents. To access these resources, see www.tn.gov/education/student-support/special-education/dyslexia-advisory-council.html. Each year, the advisory council submits a report that explains how many students are being provided with dyslexia interventions across the state. Those reports may be viewed on the advisory council webpage. The advisory council meets at least four times a year, and these meetings are open to the public. Questions about the dyslexia law may be directed to SayDyslexia.Questions@tn.gov.

1 Tennessee Literacy Success Act (2021) (TN SB 7003)

Erin Alexander, Ed.S., NCSP, CALT assistant director for clinical services
Assessing Dyslexia: Public Schools, Private Clinics, and the Tennessee Center for the Study and Treatment of Dyslexia

There are many paths to the identification of characteristics of dyslexia, and there is confusion about who can identify characteristics of dyslexia. This infographic examines the roles and responsibilities associated with various settings and their identification of characteristics of dyslexia. The primary path to identification is through the public school system. Public schools are required by the Child Find component of the Individuals with Disabilities Education Act (IDEA) to look for and identify students with disabilities. Public schools are obligated and empowered to identify learning disabilities; dyslexia is a specific learning disability. In addition to this requirement, public schools are in a unique position to understand a student’s strengths and weaknesses and plan appropriate instruction.

Classroom educators routinely interact with students, monitor student response to instruction, and measure student progress toward academic goals. School personnel administer universal screening assessments to each student three times a year to identify students who may need additional support through tiered intervention. Additionally, school districts are required to screen all students for characteristics of dyslexia within the response-to-intervention framework. This screening must include phonological and phonemic awareness, sound symbol recognition, alphabet knowledge, decoding skills, rapid naming, and encoding skills. Schools are required to provide dyslexia-specific intervention targeted toward skills deficits to students demonstrating characteristics of dyslexia within the RTI framework.

Students who score below the 25th percentile on the universal screening assessments receive additional support in the response to intervention (RTI) setting, i.e., Tier 2 or Tier 3. This support is additional targeted intervention to remediate weaknesses identified through the universal screening process. Students who receive tiered intervention are then monitored regularly, i.e., every one to two weeks, to determine if the intervention is effectively remediating skills. If adequate progress does not occur, the intervention setting should be intensified, i.e., more time, smaller group size, a highly trained interventionist. The student is again monitored after the intervention has been intensified. If a student still struggles to make adequate progress, an evaluation to determine if the student has a learning disability may be appropriate. Students identified with specific learning disabilities should receive support in the special education setting.

Parents have the right to request an evaluation for a suspected learning disability at any time, and public schools may not refuse an evaluation solely on the lack of participation in the RTI process or

The use of RTI² strategies may not be used to delay or deny the provision of a full and individual evaluation to a child suspected of having a disability.

Dyslexia Resource Guide, Tennessee Department of Education
enrollment in the public schools. Public schools bear the responsibility of identifying individuals with learning disabilities even if the individual attends a private school or is home-schooled. The school cannot require an outside evaluation or diagnosis to determine the presence of a specific learning disability, i.e., dyslexia, or to provide services.

If an evaluation is offered in the public school system, a school team that includes a school psychologist conducts the evaluation to determine if a specific learning disability is present. This evaluation must include information from a variety of sources, as required by the Tennessee Department of Education. Note: If schools do not have a school psychologist on staff, they may contract a third-party licensed clinical psychologist to conduct evaluations. These evaluations typically take several hours to complete and may be administered over the course of several days.

Parents have the choice to pursue an evaluation outside of the public school system. While the school is not bound by recommendations reported from an outside evaluation, the school is required to consider the findings when determining eligibility for services. Evaluations conducted at the Tennessee Center for the Study and Treatment of Dyslexia examine oral comprehension, basic reading skills, reading fluency, reading comprehension, spelling, and phonological processes as well as consider exclusionary criteria, educational history, and family history. Evaluations conducted in private clinical settings should examine the same areas as above.

The primary difference between an evaluation conducted by a licensed clinical psychologist and the school is a diagnosis. Schools may identify specific learning disabilities, including dyslexia, and licensed clinical psychologists may diagnose a specific learning disorder, which includes dyslexia, according to the criteria set forth in the Diagnostic and Statistical Manual of Mental Disorders (DSM–5). In contrast, the center may identify if characteristics of dyslexia are present. Again, a diagnosis of dyslexia is not required for a public school to identify a student with a specific learning disability or to provide appropriate intervention and accommodations for that student. This is a common misconception among parents and educators. Public schools may identify a specific learning disability in basic reading skills or reading fluency; both of these identifications are consistent with an identification of dyslexia.

