THE DYSLEXIA HANDBOOK

2021 Update

Procedures Concerning Dyslexia and Related Disorders

TEXAS EDUCATION AGENCY • AUSTIN, TEXAS

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THE DYSLEXIA HANDBOOK
Procedures Concerning Dyslexia and Related Disorders
2021 Update

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Foreword

Reading is the fundamental skill upon which all formal education depends. Research now shows that a child who doesn't learn the reading basics early is unlikely to learn them at all. Any child who doesn't learn to read early and well will not easily master other skills and knowledge and is unlikely to ever flourish in school or life.

—Moats. L.C. Reading *is* Rocket Science: What Expert Teachers of Reading Should Know and be Able to Do, 1999

Texas has a long history of supporting the fundamental skill of reading. This history includes a focus on early identification and intervention for children who experience reading difficulties. In support of dyslexia legislation passed by the Texas Legislature, the State Board of Education (SBOE) first approved the handbook, *Dyslexia and Related Disorders: An Overview of State and Federal Requirements* in January 1986.

The SBOE approved new guidelines called the *Revised Procedures Concerning Dyslexia and Related Disorders* in 1992, which were revised in 1998. The handbook was updated again in 2001 and was called *The Dyslexia Handbook: Procedures Concerning Dyslexia and Related Disorders.* The SBOE continued to stress the importance of using research-based strategies to prevent reading difficulties and provide appropriate instruction to struggling readers in November 2006 when *The Dyslexia Handbook Revised 2007: Procedures Concerning Dyslexia and Related Disorders* was approved. In the summer of 2010, the need arose for an update of the handbook to include new legislation and additional research.

Legislation passed in the 82nd and 83rd sessions of the Texas Legislature resulted in the need for revision of the handbook. Consequently, *The Dyslexia Handbook—Revised 2014: Procedures Concerning Dyslexia and Related Disorders* was approved by the SBOE in July 2014. The most recent version, *The Dyslexia Handbook—2018 Update: Procedures Concerning Dyslexia and Related Disorders* (*Dyslexia Handbook*) implements statutory requirements added by the 85th Texas Legislature. The *Dyslexia Handbook* provides guidelines for school districts to follow as they identify and provide services for students with dyslexia and related disorders. Additionally, the handbook provides school districts and parents/guardians with information regarding the state's dyslexia laws and their relation to these federal laws: the Rehabilitation Act of 1973, Section 504 as amended in 2008 (Section 504), the Americans with Disabilities Amendments Act and the Individuals with Disabilities Education Act (IDEA). This handbook replaces all previous handbooks and guidelines.

There are also designated consultants at each regional education service center (ESC) available to assist district stakeholders with implementing state law and SBOE rules and procedures regarding dyslexia. Appendix E of this handbook contains information for the 20 ESCs. Or visit

In addition to The *Dyslexia Handbook*, resources include a State Dyslexia Network, a State Dyslexia Consultant, and a helpline (1-800-232-3030) at regional Education Service Center (ESC) 10.

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Acknowledgments

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Dedication

The 2018 Dyslexia Handbook: Procedures Concerning Dyslexia and Related Disorders

was dedicated in honor of Geraldine "Tincy" Miller in recognition of her tireless work on behalf of all Texas children with dyslexia.

Preface

In the state of Texas, students who continue to struggle with reading, despite appropriate or intensified instruction, are provided organized systems of reading support. Some students struggle during early reading acquisition while others do not struggle until the later grades, even at the postsecondary level. Here they face more complex language demands, for example reading textbooks, academic texts, and other print materials. For many struggling readers, the difficulty may be due to dyslexia. Dyslexia is found in all student populations and languages. Some students with dyslexia may be English Learners (ELs) who struggle with reading not only in English, but also in their native language. In Texas, evaluation for dyslexia is conducted from kindergarten through grade 12.

The purpose of The *Dyslexia Handbook* is to provide procedures for school districts, charter schools, campuses, teachers, students, and parents/guardians in early identification of, instruction for, and accommodations for students with dyslexia. This handbook will be used by school districts and charter schools as they develop their written procedures regarding students with dyslexia. It will also serve as a resource for educator preparation programs and other entities seeking guidance in serving students with dyslexia.

Texas Education Code (TEC) §38.003 defines dyslexia and related disorders, mandates screening and testing students for dyslexia and the provision of instruction for students with dyslexia and gives the State Board of Education (SBOE) authority to adopt rules and standards for screening, testing, and serving students with dyslexia. Texas Education Code §7.028(b) assigns the responsibility for school compliance with the requirements for state educational programs to the local district board of trustees. Title 19 of the Texas Administrative Code (TAC) §74.28 outlines the responsibilities of districts and charter schools in the delivery of services to students with dyslexia. Finally, two federal laws, the Individuals with Disabilities Education Act (IDEA) and the Rehabilitation Act of 1973, Section 504, establish assessment and evaluation standards and procedures for students (34 C.F.R. Part 300 (IDEA), Part 104 (Section 504)).

