



Understanding Dyslexia

A GUIDE FOR TENNESSEE FAMILIES

Tennessee Center for the Study and Treatment of Dyslexia
Middle Tennessee State University

This guidebook was authored by the following staff members at the Tennessee Center for the Study and Treatment of Dyslexia at Middle Tennessee State University: Erin Alexander, Jennifer Flipse, Melinda Hirschmann, Emily Farris, and Timothy Odegard.

Copyright © 2023, Middle Tennessee State University.

All rights reserved. Unless authorized in writing by Middle Tennessee State University, no part of this publication may be reproduced or used in any manner inconsistent with the Tennessee Center for Dyslexia copyright.

Correspondence about the use of any part of this publication should be directed to:

Middle Tennessee State University
Understanding Dyslexia: A Guide for Tennessee Families
200 N. Baird Lane
Murfreesboro, TN 37132

0323-1804/Middle Tennessee State University does not discriminate against students, employees, or of race, color, religion, creed, national origin, sex, sexual orientation, gender identity/expression, disability, age, status as a protected veteran, genetic information, or any other legally protected class with respect to all employment, programs, and activities sponsored by MTSU. The Interim Assistant to the President for Institutional Equity and Compliance has been designated to handle inquiries regarding the non-discrimination policies and can be reached at Cope Administration Building 116, 1301 East Main Street, Murfreesboro, TN 37132; Christy.Sigler@mtsu.edu; or 615-898-2185. The MTSU policy on non-discrimination can be found at mtsu.edu/iec.

Table of Contents

- 1-6** **I.** What is dyslexia?
- 7** **II.** What are the requirements of Tennessee’s dyslexia laws?
- 8-9** **III.** How do schools determine which students need intervention?
- 9-10** **IV.** How do Tennessee schools screen students for characteristics of dyslexia?
- 11** **V.** What school services are available to students with dyslexia?
- 12-13** **VI.** When does a student receive special education services?
- 13** **VII.** Are special education services available to children in private school or home school?
- 14-17** **VIII.** What type of reading instruction should students with characteristics of dyslexia receive?
- 18** **IX.** What types of treatments are not recommended for dyslexia?
- 19-21** **X.** What other school supports should we consider for my child?
- 22-23** **XI.** Can my child use technology to assist with learning?
- 24** **XII.** How can I support my child emotionally?
- 25** **XIII.** Where can I find more information?

Introduction

Watching your child experience difficulties in school can be an overwhelming and emotional experience. Parents and other caregivers often struggle to figure out what to do and where to go for help. When your child struggles to learn to read, you may wonder if he or she has dyslexia. This guide will help you understand what dyslexia is and how to get help for your child. It includes information about the supports and services available in the school setting and the type of reading instruction that is known to be effective. This guide also reviews the Tennessee laws that are meant to help students with characteristics of dyslexia. You will also learn about accommodations that your child could receive in the classroom and technology tools that can help with reading and writing. We hope that this handbook helps you to become a more knowledgeable and confident advocate for your child.

I. What is dyslexia?

“Dyslexia is a specific learning disability that is neurobiological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede the growth of vocabulary and background knowledge.”

This definition was adopted by the International Dyslexia Association (IDA) in 2002. It is also the definition recognized by Tennessee law since 2014 (HB 1735/SB 2002).

Dyslexia is a language-based learning disability, so it impacts reading, spelling, and writing. Primary characteristics of dyslexia include the following:

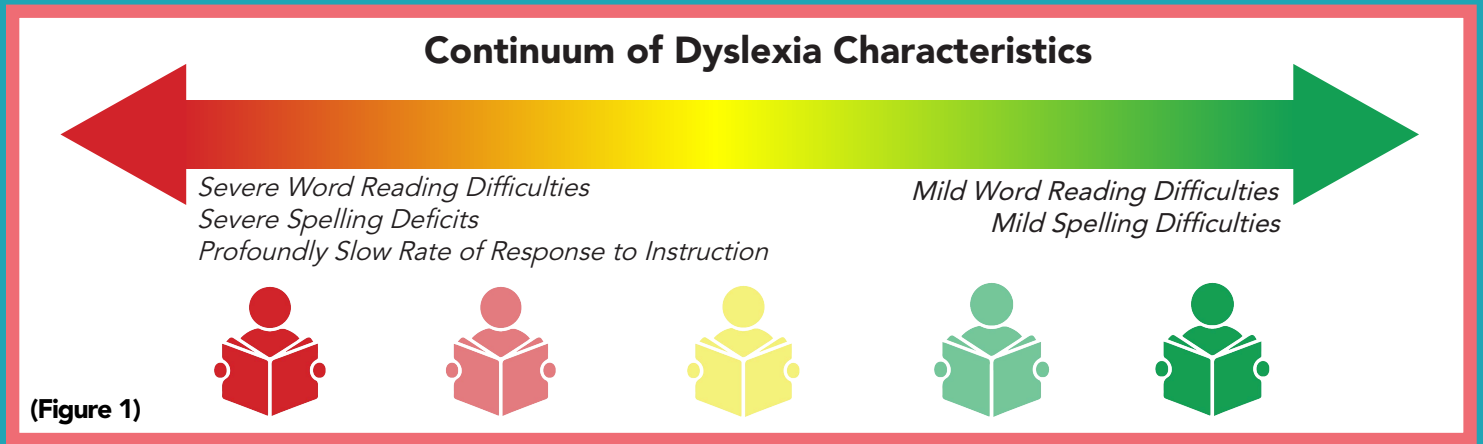
- Inaccurate word reading
- Dysfluent text reading
- Inaccurate spelling
- Slow response to reading instruction

Individuals with dyslexia are found all over the world in communities that speak, read, and write many different languages. It affects both girls and boys and occurs in people of all backgrounds. It is neurobiological, which means it is brain-based. There is a genetic component as well. People with dyslexia often have parents, siblings, or other relatives who have dyslexia.

The reading and spelling skills of a person with dyslexia can improve with appropriate interventions. While there is no cure for dyslexia, early intervention can prevent a child’s reading difficulties from becoming more pronounced. However, some students with dyslexia continue to have difficulties with reading and writing even after they have received good intervention. Although their accuracy for reading words may improve, these students often read more slowly than their peers. In addition, they may continue to have difficulty with spelling and with decoding multisyllable words.

How Many People Have Dyslexia?

Researchers estimate that 5–17% of people have dyslexia.¹ However, 15–20% of the population may have characteristics of dyslexia.² Dyslexia occurs on a continuum. In other words, some people have severe dyslexia and others have milder difficulties. Children with severe dyslexia are more likely to be identified and are more likely to receive special education services. They have significant difficulties with word reading and spelling and are very slow to respond to instruction (see Figure 1). All children benefit from direct instruction to build foundational reading skills. If direct instruction is not used in the core classroom, many students will struggle to make progress.



Common Characteristics of People with Dyslexia

Characteristics of dyslexia vary somewhat by age. No two people with dyslexia are exactly alike. A person with dyslexia may not have all the difficulties mentioned below. However, if a person has several of these characteristics, he or she is likely to have dyslexia. These difficulties occur despite strengths in other areas.