Ultimately, the setting and the terminology used to identify dyslexia should not be the priority. Rather, when a child is struggling to learn to read, the priority should be to identify the child’s needs and provide appropriate intervention as soon as possible. This will give the child the best chance of becoming a fluent and successful reader.
## ASSESSING DYSLEXIA:
PUBLIC SCHOOLS, PRIVATE CLINICS, AND THE TENNESSEE CENTER FOR THE STUDY AND TREATMENT OF DYSLEXIA

<table>
<thead>
<tr>
<th>Evaluator</th>
<th>Purpose</th>
<th>Criteria</th>
<th>Terms</th>
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<th>Challenges</th>
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<tr>
<td>School psychologist and school team</td>
<td>Dyslexia screening: eligibility for special education services; determine instructional needs</td>
<td>Tennessee Department of Education eligibility standards guided by IDEA and the RTI process</td>
<td>Specific Learning Disability in Basic Reading Skills OR Reading Fluency characteristics of dyslexia</td>
<td>Knows student history of reading progress; responsive to instructional needs; implements school services and accommodations</td>
<td>May not specify dyslexia in identification of Specific Learning Disability in Basic Reading or Reading Fluency</td>
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<tr>
<td>Licensed clinical psychologist, psychological examiner, developmental pediatrician, SLP</td>
<td>Diagnosis; determine instructional needs</td>
<td>DSM-5 criteria and established definition of dyslexia</td>
<td>Specific Learning Disorder with Impairment in reading; use of term dyslexia optional</td>
<td>Formal diagnostic statement supports securing accommodations on SAT/ACT tests and college classes</td>
<td>Criteria differ from public school setting; schools consider impact on educational performance to determine services and accommodations</td>
</tr>
<tr>
<td>Credentialled professional staff; Ph.D., Ed.D., Ed.S., NCSSP, CALT</td>
<td>Identify literacy strengths and weaknesses; identify characteristics of dyslexia; recommend appropriate instruction</td>
<td>Evidence of word-level reading and spelling deficits per the International Dyslexia Association definition</td>
<td>Characteristics of dyslexia</td>
<td>Clarifies parent and teacher observations to determine a pattern of strengths and weaknesses and guide instruction</td>
<td>Criteria differ from public school setting; schools consider impact on educational performance to determine services and accommodations</td>
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### Additional resources

- Understood.org
  - [https://www.understood.org/articles/en/child-find-what-it-is-and-how-it-works](https://www.understood.org/articles/en/child-find-what-it-is-and-how-it-works)
Data-based decision-making includes error analysis

Many children all over the nation are not developing reading skills as expected. That includes students here in Tennessee. Finding students who are at risk for reading achievement is essential. Universal screening procedures offer a first step in doing so. Examining universal screening data at the class, school, and district levels is important. This can reveal system-level factors that may be impacting student progress. Data also need to be analyzed at the student level. This provides information about individual strengths and needs. More information is then needed to precisely identify instructional needs. Educators need to use data and error analysis from curriculum-based measures (CBM) to guide their instruction and intervention. CBMs are brief assessments that measure student progress with grade-level academic skills. These skills-based assessments provide numeric data about a student's ability. They also reveal individual student performance behaviors that are invaluable for planning intervention. The numbers alone are not enough. A thoughtful error analysis pinpoints student learning needs. Error analysis ensures the intervention matches student need and supports their progress. As noted on Page 7, Tennessee law requires that specific skills be screened to identify characteristics of dyslexia.

Research has shown that teachers who use CBM data and error analysis to guide their instruction had greater student growth than those who did not. Some computer-based CBMs provide reports of individual student error analysis and instructional targets. Teachers need to integrate that information with their knowledge of the student, reading development, and literacy instruction. Educators need to draw on their deep knowledge of language and literacy development. Understanding the complex processes needed for reading supports insightful student error analysis. This optimizes the ability to target specific skills in intervention. This prepares teachers to provide individualized error correction during instruction. Which students need more practice and feedback with sound-symbol relationships? Which students need support with segmenting and blending? Which students read words accurately but need support with building fluency?