This handbook reflects current law as well as legislative action from the 84th and 85th sessions of the Texas Legislature and replaces all previous handbook editions. Recent legislation includes the following:

- TEC §21.044(c)(2) outlines the curriculum requirement for teacher preparation programs to include the characteristics of dyslexia, identification of dyslexia, and multisensory strategies for teaching students with dyslexia.
- TEC §21.054(b) and 19 TAC §232.11(e) mandate continuing education requirements for educators who teach students with dyslexia.
- TEC §28.021(b) establishes guidelines for districts when measuring academic achievement or proficiency of students with dyslexia.
- TEC §38.003(a) requires students to be screened or tested, as appropriate, for dyslexia and related disorders at appropriate times in accordance with a program approved by the SBOE. Screening must occur at the end of the school year of each student in kindergarten and each student in the first grade.
- TEC §38.0032 requires the Texas Education Agency (TEA) to annually develop a list of training opportunities regarding dyslexia that satisfy continuing education requirements for educators who teach students with dyslexia.

- TEC §38.0031 requires the agency to establish a committee to develop a plan for integrating technology into the classroom to help accommodate students with dyslexia.
- TEC §42.006(a-1) requires school districts and open-enrollment charter schools to report through the Texas Student Data System (TSDS) Public Education Information Management System (PEIMS) the number of enrolled students who have been identified as having dyslexia.
- 19 TAC §230.23 requires TEA to provide accommodations for persons with dyslexia who take licensing examinations.

The following chapters are included in this handbook:

I. Definitions and Characteristics of Dyslexia
II. Screening
III. Procedures for the Evaluation and Identification of Students with Dyslexia
IV. Critical, Evidence-Based Components of Dyslexia Instruction
V. Dysgraphia

The Dyslexia Handbook has 12 appendices:

A. Questions and Answers
B. Sources of Laws and Rules for Dyslexia Identification and Instruction
C. State Laws and Rules Related to Dyslexia
D. IDEA/Section 504 Side-by-Side Comparison
E. Contacts for Further Information
F. Associated Terms
G. Bibliography
H. Students with Disabilities Preparing for Postsecondary Education: Know Your Rights and Responsibilities
I. 2015 U.S. Department of Education Dyslexia Guidance
J. Pathways for the Identification and Provision of Instruction for Students with Dyslexia
K. Addressing Concerns about Dyslexia Programs
L. History of Dyslexia Law

I. Definitions and Characteristics of Dyslexia

The student who struggles with reading and spelling often puzzles teachers and parents. The student displays ability to learn in the absence of print and receives the same classroom instruction that benefits most children; however, the student continues to struggle with some or all of the many facets of reading and spelling. This student may be a student with dyslexia.

Texas Education Code (TEC) §38.003 defines dyslexia and related disorders in the following way:

> *"Dyslexia" means a disorder of constitutional origin manifested by a difficulty in learning to read, write, or spell, despite conventional instruction, adequate intelligence, and sociocultural opportunity.*
>
> *"Related disorders" include disorders similar to or related to dyslexia, such as developmental auditory imperception, dysphasia, specific developmental dyslexia, developmental dysgraphia, and developmental spelling disability.*

TEC §38.003(d)(1)-(2) (1995)
http://www.statutes.legis.state.tx.us/Docs/ED/htm/ED.38.htm#38.003

The International Dyslexia Association defines "dyslexia" in the following way:

> *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 growth of vocabulary and background knowledge.*

Adopted by the International Dyslexia Association Board of Directors,
November 12, 2002

Students identified as having dyslexia typically experience primary difficulties in phonological awareness, including phonemic awareness and manipulation, single-word reading, reading fluency, and spelling. Consequences may include difficulties in reading comprehension and/or written expression. These difficulties in phonological awareness are unexpected for the student's age and educational level and are not primarily the result of language difference factors. Additionally, there is often a **family history** of similar difficulties.

The following are the primary reading/spelling characteristics of dyslexia:

- Difficulty reading words in isolation
- Difficulty accurately decoding unfamiliar words
- Difficulty with oral reading (slow, inaccurate, or labored without prosody)
- Difficulty spelling

It is important to note that individuals demonstrate differences in degree of impairment and may not exhibit all the characteristics listed above.

The reading/spelling characteristics are most often associated with the following:

- Segmenting, blending, and manipulating sounds in words (phonemic awareness)
- Learning the names of letters and their associated sounds
- Holding information about sounds and words in memory (phonological memory)
- Rapidly recalling the names of familiar objects, colors, or letters of the alphabet (rapid naming)

Consequences of dyslexia may include the following:

- Variable difficulty with aspects of reading comprehension
- Variable difficulty with aspects of written language
- Limited vocabulary growth due to reduced reading experiences

Sources for Characteristics and Consequences of Dyslexia

Branum-Martin, L., Fletcher, J. M., & Stuebing, K. K. (2013). Classification and identification of reading and math disabilities: The special case of comorbidity. *Journal of Learning Disabilities*, *12*, 906–915.

Fletcher, J. M., Lyon, G. R., Fuchs, L. S., & Barnes, M. A. (2007). *Learning disabilities: From identification to intervention.* New York, NY: The Guilford Press.