Preschool

- Delays in learning to talk or with producing speech sounds correctly (they may or may not require speech or language therapy)
- Mispronounces words
- Difficulty with rhyming and identifying syllables in words
- Difficulty learning the names of letters of the alphabet



¹ Petscher, Y., Fien, H., Stanley, C., Gearin, B., Gaab, N., Fletcher, J.M., & Johnson, E. (2019). Screening for Dyslexia. Retrieved from improvingliteracy.org.

² "Dyslexia Basics" International Dyslexia Association, 2017. Retrieved from: dyslexiaida.org/dyslexia-basics-2/

Elementary School

- Difficulty learning to match letters with their sounds
- Difficulty identifying the first, middle, or last sound in a spoken word. Problems segmenting spoken words into individual sounds (e.g., the sounds in *lunch* are /l/-/ŭ/-/n/-/ch/) and blending sounds to form spoken words (e.g., /t/-/ā/-/b/-/l/ makes *table*).
- Difficulty sounding out (decoding) unfamiliar words
- Avoidance of reading and writing tasks
- Persistent confusion of visually similar letters (e.g., b/d/p, w/m, h/n, f/t)
- Persistent confusion of letters whose sounds are similar (e.g., d/t, b/p, f/v)
- Frequent misreading of common high frequency words (e.g., *who, there, of, was*)
- Reading and spelling errors that involve difficulties with sequencing sounds and/or difficulties with letter-sound correspondence such as:
 - reversals of letters (e.g., spelling *dog* as *bog*)
 - omissions (e.g., reading *trip* as *tip*)
 - additions (e.g., reading *sip* as *slip*)
 - substitutions (e.g., reading *bet* as *bat* or *rip* as *rib*)
 - transpositions (e.g., reading *form* as *from*)
- Addition or omission of suffixes when reading and/or writing (e.g., adding or leaving off -s, -ed, -ing)
- Difficulty with spelling, capitalization, and punctuation when writing
- Difficulty following directions, especially when given more than one direction at a time
- Difficulty remembering math facts
- Difficulty reading or understanding math word problems
- Difficulty remembering names of objects (e.g., may call an object the wrong name or say “that thing” because he or she has forgotten what it is called)



Middle School

- Oral reading that is slow and labored
- Significant difficulty reading and spelling longer words, often omitting entire syllables (e.g., reading *connection* as *connect*) as well as making single-sound errors (e.g., reading *brittle* as *brattle*)
- Lack of awareness of word structure (i.e., prefixes, roots, suffixes)
- Omitting or misreading short words when reading text (e.g., words like *a*, *the*, *that*)
- Difficulty with reading comprehension and learning new information from text because of underlying word reading difficulties
- Difficulty understanding text because of underlying language problems such as difficulty with vocabulary and grammar
- Has good ideas for writing assignments but struggles to get them on paper due to problems with spelling and organization



High School and Adults

- Continued difficulty with word reading that significantly affects the ability to gain knowledge from text and analyze written material
- Slow rate of reading
- Continued difficulty with spelling and written composition
- Difficulty taking notes in class
- Trouble learning a foreign language



Confusion about Dyslexia

There are many misconceptions or myths commonly associated with dyslexia. It is important to correct these misunderstandings because they may delay identification or intervention services for students. The infographic on the following page lists some of the most common myths about dyslexia and compares these misunderstandings with the facts about dyslexia. For information about controversial treatments for dyslexia, see page 18 of this manual. For additional insight into common dyslexia myths, please see the following links:

gaablab.com

understood.org

dyslexiahelp.umich.edu

DYSLEXIA MYTHS VS. FACTS

Myths

Dyslexia is rare.

Dyslexia is due to a problem with intelligence or effort.

Dyslexia is a vision problem where children read and write letters and numbers backward.

Schools cannot identify dyslexia.

Maybe if we give the child more time, they'll learn to read.



Facts

Dyslexia is the most common learning disability and may affect up to 20% of the population.

People with dyslexia are just as smart as anyone else and can be gifted. Children are often working harder than others in their class to learn to read and complete work.

Dyslexia is a language-based learning disability—not a vision problem. People with dyslexia do not see or read backward.

Public schools do not diagnose, but they are required to identify students who have educational disabilities and to provide appropriate services.

Early identification and intervention are essential! Students are unlikely to “catch up” to peers without early intervention.



Co-occurring Conditions

Many, but not all, children with dyslexia have other conditions that can affect their learning and behavior. Because these disorders can share symptoms, it can sometimes be challenging for caregivers and professionals to determine which condition is causing the child's difficulties. Thus, children may need evaluations from other specialists in addition to their evaluation for dyslexia.

Examples of conditions that may occur with dyslexia:

- Attention Deficit Hyperactivity Disorder (ADHD)
- Speech and/or language disorders
- Learning disabilities in math (sometimes called dyscalculia)
- Learning disabilities in written expression (sometimes called dysgraphia)
- Fine motor and/or handwriting problems
- Emotional disorders such as anxiety or depression
- Behavioral disorders such as conduct disorder or oppositional defiant disorder

Children who have co-occurring conditions may require more than one type of intervention to ensure all their needs are addressed. For example, a child with ADHD and dyslexia may need medication and/or behavioral interventions in addition to his or her reading intervention. The accommodations he or she is likely to need at school should also address both conditions.

Some people can have learning disabilities such as dyslexia and be intellectually gifted (known as **twice exceptional**). These students need instruction and other support that nurtures their strengths while addressing academic weaknesses. This factsheet provides more information on the needs of these students: dyslexiaida.org/gifted-and-dyslexic-identifying-and-instructing-the-twice-exceptional-student/

The following websites provide information on common conditions that can affect learning and behavior:

Children and Adults with ADHD chadd.org

Child Mind Institute childmind.org

Understood understood.org/

II. What are the requirements of Tennessee's dyslexia laws?

Tennessee's dyslexia laws were designed to raise awareness about dyslexia, to help schools identify students with characteristics of dyslexia, and to help ensure that those students receive appropriate instruction.

The 2014 "Dyslexia is Real" law (HB 1735/SB 2002)

recognizes the International Dyslexia Association's research-based definition of dyslexia. This is the same definition provided earlier in this document on page 1. This definition indicates that dyslexia is neurobiological in nature (i.e., brain-based) and is characterized by difficulties with reading words accurately and/or fluently, decoding, and spelling. In addition, this law required the Tennessee Department of Education to work with colleges on educating teachers about dyslexia.

The 2016 "Say Dyslexia" law (HB 2616/SB 2635)

requires Tennessee public schools to screen students for characteristics of dyslexia. Screening occurs through the universal screening process as part of the Response to Instruction and Intervention (RTI²) framework or through other available means. Information about this screening process is provided in the next section of this guidebook. If a student has characteristics of dyslexia, the school must provide dyslexia-specific intervention and monitor the student's progress. The RTI² framework is used to determine the tier in which the student receives this intervention. A school-based problem-solving team must meet to analyze screening and progress-monitoring results. This team provides guidance regarding instruction, intervention, accommodations, and assistive technology that may be needed. In addition, the school must notify the child's parent or legal guardian of the screening results.