Let's examine a brief and simplified case study. Talia is a third grade student who scored at the 11th percentile on the fall universal screener. It was a timed reading comprehension assessment. It contained questions about vocabulary, text analysis, and text structure. Her score on the screener suggested that she is not on target to meet grade-level expectations. Previous comprehension and reading fluency scores were also below expectations. Her parents and teachers have shared concerns about her independent reading as well. Yet, we don’t know if Talia’s low score can be isolated to difficulties
with just vocabulary and comprehension. She may have weaknesses in other word-level subskills that support reading comprehension. Administering the dyslexia-specific screeners will help uncover foundational skills weaknesses.

Phonological and Phonemic Awareness
Talia scored within benchmark expectations on a phonological awareness screener. However, an error analysis revealed that she missed the three items related to phonemic awareness. She was given a more thorough diagnostic assessment representing phonemic awareness skills. She was able to identify the first and final sounds in spoken words. She struggled with segmenting consonant blends into their individual sounds.

Letter Knowledge and Sound Symbol Recognition
Talia recognized all uppercase and lowercase letter names and their most frequent sounds on a letter knowledge screener. She provided the incorrect sound for many vowel teams (such as ea and oy) and r-controlled vowels (such as ar and ur).

Decoding
Talia scored below benchmark expectations on a decoding measure. She used her knowledge of phonics to read words with short vowels and the silent “e” pattern. She made many errors when reading words with vowel teams, r-controlled vowels, and suffixes. Additional error analysis on misread words revealed that she often relied only on the first and last letters/sounds. For example, she read plead as pledge and burrow as bow. Error analysis also revealed that she frequently omitted or changed suffixes. For example, she read tunnels as tunnel and dripping as dripped.

Encoding
Talia has made similar errors when spelling words. She omitted letters from final consonant blends (for example, spelling hunt as hut). She overgeneralized the silent “e” pattern to spell words with vowel teams (for example, spelling rain as rane and coat as cote). She also omitted the vowel letter in words with r-controlled vowel sounds (for example, spelling fern as frn).

Rapid Naming
Talia scored in the below-average range on the rapid naming assessment. She accurately named all the items on the test, but she did so more slowly than students her same age.

This information was considered along with her instruction, assessment, and intervention history. The dyslexia-specific screeners uncovered word-level weaknesses that are consistent with dyslexia. Talia’s foundational skills gaps are impacting her ability to read accurately and smoothly. That has a downstream impact on her independent reading comprehension. She needs dyslexia-specific intervention to build her reading and spelling skills. Her below-average
rapid naming score also provides instructional information. She will need many repetitions, practice opportunities, and immediate feedback during intervention. That will support her long-term retention and quick retrieval of language information. This includes sound-symbol relationships, spelling patterns, and word reading. Error analysis allowed us to pinpoint instructional targets. She needs intervention in reading and spelling words with blends, vowel teams, and suffixes. Her intervention will need to incorporate all layers of language (sound, syllable, word, phrase, and connected text). Her intervention will include oral reading fluency, reading comprehension, and basic writing. It will need to use direct, explicit, systematic and cumulative instruction. CBMs should also be used to track her progress with those skills. The progress monitoring probes should match the instructional targets. For example, a word reading probe that has words with the vowel teams she is learning would be appropriate. A reading comprehension probe would not appropriately monitor her skills-based intervention progress.

Our guide, *Dyslexia within RTI*, includes more information about aligning progress monitoring probes with skills targeted in the intervention setting.

Our center has developed tools and guides to support identification and instruction for students with characteristics of dyslexia. Please visit our website for free access to e-books, planning guides, and instructional materials.

Our website features many publications to assist parents and teachers to support students as they develop foundational literacy skills.

We will address identification and instruction in-depth at our upcoming fall workshops. Our full-day event, “From the District to the Reading Teacher: Using Screeners to Expand Your Capacity to Identify Students With Characteristics of Dyslexia,” will serve as the foundation for this year’s success series. The success series will focus on differentiating intervention and using error analysis to support students with characteristics of dyslexia. “Destination Intervention: Using Data and Error Analysis to Plan Intervention for Students.”

Upcoming Workshops & Conferences

Fall Conference: Oct. 22, 2021

From the District to the Reading Teacher: A Roadmap for Using Screeners to Identify Students With Dyslexia.
*Registration opens Sept. 1, 2021.*

Dyslexia Success Series November 2021 - February 2022
*Destination Intervention: Using Data and Error Analysis to Plan Intervention.*
*Registration opens Sept. 1, 2021.*

Ask an Expert
Sessions resume in August 2021. Details and registration at: www.mtsu.edu/dyslexia