The International Dyslexia Association. (2018). *Knowledge and practice standards for teachers of reading*, (2nd ed.). Retrieved from https://app.box.com/s/21gdk2k1p3bnagdfz1xy0v98j5ytl1w.

Moats, L. C., & Dakin, K. E. (2008). *Basic facts about dyslexia and other reading problems*. Baltimore, MD: The International Dyslexia Association.

Evidence-based Core Reading Instruction (Tier I)

House Bill 3, passed by the 86th Legislature, requires each school district and open-enrollment charter school to provide for the use of a phonics curriculum that uses systematic direct instruction in kindergarten through third grade to ensure all students obtain necessary early literacy skills. Districts and charter schools must ensure that all kindergarten, first, second, and third grade teachers attend a teacher literacy achievement academy to increase teacher knowledge and implementation of the science of teaching reading. Additionally, districts and charter schools must certify to the agency that they prioritize placement of highly effective teachers in kindergarten through second grade and have integrated reading instruments used to diagnose reading development and comprehension to support each student in prekindergarten through third grade. This handbook assumes that all students have received strong systematic reading instruction in Tier 1.

Connecting Research and Practice

Research in understanding dyslexia as a neurodevelopmental disorder is ongoing. Future research will assist in learning more about the phonological awareness deficit and how this deficit interacts with other risk factors related to dyslexia. Research is now also focusing on the developmental cause of neural abnormalities and how these predict treatment response.

Pennington, B. F. (2009). *Diagnosing learning disorders: A neuropsychological framework* (2nd ed.). New York, NY: The Guilford Press.

Peterson, R. L., & Pennington, B. F. (2012). Developmental dyslexia. *The Lancet, 379*(9830), 1997–2007.

Common Risk Factors Associated with Dyslexia

If the following behaviors are unexpected for an individual's age, educational level, or cognitive abilities, they may be risk factors associated with dyslexia. A student with dyslexia usually exhibits several of these behaviors that persist over time and interfere with his/her learning. A family history of dyslexia may be present; in fact, recent studies reveal that the whole spectrum of reading disabilities is strongly determined by genetic predispositions (inherited aptitudes) (Olson, Keenan, Byrne, & Samuelsson, 2014).

The following characteristics identify risk factors associated with dyslexia at different stages or grade levels.

Preschool

- Delay in learning to talk
- Difficulty with rhyming
- Difficulty pronouncing words (e.g., "pusgetti" for "spaghetti," "mawn lower" for "lawn mower")
- Poor auditory memory for nursery rhymes and chants
- Difficulty adding new vocabulary words
- Inability to recall the right word (word retrieval)
- Trouble learning and naming letters and numbers and remembering the letters in his/ her name
- Aversion to print (e.g., doesn't enjoy following along if a book is read aloud)

Kindergarten and First Grade

- Difficulty breaking words into smaller parts, or syllables (e.g., "baseball" can be pulled apart into "base" "ball" or "napkin" can be pulled apart into "nap" "kin")
- Difficulty identifying and manipulating sounds in syllables (e.g., "man" sounded out as /m/ /ă/ /n/)
- Difficulty remembering the names of letters and recalling their corresponding sounds
- Difficulty decoding single words (reading single words in isolation)
- Difficulty spelling words the way they sound (phonetically) or remembering letter sequences in very common words seen often in print (e.g., "sed" for "said")

Second Grade and Third Grade

Many of the previously described behaviors remain problematic along with the following:

- Difficulty recognizing common sight words (e.g., "to," "said," "been")
- Difficulty decoding single words
- Difficulty recalling the correct sounds for letters and letter patterns in reading
- Difficulty connecting speech sounds with appropriate letter or letter combinations and omitting letters in words for spelling (e.g., "after" spelled "eftr")
- Difficulty reading fluently (e.g., reading is slow, inaccurate, and/or without expression)
- Difficulty decoding unfamiliar words in sentences using knowledge of phonics
- Reliance on picture clues, story theme, or guessing at words
- Difficulty with written expression

Fourth Grade through Sixth Grade

Many of the previously described behaviors remain problematic along with the following:

- Difficulty reading aloud (e.g., fear of reading aloud in front of classmates)
- Avoidance of reading (particularly for pleasure)
- Difficulty reading fluently (e.g., reading is slow, inaccurate, and/or without expression)
- Difficulty decoding unfamiliar words in sentences using knowledge of phonics
- Acquisition of less vocabulary due to reduced independent reading
- Use of less complicated words in writing that are easier to spell than more appropriate words (e.g., "big" instead of "enormous")

- Reliance on listening rather than reading for comprehension

Middle School and High School

Many of the previously described behaviors remain problematic along with the following:

- Difficulty with the volume of reading and written work
- Frustration with the amount of time required and energy expended for reading
- Difficulty reading fluently (e.g., reading isslow, inaccurate, and/or without expression)
- Difficulty decoding unfamiliar words in sentences using knowledge of phonics
- Difficulty with written assignments
- Tendency to avoid reading (particularly for pleasure)
- Difficulty learning a foreign language

Postsecondary

Some students will not be identified as having dyslexia prior to entering college. The early years of reading difficulties evolve into slow, labored reading fluency. Many students will experience extreme frustration and fatigue due to the increasing demands of reading as the result of dyslexia. In making a diagnosis for dyslexia, a student's reading history, familial/genetic predisposition, and assessment history are critical. Many of the previously described behaviors may remain problematic along with the following:

- Difficulty pronouncing names of people and places or parts of words
- Difficulty remembering names of people and places
- Difficulty with word retrieval
- Difficulty with spoken vocabulary
- Difficulty completing the reading demands for multiple course requirements
- Difficulty with notetaking
- Difficulty with written production
- Difficulty remembering sequences (e.g., mathematical and/or scientific formulas)

Appendix H, Students with Disabilities Preparing for Postsecondary Education: Know Your Rights and Responsibilities has been included for additional information.