As part of the "Say Dyslexia" law, a dyslexia advisory council was formed to help guide the Tennessee Department of Education in these efforts. This group is required to prepare an annual report that includes the number of students in public schools who are screened and provided with dyslexia intervention each year.

The law also requires the Tennessee Department of Education to develop screening procedures for identifying characteristics of dyslexia. The department must also provide educators with resources on dyslexia identification and intervention. The **Dyslexia Resource Guide** was written as one way to provide this information. This guide, along with additional resources for parents and educators, can be found at the dyslexia advisory council website: tn.gov/education/students/student-supports-in-tn/special-education/dyslexia-advisory-council.html



III. How do schools determine which students need intervention?

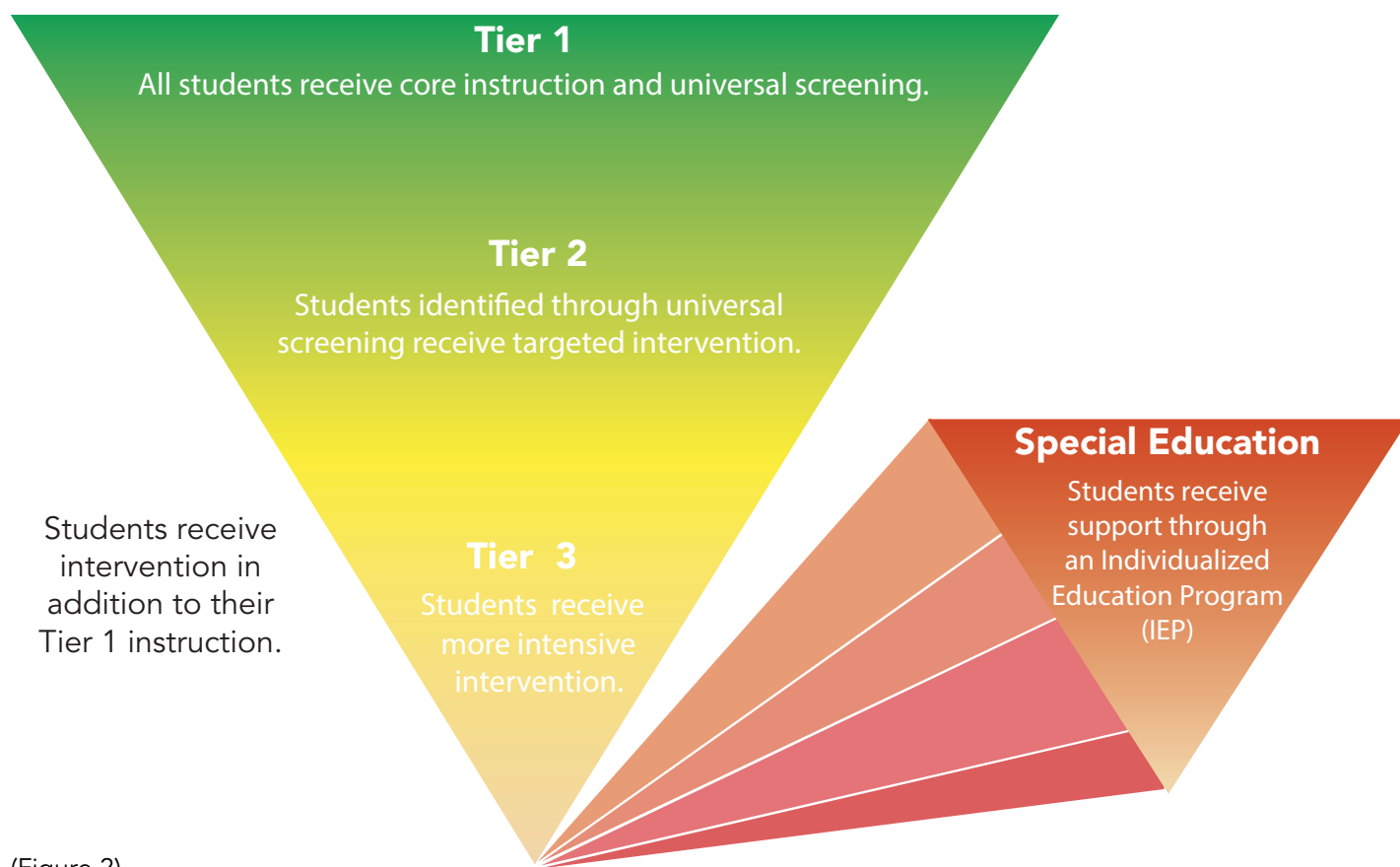
Many school districts in the United States use a Response to Intervention (RTI) model to identify student needs and to provide instructional support (see Figure 2). Other terms for the RTI model include the RTI framework or the RTI process. Some variations on this model are referred to as multi-tiered systems of support (MTSS). In Tennessee public schools, this model is known as the **Response to Instruction and Intervention (RTI²)** framework. All students receive instruction in Tier 1 (also known as core instruction). A **universal screening process** is used for all students to determine if they are on track to meet grade level expectations in reading, writing, and math. In grades K–8, schools administer skills-based universal screeners. This is a brief series of tests to measure reading, writing, and math skills. Screeners are often nationally normed, which allows schools to compare a student to other students across the nation who are in the same grade. Schools are required to notify parents or guardians regarding the dates that universal screening will occur. For grades 9–12, the screening process includes examining multiple sources of data that show how a student has performed in high school or in previous grades. When a student is not meeting grade level expectations, the school may give additional tests to help determine which specific skills should be addressed with intervention. If the student’s universal screening data indicate below grade level reading skills, additional screening tests can also help schools identify if a student is at risk for or has characteristics of dyslexia. In Tennessee, screening for characteristics of dyslexia occurs within the RTI² framework.

When screening data indicate a student is not meeting grade level expectations in reading, writing, or math, intervention typically begins in the Tier 2 or Tier 3 setting. This intervention is added to the student’s regular classroom instruction (i.e., Tier 1). According to the Tennessee Department of Education, in general, approximately 10–15% of children should need Tier 2 intervention while only 3–5% require Tier 3 intervention. Tier 3 interventions are more intensive than Tier 2 interventions. For example, a student in Tier 3 may receive more intervention time each week than a student in Tier 2. Schools regularly collect **progress monitoring data** to determine if the intervention is working and to make changes to the instruction if needed. Schools are required to notify parents or guardians before beginning or ending intervention with a student, and they are required to share the child’s progress monitoring data. If needed, parents may ask their child’s teachers to explain what this data means. A formal meeting between the child’s parents and school can also be held to discuss concerns and progress (often called a **student support team meeting**).