Since dyslexia is a neurobiological, language-based disability that persists over time and interferes with an individual's learning, it is critical that identification and intervention occur as early as possible.

Associated Academic Difficulties and Other Conditions

The behaviors in the previous sections represent common difficulties that students with dyslexia may exhibit. In addition, students with dyslexia may have problems in written expression, reading comprehension, and mathematics as well as other complicating conditions and/or behaviors.

Besides academic struggles, some students with dyslexia may exhibit other complex conditions and/or behaviors. The most common co-occurring disorders with dyslexia are attention deficit hyperactivity disorder (ADHD) and specific developmental language disorders (Snowling & Stackhouse, 2006, pp. 8–9). Some, though not all, students with dyslexia may also experience symptoms such as anxiety, anger, depression, lack of motivation, or low self-esteem. In such instances, appropriate instructional/referral services need to be provided to ensure each student's needs are met.

These additional conditions can have a significant impact on the effectiveness of instruction provided to students with dyslexia. Motivation, in particular, has been shown to be critical to the success or failure of instructional practices. Regarding motivation, Torgesen states (as cited in Sedita, 2011), "even technically sound instructional

techniques are unlikely to succeed unless we can ensure that, most of the time, students are engaged and motivated to understand what they read" (p. 532). Acknowledging that students with dyslexia must exert extra effort to meet grade-level expectations, all the factors that may affect learning must be considered when identifying and providing instruction for students with dyslexia. ADHD or symptoms of anxiety, anger, depression, or low self-esteem may lower a student's engagement in learning. Educators and parents should provide students with affirmation and an environment that fosters engagement and success.

Sources for Common Characteristics and Risk Factors of Dyslexia

Carreker, S. (2008, September). *Is my child dyslexic?* The International Dyslexia Association. Retrieved from https://dyslexiaida.org/.

Dickman, E., JD. (2017, February). *Do we need a new definition of dyslexia?* The International Dyslexia Association. Retrieved from https://dyslexiaida.org/

Mather, N., & Wendling, B. J. (2012). *Essentials of dyslexia assessment and intervention.* Hoboken, NJ: John Wiley & Sons.

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Olson, R. K., Keenan, J. M., Byrne, B., & Samuelsson, S. (2014). Why do children differ in their development of reading and related skills? *Scientific Studies of Reading, 18*(1), 38–54.

Shaywitz, S. (2003). *Overcoming dyslexia: A new and complete science-based program for reading problems at any level*. New York, NY: Alfred A. Knopf.

Sources for Associated Academic Difficulties and Other Conditions

Gooch, D., Snowling, M., & Hulme, C. (2011). Time perception, phonological skills, and executive function in children with dyslexia and/or ADHD symptoms. *The Journal of Child Psychology and Psychiatry, 52*(2), 195– 203.

Harpin, V., Mazzone, L., Raynaud, J. P., Kahle, J. R., & Hodgkins, P. (2013). Long-term outcomes of ADHD: A systematic review of self-esteem and social function. *Journal of Attention Disorders*. doi:10.1177/1087054713486516

Kavale, K. A., & Forness, S. R. (1996). Social skill deficits and learning disabilities: A meta-analysis. *Journal of Learning Disabilities, 29*(3), 226–237.

Klassen, A. F., Miller, A., & Fine, S. (2004). Health-related quality of life in children and adolescents who have a diagnosis of attention-deficit/hyperactivity disorder. *Pediatrics*, *114*(5), 541-547.

Mazzone, L., Postorino, V., Reale, L., Guarnera, M., Mannino, V., Armando, M., Fatta, L., De Peppo, L., & Vicari, S. (2013). Self-esteem evaluation in children and adolescents suffering from ADHD. *Clinical Practice & Epidemiology in Mental Health 9*, 96–102.

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Sedita, J. (2011). Adolescent literacy: Addressing the needs of students in grades 4–12. In J. R. Birsh (Ed.), *Multisensory teaching of basic language skills* (3rd ed., p. 532). Baltimore, MD: Paul H. Brookes Publishing.

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II. Screening

Overview of Chapter II

The purpose of Chapter II is to further clarify the following topics related to screening for dyslexia:

- The definition of universal screening
- Administration of screening instruments
- Interpretation of screening results
- Best practices for ongoing monitoring

Part A of Chapter II will cover the definition of universal screening as well as the local, state, and federal requirements related to dyslexia and related disorders, including the Child Find requirement imposed under the Individuals with Disabilities Education Act (IDEA).