Students who do not make adequate progress in tiered intervention may be referred for a **special education evaluation**. A special education referral can be made by the parents or the school any time a disability is suspected. Parents must give consent before the first special education evaluation can occur and before special education services can begin. This document provides more information on parent rights and responsibilities in the special education process: tstep.org/wp-content/uploads/2020/01/Quick-Guide-to-Parents-Rights-and-Responsibilities-2018-w-TDOE.pdf

If an educational disability is suspected, parents may request an evaluation from their child’s school at any time, regardless of where the child is in the RTI² process (i.e., in Tier 1, 2, or 3). In 2011, the U.S. Department of Education published the following memo stating that, while it supports the use of RTI in schools, “the use of RTI strategies cannot be used to delay or deny the provision of a full and individual evaluation...to a child suspected of having a disability.” <https://sites.ed.gov/idea/idea-files/osep-memo-11-07-response-to-intervention-rti-memo/>

Response to Intervention Framework



(Figure 2)

IV. How do Tennessee schools screen students for characteristics of dyslexia?

While it is not the role of Tennessee public schools to diagnose a student with dyslexia, Tennessee’s “Say Dyslexia” law (HB 2616/SB 2635) requires schools to identify students with characteristics of dyslexia. The purpose of identification is to provide intervention targeted to the student’s needs.

In Tennessee, all students must be screened for characteristics of dyslexia as part of the Response to Instruction and Intervention (RTI²) screening process. If a student scores below grade level expectations for reading, additional testing may be given as needed to meet mandated dyslexia screening components and/or to determine the student’s specific areas of strengths and weaknesses with reading and spelling skills. Screening for dyslexia may be requested by the student’s parent or guardian, teacher, counselor, or school psychologist. If a student is determined to have characteristics of dyslexia based on this screening, the parent or legal guardian must be notified and given resources about dyslexia. A plan for intervention must also be made.

Tennessee law requires dyslexia screening to include the following skills, which we have defined below:

Phonological awareness	the ability to notice and think about all levels of spoken sounds, from whole words to syllables and phonemes (i.e., individual speech sounds within words)
Phonemic awareness	the ability to notice and think about the smallest units of speech sounds (i.e., phonemes) within words
Sound symbol recognition	knowing the relationship between speech sounds (i.e., phonemes) and the letter or letters used to represent them in print
Alphabet knowledge	the ability to recognize and name letters
Decoding skills	using sound symbol knowledge to read unknown words
Rapid naming	the ability to name a repeated sequence of known objects, colors, numbers, or letters quickly and accurately Rapid Automatic Naming (RAN) is thought to represent some of the complex processes used in reading. RAN is also connected to reading fluency.
Encoding skills	the ability to use sound symbol knowledge to spell words

According to state law, students identified with characteristics of dyslexia must be provided with dyslexia-specific intervention that targets their specific needs. Students will receive this intervention in a Tier 2 or Tier 3 setting, in accordance with Tennessee’s RTI² framework.

According to Tennessee’s “Say Dyslexia” law, dyslexia-specific intervention means “evidence-based, specialized reading, writing, and spelling instruction that is multisensory in nature, equipping students to simultaneously use multiple senses, such as vision, hearing, touch, and movement. Dyslexia-specific intervention employs direct instruction of systematic and cumulative content, with the sequence beginning with the easiest and most basic elements and progress methodically to more difficult material. Each step must also be based on those already learned. Components of dyslexia-specific intervention include instruction targeting phonological awareness, sound symbol association, syllable structure, morphology, syntax, and semantics.” For more information on intervention for dyslexia, see page 14 of this manual.

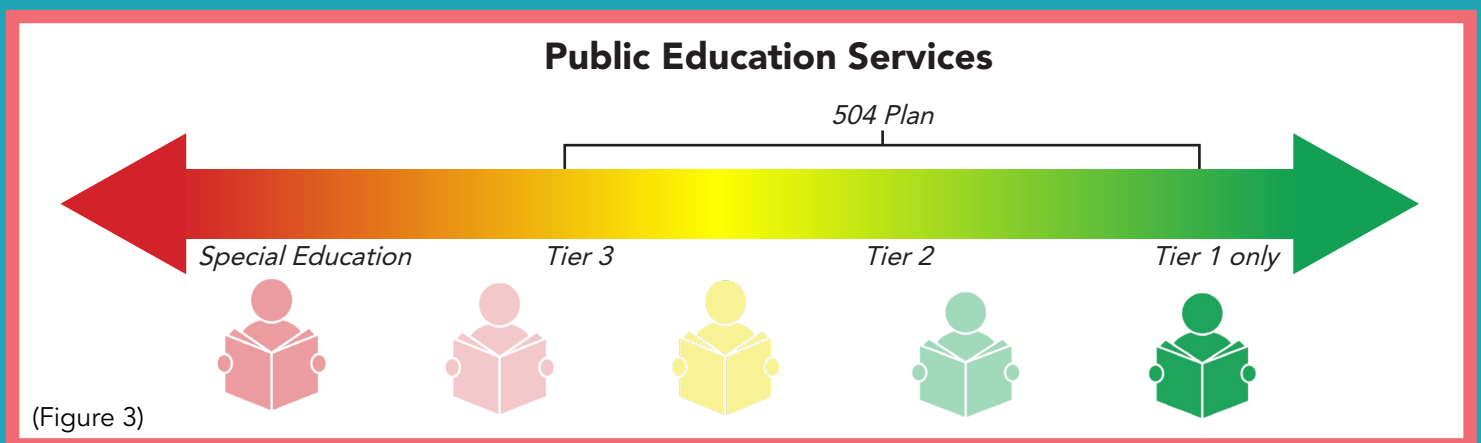
Identification and intervention within the RTI² framework may provide the intensity of instruction the student needs to make progress over time toward meeting grade level expectations. Students may also be referred for a more comprehensive school-based evaluation to determine if they meet the criteria as a student with a **Specific Learning Disability** in reading. A student may be referred for this type of evaluation if he or she is not making adequate progress in tiered intervention. Educators and parents may also request an evaluation at any time if a disability is suspected. Students who are identified with a Specific Learning Disability may be eligible for special education services.

V. What school services are available to students with dyslexia?

Students with characteristics of dyslexia vary in how much support they need in school. Just as characteristics of dyslexia occur on a continuum from mild to severe, a continuum of services is available based on individual student needs. Students with milder difficulties may be able to have their educational needs met in general education. This includes Tiers 1, 2, and 3 of the RTI² framework.

Students who are not making adequate progress in general education interventions may be eligible for special education (see Figure 3). A team of parents and school personnel (called an **IEP team**) decides if a child is eligible for these services following a comprehensive evaluation. After reviewing the evaluation results, the team must decide (1) if the student has an educational disability (based on state Department of Education criteria), and (2) if this disability adversely affects their educational performance to the degree that special education is required (i.e., the student's needs cannot be met in general education alone). Eligible students receive an **Individualized Education Program (IEP)**. An IEP is a legal document that describes the student's present levels of educational performance, the IEP team's goals for what the student should learn over the next year, and how progress toward those goals will be measured. The IEP also lists the supports and services a student will receive, how frequently he or she will receive them (i.e., the number of minutes per day or week), and for how long. If a student needs behavior supports, accommodations, modifications, or assistive technology, these will be addressed in the IEP as well. The following website provides more information on components of an IEP and the IEP process: understood.org

Students who do not receive special education services may be eligible to receive accommodations and services through a **504 plan**. Section 504 of the Rehabilitation Act is a federal civil rights law that protects people with disabilities from discrimination. To be eligible for Section 504 protections, a person must have "a physical or mental impairment which substantially limits one or more major life activities." In a public school, a 504 plan may be written to ensure that a student receives equal access to the school curriculum and learning environment. This plan may include accommodations, assistive technology, or other school services. Students with IEPs usually do not need a separate 504 plan because everything in the 504 plan can be included in the IEP. The following article explains how 504 plans compare to IEPs: understood.org/en/articles/the-difference-between-ieps-and-504-plans



VI. When does a student receive special education services?

Educational disabilities are grouped into different categories based on federal special education law and regulations. This law is known as the Individuals with Disabilities Education Act (IDEA). Dyslexia falls in the Specific Learning Disability (SLD) category. However, not all students with characteristics of dyslexia are eligible for special education services. To be eligible for special education, students must have a disability that falls under one of the categories covered by IDEA, and they also must need special education and related services as a result of the disability. Thus, special education is for students whose needs cannot be fully met through general education intervention (i.e., Tier 1, 2, and 3 settings) and/or accommodations.

A student may have an SLD in one or more areas. Within the reading domain, students may have an SLD in basic reading skills, reading fluency, or reading comprehension. Dyslexia is an SLD in the area of basic reading skills (i.e., difficulty with accurate word recognition and decoding) or reading fluency (i.e., difficulty reading text accurately and at an appropriate pace). Reading comprehension problems are not a primary characteristic of dyslexia, but they can be a secondary consequence of difficulties reading accurately and/or fluently. Thus, when students have difficulty with reading comprehension, their word recognition and fluency skills should be evaluated to be sure all areas of reading weakness are addressed through intervention. Here is the IDEA (2004) definition of Specific Learning Disability (SLD). Note that the definition includes the term dyslexia.

“Specific Learning Disability means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in the imperfect ability to listen, think, speak, read, write, spell or do mathematical calculations, including conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, **dyslexia**, and developmental aphasia. Specific learning disability does not include learning problems that are primarily the result of: visual, hearing, or motor disabilities; intellectual disability; serious emotional disability; cultural factors; environmental or economic disadvantage; or limited English proficiency.”

Students who are eligible for special education under the Specific Learning Disability category will have this term listed on their IEP and related documents. Many students who are identified with an SLD also have characteristics of dyslexia. In 2015, the U.S. Department of Education released a document that states, “The purpose of this letter is to clarify that there is nothing in the IDEA that would prohibit the use of the terms dyslexia, dyscalculia, and dysgraphia in IDEA evaluation, eligibility determinations, or IEP documents.” However, a diagnosis of dyslexia, dyscalculia, or dysgraphia is not required for a student to be eligible for special education.

The use of multiple terms to describe a child’s difficulties can be confusing. The following resource was created to help parents and educators understand the similarities and differences between terms like dyslexia and Specific Learning Disability.

“Five Questions Parents and Educators Can Ask to Start Conversations About Using Terms Like Learning Disabilities, Dyslexia, Dyscalculia, and Dysgraphia” ncl.org

Learning disorders, including dyslexia, are typically identified by professionals who have received extensive training in assessment through a graduate level degree program. Examples of these professionals include school psychologists, clinical psychologists, speech language pathologists, developmental pediatricians (i.e., pediatricians with advanced training to evaluate learning and other developmental disorders), and others with similar graduate level clinical training. Evaluators outside of the public education system often use the term **specific learning disorder**. Public school IEP teams use the similar term **specific learning disability**, which is the disability category that federal special education law requires them to use. Qualified evaluators outside of the school system may or may not use the term **dyslexia** to describe learning disorders characterized by difficulties in word recognition, decoding, and spelling. The following article describes some of the differences between school and clinical evaluations, including the specific terms that may be used by each one: understood.org/en/articles/the-difference-between-a-school-identification-and-a-clinical-diagnosis. While school teams must consider outside evaluations shared by the parent or guardian, a diagnosis made by a medical doctor or other evaluator outside of the school system is not required in order for a child to access school services.

Parents of children with disabilities often need help understanding the special education process and their rights within the educational system. Each state has a Parent Training and Information Center to help parents learn how to participate effectively in the education of their children with disabilities. In Tennessee, that organization is TNSTEP: tnstep.org. For a listing of parent centers in other states, see parentcenterhub.org/the-parent-center-network/.

VII. Are special education services available to children in private school or home school?

When a disability is suspected (including specific learning disabilities such as dyslexia), parents of children who are home-schooled or in private school have the right to request an evaluation at no cost from the local public school district. If the evaluation reveals that your child has an educational disability and is eligible for special education services, you may enroll your child in public school where he or she would receive an Individualized Education Program (IEP). If you decide to keep your child in a private school or home school, he or she may receive a **service plan** that provides a specified amount of special education and related services as determined by the IEP team, which would include parents, representatives from the public school district, and a representative from the child's private school. This article explains the differences between IEPs and service plans: understood.org/en/articles/the-difference-between-ieps-and-service-plans. Parents should contact the special education office of their local school district for more information on this process.

Private schools are not required to provide special education services. Therefore, they vary in their ability to offer interventions and accommodations. Some private schools specialize in educating children with learning differences. Others do not offer intervention services at all. Parents will need to ask the school about what services, if any, are available and the process for accessing those services.

VIII. What type of reading instruction should students with characteristics of dyslexia receive?

The goal of reading is to make sense of text. Comprehension builds over many years of practice integrating layers of language skills. Our written language has consistent sound, spelling, and meaning features. A **Structured Literacy approach** weaves these layers of language together explicitly and systematically. A Structured Literacy approach refers to the language concepts that are taught and the principles for how this instruction occurs (see Figure 4). This direct instruction in the sound, word, sentence, and meaning levels of our language system benefits all students. It is an essential approach for students with dyslexia.

If students do not receive their core reading instruction (i.e., Tier 1) through a **Structured Literacy approach**, it is difficult to appropriately identify those with dyslexia. A primary characteristic of dyslexia is a slow response to instruction. That is best determined when appropriate, evidence-based reading instruction has been offered in the core setting. If many students in a school or district are exhibiting characteristics of dyslexia, then the core instruction should be examined to ensure it aligns with the instructional components and principles of Structured Literacy. Students with characteristics of dyslexia need the same Structured Literacy instruction as their classmates. However, they need it delivered with increased intensity. Primary characteristics of dyslexia are inaccurate and/or dysfluent word reading, inaccurate spelling, and a slow response to instruction. Students identified with these characteristics need to be taught using a carefully planned and paced sequence of literacy skills. They need many opportunities for repetition and practice. They also need a small group size that allows for a high level of teacher interaction and immediate, corrective feedback.