Part B will address the administration of the required screening instruments for kindergarten and grade 1 students.

Part C will cover how the interpretation of the screening results affect the decisions that the school will make to determine when a student is at risk for reading difficulties, including dyslexia and related disorders.

Part D will address ongoing monitoring of students throughout their academic careers.

Part A: Universal Screening and State and Federal Requirements

The Importance of Early Screening

> *If the persistent achievement gap between dyslexic and typical readers is to be narrowed, or even closed, reading interventions must be implemented early, when children are still developing the basic foundation for reading acquisition. The persistent achievement gap poses serious consequences for dyslexic readers, including lower rates of high school graduation, higher levels of unemployment, and lower earnings because of lowered college attainment. Implementing effective reading programs early, even in preschool and kindergarten, offers the potential to reduce and perhaps even close the achievement gap between dyslexic and typical readers and bring their trajectories closer over time.*
>
> —Ferrer, et al., Achievement Gap in Reading Is Present as Early as First Grade and Persists through Adolescence, 2015

The early identification of students with dyslexia along with corresponding early intervention programs for these students will have significant implications for their future academic success. In the book *Straight Talk about Reading*, Hall and Moats (1999) state the following:

- Early identification is critical because the earlier the intervention, the easier it is to remediate.
- Inexpensive screening measures identify at-risk children in mid-kindergarten with 85 percent accuracy.
- If intervention is not provided before the age of eight, the probability of reading difficulties continuing into high school is 75 percent (pp. 279–280).

Research continues to support the need for early identification and assessment (Birsh, 2018; Sousa, 2005; Nevills & Wolfe, 2009). The rapid growth of the brain and its responsiveness to instruction in the primary years make the time from birth to age eight a critical period for literacy development (Nevills & Wolfe, 2009). Characteristics associated with reading difficulties are connected to spoken language. Difficulties in young children can be assessed through screenings of phonemic awareness and other phonological skills (Sousa, 2005). Additionally, Eden (2015) points out that "when appropriate intervention is applied early, it is not only more effective in younger children, but also increases the chances of sparing a child from the negative secondary consequences associated with reading failure, such as decline in self-confidence and depression."

Keeping the above information in mind, it is essential to screen students for dyslexia and related disorders early in their academic careers.

State Requirements

In 2017, the 85th Texas Legislature passed House Bill (HB) 1886, amending Texas Education Code (TEC) §38.003, Screening and Treatment for Dyslexia,[1] to require that all kindergarten and first-grade public school students be screened for dyslexia and related disorders. Additionally, the law requires that all students beyond first grade be screened or tested as appropriate.

In response to the screening requirements of HB 1886, the SBOE amended its rule in 19 Texas Administrative Code (TAC) §74.28, Students with Dyslexia and Related Disorders. While this rule speaks primarily to evaluation and identification of a student with dyslexia or related disorders, it also requires that evaluations only be conducted by appropriately trained and qualified individuals. Guidelines regarding the required screening for kindergarten and first-grade students are discussed in Part B of this chapter.

A related state law adds an additional layer to screening requirements for public school students. Texas Education Code §28.006, Reading Diagnosis, requires each school district to administer to students in kindergarten, first grade, and second grade a reading instrument to diagnose student reading development and comprehension. This law also requires school districts to administer a reading instrument at the beginning of seventh grade to students who did not demonstrate reading proficiency on the sixth-grade state reading assessment. The law requires each school district to administer to kindergarten students a reading instrument adopted by the commissioner or an alternative reading instrument approved by the commissioner. The commissioner must adopt a list of reading instruments that a school district may use to diagnose student reading development and comprehension. Districts are permitted to use reading instruments other than those adopted by the commissioner for first, second, and seventh grades only when a district-level committee adopts these additional instruments. Texas Education Code §28.006(d) requires each district to report the results of these reading instruments to the district's board of trustees, TEA, and the parent or guardian of each student.

Further, a school district is required to notify the parent or guardian of each student in kindergarten, first grade, or second grade who is determined to be at risk for dyslexia or other reading difficulties based on the results of the reading instruments. In accordance with TEC §28.006(g), an accelerated reading instruction program must be provided to these students.

[1] For the full text of the state laws and rules referenced in this chapter, please refer to Appendix C, State Laws and Rules Related to Dyslexia.

Are the dyslexia screening under TEC §38.003
and the early reading diagnosis under TEC §28.006 the same?

The answer to this question is not a simple one. School districts must meet the requirements of TEC §28.006 and §38.003, both of which deal, at least in part, with early screening for dyslexia.
Should a district wish to use a single instrument to meet the requirements of both TEC §28.006 and §38.003, the district may, but is not required to do so.

It is important to note that TEC §38.003 applies only to the screening of kindergarten and first-grade students for dyslexia and related disorders, whereas TEC §28.006 addresses general reading diagnoses for students in kindergarten and grades 1, 2, and 7. Districts that decide to use one instrument to meet the requirements of both the dyslexia screening and the early reading diagnosis for kindergarten and grade 1 must also continue to administer reading instruments to all second-grade students and to students in grade 7 who did not demonstrate proficiency on the state reading assessment for sixth grade.