©2016 Cowan for IDA
Figure 4

Instructional Components of Structured Literacy

The inner circle of the Structured Literacy graphic (above) represents the language components that students must learn in order to be successful readers.

Phonology	learning how to identify and manipulate units of speech, from words to syllables to individual speech sounds
Sound-Symbol	learning which letters or groups of letters represent speech sounds
Syllables	learning the syllable types of English and how words can be divided into syllables
Morphology	learning word parts such as prefixes, suffixes, and roots
Syntax	learning about grammar, the order of words, and how they function in sentences
Semantics	learning about the meanings of words and phrases and the relationships among words

There is more to Structured Literacy than its instructional content. The expertise of the person teaching it and how it is delivered are also important. Educators need to have deep knowledge and flexible use of the layers of language. Teachers develop this expertise by seeking out science-based professional development and getting lots of practice providing Structured Literacy instruction. When delivered as intended, Structured Literacy offers a high level of engagement between teachers and students. Students learn the consistent patterns of the language and reliable strategies to read words and make meaning from text. That leads to comprehension. For information on how Structured Literacy compares to typical literacy practices, see dyslexiaida.org/heres-why-schools-should-use-structured-literacy/.

Instructional Principles of Structured Literacy

The outer circle of the Structured Literacy graphic on page 14 represents how these language skills should be taught.

Systematic & Cumulative	Skills are taught in a defined sequence built around the structure of the English language. The easiest, most frequently occurring skills are taught first. More difficult concepts build on previously taught concepts.
Explicit	Skills are directly taught by the teacher. Students are given many opportunities for practice, and teachers give prompt, corrective feedback.
Diagnostic	Teachers use data to determine what skills each student should be taught and which skills a student should review or practice.

Students who are responding to core reading instruction more slowly than their peers may require more intensive Structured Literacy instruction in an intervention setting (i.e., Tier 2, Tier 3, or special education). They are likely to benefit from a smaller group size, more instructional time, more opportunities to respond, and more feedback from the teacher. Students may need to receive intervention to give them time to review and practice skills that were already taught but not mastered in core instruction. The amount of time needed in daily intervention will depend on the severity of the student’s difficulties. For many students with characteristics of dyslexia, at least 45 minutes of daily intervention will be needed in addition to their core reading instruction.

Students with dyslexia can learn to read. There is no “quick fix” for this process. Student progress compounds over many days, months, and years of structured and cumulative instruction, practice, and feedback. If your child is receiving the right type of intervention provided consistently and with fidelity (i.e., delivered as the program’s authors intended), he or she should make slow but steady gains. Students who receive intervention in early elementary school are likely to show progress faster than students who begin intervention when they are older.

Students also vary in their response to instruction based on the severity of their dyslexia. A lack of progress could signal a need for more intensive intervention. Organizational intensifiers that increase the time, frequency, and/or duration of the intervention being provided should be considered. Instructional intensifiers can also be added to optimize the impact of an appropriate intervention program. For example, students may benefit from even more repetition and practice opportunities, corrective feedback, and cumulative review. Additional information on this topic can be found in the book, *Intensive Reading Interventions for the Elementary Grades (2019)* by Jeanne Wanzek, Stephanie Al Otaiba, and Kristin L. McMaster.

Did you know?

Structured Literacy is the term that the International Dyslexia Association (IDA) uses to describe research-based reading and spelling instruction. Structured Literacy is not the name of a specific program. It describes an approach that includes evidence-based essential literacy content and instructional delivery methods.

The practice guide *Intensive Interventions for Students Struggling in Reading and Mathematics (2012)* by Sharon Vaughn, Jeanne Wanzek, Christy S. Murray, and Greg Roberts, as well as related resources, are available at centeroninstruction.org/intensive-interventions-for-students-struggling-in-reading-and-mathematics.

Common Syllable Division Patterns

Structured Literacy includes syllable instruction, which helps students to decode unknown words. Written syllables are organized around a vowel sound. The six common syllable types are closed, open, silent-e, vowel team, r-controlled, and consonant-le. Knowing these patterns can help children predict the vowel sound in words and help them break longer words into chunks.

Syllable Type	Example	Pattern
closed	<i>cat</i>	the vowel is followed by one or more consonants, the vowel sound is short
open	<i>no</i>	one vowel at the end with no consonants after it, the vowel sound is long
silent-e	<i>time</i>	one vowel followed by a consonant ending with a silent e, the vowel sound is long
vowel team	<i>rain</i>	two vowels (or a vowel and a consonant) that combine to make one sound
r-controlled	<i>stern</i>	the vowel is followed by the letter r (e.g., <i>er, ir, ur, or, ar</i>)
consonant -le	<i>handle</i>	a consonant is followed by the letters le; occurs at the end of the word, the e is silent

Long words can be divided into their individual syllables so each part can be read and then blended back together into the whole word. Every syllable has a vowel sound. Identifying the vowel sounds and the consonants between them is one way to help students read words with multiple syllables.

Formal instruction from a trained reading interventionist is necessary for students with dyslexia, and parents and other caregivers can also support reading development at home. The following resources are available on our website:

Structured Shared Reading: A Planning Guide to Support Shared Reading Experienced in the Home
mtsu.edu/dyslexia/documents/publications/Shared_ReadingGuide.pdf

Decoding Tips for Parents: 5 Common Word Reading Errors and How to Help
mtsu.edu/dyslexia/documents/publications/decoding_tips.pdf

Common Syllable Division Patterns

VC/CV	<i>in/sist</i>
V/CV	<i>me/ter</i>
VC/V	<i>rob/in</i>
V/V	<i>di/et</i>
VC/CCV	<i>com/plete</i>
VCC/CV	<i>pump/kin</i>

Students label vowels with a V and consonants with a C as they break long words into syllables.

Tennessee Dyslexia Law Requirements

Tennessee's "Say Dyslexia" law requires schools to provide an appropriate "dyslexia-specific intervention" to students who are screened and found to have characteristics of dyslexia. The law does not name specific published materials or programs that must be used. Instead, Tennessee's "Say Dyslexia" law provides the following description of this type of instruction, which is consistent with Structured Literacy instruction:

"Dyslexia-specific intervention" means evidence-based, specialized reading, writing, and spelling instruction that is multisensory in nature, equipping students to simultaneously use multiple senses, such as vision, hearing, touch, and movement. Dyslexia-specific intervention employs direct instruction of systematic and cumulative content, with the sequence beginning with the easiest and most basic elements and progress methodically to more difficult material. Each step must also be based on those already learned. Components of dyslexia-specific intervention include instruction targeting phonological awareness, sound symbol association, syllable structure, morphology, syntax, and semantics."

Dyslexia Treatment Outside of School

Some parents and caregivers choose to seek dyslexia therapy outside of the school setting. A few national organizations maintain public lists of professionals trained to provide Structured Literacy intervention, which is necessary for students with characteristics of dyslexia. These professionals may work inside or outside of a traditional school setting. Search the following websites for lists of dyslexia interventionists in your area:

Academic Language Therapy Association (ALTA) altaread.org/

Academy of Orton-Gillingham Practitioners and Educators (AOGPE) ortonacademy.org/

The Center for Effective Reading Instruction (CERI) effectivereading.org/about-ceri/

Wilson Language Training wilsonlanguage.com/for-parents-and-guardians/

IX. What types of treatments are not recommended for dyslexia?

The instructional recommendations discussed above are based on what a large body of empirical research tells us about how students learn to read. However, myths about the nature of dyslexia persist. This lack of understanding leads to treatment recommendations that are not based on scientific evidence. Although people who promote such treatments may be well-meaning, conflicting information can be confusing to parents and teachers who are trying to do what is best for children.

Because we do not want children to be distressed, it is tempting to pursue treatments that claim students will make rapid gains in a short amount of time or that claim to cure learning disabilities. However, these claims are unrealistic. A company may promise that their treatment is the answer to a wide variety of learning and behavior problems. These treatments are often promoted by clever marketing tactics, including the use of testimonials and scientific-sounding terminology. Unfortunately, parents and caregivers may end up wasting valuable time and money on ineffective treatments instead of on treatments that are more beneficial.

Examples of controversial treatments for dyslexia include the following:

- Vision-based treatments such as colored lenses or glasses, colored paper or overlays, glasses with low-power lenses when vision is normal, and vision therapy for dyslexia
- “Brain training” games
- Movement-based treatments (e.g., exercises focused on crossing the midline such as passing a ball from one side of the body to the other, walking on a balance beam, etc.)

Several of these controversial treatments are based on the myth that dyslexia is primarily a vision-based problem, yet there is substantial evidence to indicate that it is language-based. The International Dyslexia Association has gathered a variety of articles that address these issues: dyslexiaida.org/myth-busting-common-dyslexia-cure-claims/. Remember that if a treatment sounds too good to be true, it probably is.

X. What other school supports should we consider for my child?

Students with characteristics of dyslexia often need accommodations to access information at their grade level and to show what they have learned. Accommodations do not change *what* a person is learning; they change *how* he or she is learning it. Accommodations fall into these four basic categories:

- **Presentation:** students access information in other ways besides reading it (the teacher changes how instruction is delivered)
- **Response:** students show what they know in a different way
- **Setting:** students may take a test or complete work in a different location to minimize distractions
- **Timing and scheduling:** students may need extra time to complete an assignment or test, or they may need breaks between tasks

Accommodations do not lower learning expectations. They are intended to:

- Reduce or even eliminate the effects of a student's reading or writing problems
- Ensure that a test measures the student's knowledge and skills rather than the student's disabilities
- Allow students to access grade level curriculum and to demonstrate learned knowledge despite basic skill deficits

Accommodations Available in K–12 Settings

Accommodations may be provided in any tier of the RTI framework (i.e., Tiers 1, 2, and 3) and in special education settings. They are formally documented in the IEP for students who receive special education services. Other students have 504 plans that formally document their accommodations. In addition, teachers often provide informal supports within the classroom based on the needs of their students. Please note that an outside diagnosis of dyslexia is not required for a student to be eligible for an IEP or a 504 plan at school.³ See page 11 for more information on IEPs and 504 plans.

The following page contains examples of accommodations that may be considered for students with dyslexia. Not all students need the same type or same number of accommodations. Students with more severe dyslexia will probably need more accommodations than those with milder dyslexia characteristics. Accommodations are based on individual student needs, and those needs can change from year to year as a student's skills develop. In addition, the amount and type of reading and writing assignments change as a student moves through each grade level. Thus, the accommodations a student needs in one grade may be different from what the student needs in a later grade.

³Frequently Asked Questions: Say Dyslexia Guidance

[tn.gov/content/dam/tn/education/special-education/dys/say_dyslexia_faqs.pdf](https://www.tn.gov/content/dam/tn/education/special-education/dys/say_dyslexia_faqs.pdf)

ACCOMMODATIONS

a change to a task in time, setting, presentation, or response that allows a student to access the curriculum and demonstrate learning



Additional time allows students adequate time to complete tasks.



Preferential seating or small group settings allow students to focus on tasks.



Audio presentations of material allow students who struggle with reading to access the curriculum.



Oral response or visual presentations allow students who struggle with written expression to demonstrate learning.

decoding & fluency



Allow student to access the curriculum with audiobooks while building automaticity in decoding skills in the intervention setting.



Allow student additional time to access the curriculum while building automaticity in the intervention setting.



Provide oral testing to allow student to demonstrate learning.



Allow student to use a recorder to capture lectures and directions.



Limit timed tasks to skills and knowledge student has mastered.

spelling & written composition



Grade tasks for content only; do not reduce grade for spelling errors.



Use spelling words aligned with the intervention content which test knowledge of specific patterns.



Allow student access to spellcheck tools for writing assignments.



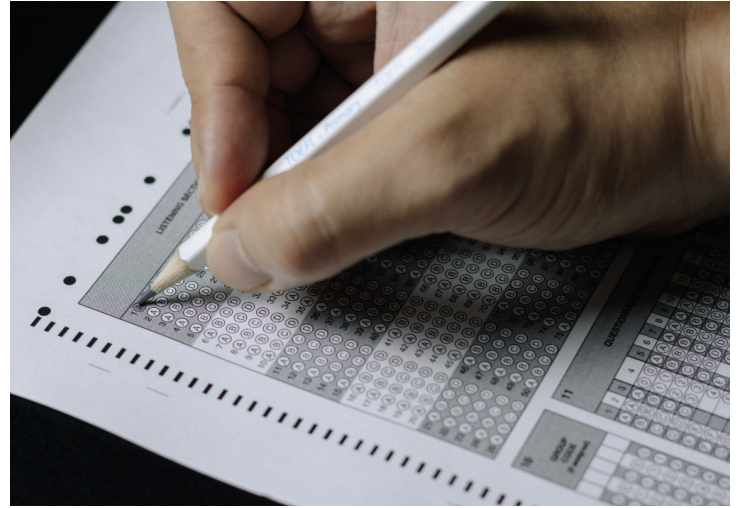
Allow student to type assignments to benefit from word prediction, speech-to-text, and text-to-speech software.



Provide an alternate space for test taking as needed to minimize distractions.

Accommodations and Support Available in Colleges and Universities

Students with learning disabilities and other types of disabilities can request accommodations on college entrance exams. To best support your request, it is important to keep copies of your child's evaluation reports as well as written records of the accommodations your child has received through the years. Often there is someone at the student's school who can assist students or parents with requesting these test accommodations. The test company's website will contain specific information on applying for accommodations.



Students at technical colleges, community colleges, and universities do not have Individual Education Programs (IEPs) because special education services are not available past high school. The Individuals with Disabilities Education Act (IDEA) does not apply to college. However, adult students with disabilities are protected under federal civil rights laws, which include Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA). Students with documented disabilities may be eligible to receive accommodations in college.