The approved reading Instruments on the current list meet the requirements of TEC §28.006 and are available on the Texas Education Agency (TEA) website at https://tea.texas.gov/academics/early-childhood-education/data-tool-selection-guidance . The approved reading instruments include the required elements of a dyslexia screener. These instruments will meet the requirements of both the early reading diagnosis under TEC §28.006 and the dyslexia screening under TEC §38.003. This allows districts and charter schools to use an instrument from the approved list to satisfy both requirements should they choose to do so.

Should it be determined that funds are not available for the early reading instruments under TEC §28.006, districts are not required to notify parents/guardians of or implement the accelerated reading program. However, districts and charter schools **must** screen all students in kindergarten and grade 1 for dyslexia and related disorders regardless of the availability of funding.

While this chapter primarily addresses the screening required under TEC §38.003 for kindergarten and grade 1, the screening and ongoing monitoring of *all students* should be done regularly according to district, state, and federal laws and procedures.

Federal Requirements- Child Find

In addition to state and local requirements to screen and identify students who may be at risk for dyslexia, there are also overarching federal laws and regulations to identify students with disabilities, commonly referred to as Child Find. Child Find is a provision in the Individuals with Disabilities Education Act (IDEA), a federal law that requires the state to have policies and procedures in place to ensure that every student in the state who needs special education and related services is located, identified, and evaluated. The purpose of the IDEA is to ensure that students with disabilities are offered a free and appropriate public education (20 U.S.C. §1400(d); 34 C.F.R. §300.1). Because a student suspected of having dyslexia may be a student with a disability under the IDEA, the Child Find mandate includes these students. Therefore, when referring and evaluating students suspected of having dyslexia, LEAs must follow procedures for conducting a full individual and initial evaluation (FIIE) under the IDEA.

Another federal law that applies to students with disabilities in public school is Section 504 of the Rehabilitation Act of 1973, commonly referred to as Section 504. Under Section 504, public schools must annually attempt to identify and locate every qualified student with a disability residing in its jurisdiction and notify them and/or their parents of the requirements of Section 504.

Dyslexia Screening

Universal Screening

For purposes of this chapter, screening is defined as a universal measure administered to **all** students by qualified personnel to determine which students are at risk for dyslexia or reading difficulties and/or a related disorder. Screening is not a formal evaluation.

Timing of Screening

Texas Education Code §38.003 mandates that kindergarten students be screened at the end of the school year. In scheduling the kindergarten screener, districts and charter schools should consider the questions in Figure 2.1 below.

Figure 2.1. Considerations for Local Scheduling of Dyslexia Screening

- Has adequate time for instruction been provided during the school year?
- Has adequate time been provided to compile data prior to the end of the school year?
- How will the timing of the administration of the screener fit in with the timing of other required assessments?
- Has sufficient time been provided to inform parents in writing of the results of the reading instrument and whether the student is at risk for dyslexia or other reading difficulties?
- Has adequate time been provided for educators to offer appropriate interventions to the student?
- Has sufficient time been provided for decision making regarding next steps in the screening process?

Texas Education Code §38.003 does not explicitly state when first grade students must be screened. The SBOE, through approval of the rule which requires adherence to this handbook (TAC §74.28), has determined that students in first grade must be screened no later than the middle of the school year. Screening of first-grade students can begin anytime in the fall as the teacher deems appropriate. Grade 1 screening must conclude **no later than January 31 of each year**.

The timing of the grade 1 screening is designed to ensure that students are appropriately screened, and if necessary, evaluated further so that reading difficulties can be addressed in a timely manner. Because kindergarten is not mandatory in the State of Texas, some students will not have been enrolled in kindergarten and will therefore not have been screened prior to the first grade. Waiting too long in the first-grade year would delay critical early intervention for students at risk for dyslexia or reading difficulties. Screening of first grade students by the middle of the school year will ensure that sufficient time is provided for data gathering, evaluation, early intervention, etc., to meet the needs of students. Conducting the grade 1 screening no later than the middle of the school year will allow districts and charter schools to complete the evaluation process with enough time for interventions to be provided to the student prior to the end of first grade.

Other Related Disorders

It is important to note that, while TEC §38.003 requires that all students in kindergarten and grade 1 be screened for dyslexia and related disorders, at the time of the update to this handbook it was determined there are no grade-level appropriate screening instruments for dysgraphia and the other identified related disorders. For more information, please see Chapter V: Dysgraphia.

Local District Requirements

Each district may have additional policies and procedures in place regarding screening and evaluating students for dyslexia and related disorders. Refer to your district's website or administrative office for more information on local policies or search for information specific to your school district or charter school by accessing the *Legal Framework for the Child-Centered Special Education Process* at http://framework.esc18.net/.