Many colleges and universities have a disability office that helps students access the materials needed to complete their coursework. They may be able to direct students to other available resources on campus, such as tutoring services. For more information on college disability services, see understood.org/en/articles/7-things-to-know-about-college-disability-services?_sp=bea98b10-eb1d-480e-8126-8102f26ac483.1654285127194.

People with disabilities are also protected from discrimination in the workplace. The ADA requires employers to provide reasonable accommodations to workers with disabilities. The following article provides information on ADA: understood.org/en/articles/faq-ada-at-work. For other resources to help prepare students for life after high school, see transitiontn.org.

XI. Can my child use technology to assist with learning?

Assistive technology (AT) can help students with dyslexia to learn despite their reading and writing challenges. AT can increase a student's independence, and it allows students to access information at their grade level and to show what they have learned. AT can provide different types of support to enable students to engage with materials.

Reading Support. While the reading skills of a student with dyslexia may be below grade level expectations, their listening comprehension skills often are not. When listening to literature or textbooks, the student gains access to text he or she may not be able to read. The student also continues to gain independence and build background knowledge, vocabulary, and comprehension skills by listening. One way to listen to text is to use **audiobooks**.

Writing Support. Students with dyslexia often have good ideas but struggle to express those ideas in writing due to difficulties with spelling, handwriting, or punctuation. For example, they may choose a simpler word than the one they want to use because it is a word they know how to spell. Thus, their writing may not fully reflect their knowledge and ideas. AT can help students with written assignments by supporting spelling, grammar, and vocabulary. **Word prediction** technology detects letters as the student types and then suggests words that the student may be trying to write. **Graphic organizers** can help students who struggle to organize their thoughts before writing.

Many devices have AT built into them. **Text-to-speech (TTS)** or "read aloud" technology is available in phones, tablets, and PCs/laptops. TTS converts printed words into audio. The student selects words on a screen and the computer "reads" them aloud. **Annotation tools** help students to take notes or highlight important sections as they read. **Speech-to-text (STT)** converts a student's spoken words into writing. This is often built into phones and other devices. Students can use STT to help with their writing, and then use TTS to read what they have written. TTS allows students to confirm that the ideas they intend to share are being conveyed. They can use **spellcheck and grammar editing tools** to check their work as well.

Several websites offer free or low-cost audiobooks. Here are some examples:

Bookshare: bookshare.org

Audible: audible.com/ep/kids-audiobooks

Epic!: getepic.com

Learning Ally: learningally.org

Lit2Go: etc.usf.edu/lit2go/

TumbleBooks: tumblebooks.com/

TN Regional Ebook and Audio Download System (TN READS): reads.overdrive.com/



ASSISTIVE TECHNOLOGY



Leveling the playing field for students with dyslexia

TEXT-TO-SPEECH

A computer generated voice reads selected text to the learner.



Allows struggling readers to access content.

AUDIOBOOKS

Prerecorded reading of text is played to the learner through an app or other media.



Allows students to read grade level and above text to build vocabulary and background knowledge while developing independent reading skills.

DEVICES

Software and apps can be installed on devices to support student learning with annotation, dictionary access, and speech recognition.



Devices with built-in assistive technology, like speech-to-text, help students with reading and written assignments.



Mobile devices enable students to digitally record lectures, take pictures of examples or presentations, and access educational apps.



Assistive technology includes stand-alone devices like a scanning pen or voice recorder. AT may also be built into other devices, like spell check in a word processing program.



Technology does not have to be high tech to be effective. Low tech options like graphic organizers, highlighters, and sticky notes also support student learning and comprehension.



Calculators can support students who may struggle with timely recall of math facts. Organizational tools like timers and planners help students stay on track and manage their time.

XII. How can I support my child emotionally?

For many students, dyslexia can lead to feelings of frustration, anger, anxiety, and embarrassment. Even though dyslexia is not a problem with intelligence, students may still feel that they are not as smart as their classmates. Some people may think these students are lazy when they are not. Often, students with dyslexia must work harder than their peers. Having difficulties in school may also lead to challenging classroom behaviors. For example, students may refuse to complete work if they think they will fail, or they may make an excuse to leave the room or cause a disruption to avoid reading in front of the class. Students who experience severe emotional difficulties may be diagnosed with a mental health disorder such as anxiety or depression. Thus, emotional support is just as important as academic support.

What some children with dyslexia may experience:

- Low self-esteem; feeling “dumb”
- Fear of failure or embarrassment
- Headaches or stomachaches due to anxiety about school
- Behavior challenges

Some things parents and caregivers can do to help:

- Learn as much as you can about dyslexia and discuss it with your child.
- Help your child understand that he or she is just as smart as other kids.
- Help your child recognize his or her strengths.
- Help your child develop skills and interests inside and outside of school.
- Partner with your child’s school. Request interventions shown to be effective in helping students improve reading and writing skills (i.e., Structured Literacy).
- Praise effort and hard work even when mistakes are made. Acknowledge what your child is doing right.
- Share personal stories from other people with dyslexia so your child knows he or she can succeed and does not feel alone.
- As he or she gets older, teach your child how to self-advocate so his or her needs are met at school and at work.



Students with dyslexia can succeed in school and in life. Their future success is optimized when they are provided with plenty of home and school support and with appropriate instruction and accommodations. The staff at the Tennessee Center for the Study and Treatment of Dyslexia is available to support you in your efforts. Information on training opportunities for parents and teachers as well as additional resources can be found on our website: mtsu.edu/dyslexia.

XIII. Where can I find more information?

The following resources provide additional support and information about dyslexia and reading development.

Decoding Dyslexia Tennessee

decodingdyslexiatn.wordpress.com/

DyslexiaHelp: University of Michigan

dyslexiahelp.umich.edu

Individuals with Disabilities Education Act

idea.ed.gov

International Dyslexia Association

dyslexiaida.org; tnida.org (TN Branch)

Learning Ally's 1in5 Student Initiative

1in5.learningally.org/

Learning Disabilities Association of America

ldaamerica.org

LD Online

ldonline.org

National Center on Improving Literacy

improvingliteracy.org

Understood

understood.org

Yale Center for Dyslexia and Creativity

dyslexia.yale.edu

Florida Center for Reading Research

fcrr.org/families

Meadows Center for Preventing Educational Risk

meadowscenter.org

Tennessee Center for the Study and Treatment of Dyslexia

mtsu.edu/dyslexia

National Center for Learning Disabilities

nld.org

The Reading League

thereadingleague.org

Reading Rockets

readingrockets.org

The Tennessee Center for the Study and Treatment of Dyslexia supports efforts to provide individuals with dyslexia with appropriate instruction and to identify these individuals at an early age. This list is intended only for informational purposes and the convenience of its users. This resource list should not be construed as an endorsement or recommendation of any organization, commercial products, processes, or services.

**MIDDLE
TENNESSEE**
STATE UNIVERSITY.
I AM *true***BLUE**.