Part B: Kindergarten-Grade 1 Universal Screening: Administration

> *Dyslexia screening is a tool for identifying children who are at risk for this learning disability, particularly in preschool, kindergarten, or first grade. This means that the screening does not "diagnose" dyslexia. Rather, it identifies "predictor variables" that raise red flags, so parents and teachers can intervene early and effectively.*
>
> —Richard Selznick, *Dyslexia Screening: Essential Concepts for Schools and Parents*, 2015

The importance of early interventions for students with reading difficulties cannot be overstated. In order for early interventions to be provided, a student must first be identified as at risk for dyslexia or another reading difficulty. While educators once delayed identification of reading difficulties until the middle elementary grades, recent research has encouraged the identification of children at risk for dyslexia and reading difficulties "prior to, or at the very least, the beginning of formal reading instruction" (Catts, 2017).

The requirement in TEC §38.003 that all kindergarten and first grade students be screened for dyslexia and related disorders is aligned with this shift to identify students at risk for dyslexia and reading difficulties when they are just beginning their formal education. Universal screeners generally measure reading or literacy-related skills such as sound-symbol recognition, letter knowledge, phonological awareness, and other skills. The International Dyslexia Association (2017) describes screening instruments as follows.

> *Screening measures, by definition, are typically brief assessments of a skill or ability that is highly predictive of a later outcome. Screening measures are designed to quickly differentiate students into one of two groups: 1) those who require intervention and 2) those who do not. A screening measure needs to focus on specific skills that are highly correlated with broader measures of reading achievement resulting in a highly accurate sorting of students.*
>
> —International Dyslexia Association, *Universal Screening: K-2 Reading*, 2017

Screening Instruments

While screening instruments can measure the skills and abilities of students at different grade levels, this section is dedicated to a discussion of instruments that may meet the dyslexia screening requirement for kindergarten and first grade students. As previously mentioned, at the time of the update to this handbook it was determined there are no grade-level appropriate screening instruments for dysgraphia and the other

identified related disorders. As a result, the focus of this section is on screening instruments for dyslexia and reading difficulties.

It is important that screening instruments be accurate and comprehensive; however, they need not be as comprehensive as an extensive individualized evaluation. With this in mind, various types of instruments that meet the criteria below could be used to screen for dyslexia.

In developing the criteria for the kindergarten and grade 1 screening instruments for dyslexia and other reading difficulties, it was important to differentiate between the skills and behaviors appropriate at each grade level. Additionally, with a sizable English Learner (EL) population in Texas, it was essential that Spanish language screening instruments be addressed. Therefore, criteria for both English and Spanish speakers are included.

Screener Criteria

Regardless of the primary language of the student, instruments used to screen for dyslexia and other reading difficulties must address the skills in Figure 2.2 below.

Figure 2.2. Criteria for English and Spanish Screening Instruments	
Kindergarten	**First Grade**
• Letter Sounds Knowledge or Letter Naming Fluency • Phonological Awareness	• Word Reading Accuracy or Fluency • Phonological Awareness

While the selected screening instrument will be expected to measure each of the skills identified above, it is important that individuals who administer the screening instrument document student behaviors observed during the administration of the instrument. A list of behaviors that may be observed during the administration of the screening and which should be documented are included in Figure 2.3 below.

Figure 2.3. Student Behaviors Observed During Screening
• Lack of automaticity • Difficulty sounding out words left to right • Guessing • Self-correcting • Inability to focus on reading • Avoidance behavior

Other Criteria

In addition to the measures of the skills identified in Figure 2.2 above, other criteria should be considered when selecting a screening instrument. Approved screening instruments must take only a brief time to administer and be cost effective. They must have established validity and reliability and standards. They must also include distinct indicators identifying students as either not at risk or at risk for dyslexia or reading difficulties. Screening instruments must also provide standardized directions for administration as well as clear guidance for the administrator regarding scoring and interpretation of indicators/results. Additionally, each screening instrument must include adequate training for educators on how to administer the instrument and interpret results.

Selecting an Appropriate Screening Instrument

Screening instruments must include a measure for each of the skills noted above. The commissioner of education is expected to periodically issue a request for English and Spanish screening instruments that meet the established criteria. Instruments that meet each of the criteria will be included on the Commissioner's List of Reading Instruments. A district or charter school must select for use an instrument from the commissioner's list. In determining which screening instrument to use, a district or charter school must consider the primary language of the student and other factors as determined by the local district or school.

Administration of Screening Instruments

Who May Administer the Dyslexia Screener

A district or charter school must ensure that appropriately trained and qualified individuals administer and interpret the results of the selected screening instrument. Please note that an educational aide is not eligible to administer or interpret the dyslexia screening instrument. Individuals who administer and interpret the screening instrument must, at minimum, meet the following qualifications:

- An individual who is certified/licensed in dyslexia; or
- A classroom teacher who holds a valid certification for kindergarten and grade 1.
  (For a list of current certifications for kindergarten and grade 1, see the State Board for Educator Certification Teacher Assignment Chart at https://tea.texas.gov/Texas_Educators/Certification/.)

BEST PRACTICE: Whenever possible, the student's current classroom teacher should administer the screening instrument for dyslexia and reading difficulties.

Training

The individual who administers and interprets the screening instrument must receive training designed specifically for the selected instrument in the following:

- Characteristics of dyslexia and other reading difficulties
- Interpretation of screening results and at-risk indicators and decisions regarding placement/services

When to Administer the Dyslexia/Reading Screener

Districts and charter schools must implement a screening program that includes each of the following:

- Screening of **each** student in kindergarten at the end of the school year
- Screening of **each** student in the first grade no later than January 31

For more information on considerations regarding the scheduling of the mandated dyslexia screening, please refer to Part A, Dyslexia Screening, on p. 10.

Part C—Kindergarten-Grade 1 Universal Screening: Interpretation

The importance of early intervention cannot be overstated. Intervening early, before difficulties become intractable, offers the best hope for successful outcomes and prevention of long-term deficits. The purpose of screening is to help identify, as early as possible, the students at risk for dyslexia or other reading difficulties so that targeted intervention can be provided. Screening alone will never improve outcomes for students. The screening must lead to effective instruction for it to be useful. Therefore, once the screening has been administered the next steps are to analyze results, identify level of risk for each student, and make informed decisions. The next steps are broadly categorized as: refer for evaluation, implement targeted intervention, and/or continue with core instruction.

There are several important factors to consider when interpreting screening results. First, it is important to remember that there is no definitive test score that invariably identifies dyslexia. Dyslexia is a neurobiological disorder that exists along a continuum of severity. Similar to diabetes or hypertension, dyslexia is identified based on how far an individual's condition departs from the average range. This makes

the identification of dyslexia more challenging than identifying other forms of disability.

Second, it is important to keep the definition and goals of screening in mind. The purpose of screening is to differentiate a smaller set of individuals who may be at risk for dyslexia. Screening, by definition, should never be the final determination of whether a student has dyslexia. Therefore, screening tools must be brief, efficient, and cost effective. Subsequent consideration of other data and information with the smaller group is then used to determine next steps. However, it is key to remember that "screening" represents the initial step in the process. Dyslexia referral and identification under IDEA must be individualized and based on multiple pieces of information, including results of the screening.

As with any evaluation, it is important that schools administer and interpret the screening instrument with fidelity. Screening tools use criterion-referenced criteria to establish cut points derived by the publisher of the tool. Cut points are used to group students into categories (e.g., at risk or not at risk) based on the results of the screening tool. Districts and charter schools must adhere to the cut points established by the published screening instrument.

In general, students scoring below the publisher-determined cut point are considered "at risk" for dyslexia, while those who score above the cut point are considered "not at risk" for dyslexia. However, it is important to realize that risk falls on a continuum and there will always be false positives (students who screen at risk when they are not) and false negatives (students who screen not at risk when they are). Consequently, continual progress monitoring and an ongoing review of data is important. Any student may be referred for a full individual and initial evaluation under IDEA, at any time, regardless of the results of the screening instrument.

Students falling well below the cut point have a much higher probability of being at risk for dyslexia while students scoring well above the cut point have lower probability of being at risk for dyslexia. The decision for what to do next is easiest for students whose scores fall at the extreme ends of the continuum. Students falling well above the cut point can be considered at low risk for dyslexia and are much less likely to need additional intervention or evaluation. Students scoring far below the cut point should be considered at high risk for dyslexia.

For students who are identified as at risk for dyslexia, the school should provide targeted intervention provided by the appropriate staff as determined by the district or charter school. The district or school should also continue the data collection and evaluation process outlined in Chapter III, Procedures for the Evaluation and Identification of Students with Dyslexia. It is important to note that the use of a tiered intervention process, such as Response to Intervention or RTI, must not be used to delay or deny an evaluation for dyslexia, especially when parent or teacher observations reveal the common characteristics of dyslexia.

For students who score close to the cut point, more information will be needed to make an informed decision regarding referral for evaluation, implementation of targeted interventions with progress monitoring, or continuation of core instruction only. Data gathering will provide this additional information.

Screening Data Gathering

Both quantitative and qualitative information are critical components of the screening process. Examples of quantitative and qualitative information used in determining next steps are provided in Figure 2.4 below.

Figure 2.4. Sources and Examples of Screening Data	
Quantitative Information	**Qualitative Information**
Results of— • Current screening instruments • Previous screening instruments • Formal and informal classroom reading assessments • Additional brief and targeted skill assessments	• Observations of student during screening (See Figure 2.3, Student Behaviors Observed During Screening) • Other observations of student progress • Teacher observations • Parent/guardian input (e.g., family history, early language skills) • Current student work samples • Work samples from earlier grade(s) • Intervention history

For students who fall close to the predetermined cut points, implementation of short-term, targeted intervention with regular progress monitoring is one way to determine if additional evaluation is needed. Teachers and administrators should also be mindful that screening for risk is an ongoing process. Decisions made based on a single-point-in-time screening instrument should always be reevaluated and altered as more information is obtained as instruction continues. See Part D of this chapter, Best Practices for Ongoing Monitoring, for additional information.

Screening data should always be shared with parents. Screening data should also be used by teachers and school administrators to guide instruction at the classroom level. When large percentages of students fall below the cut point (are at risk for dyslexia), it signals a need to review instructional programming and practices and teacher training in effective and explicit reading instruction.

Interpretation of Data

A qualified team is required to review all data to make informed decisions regarding whether a student exhibits characteristics of dyslexia. This team must consist of individuals who—

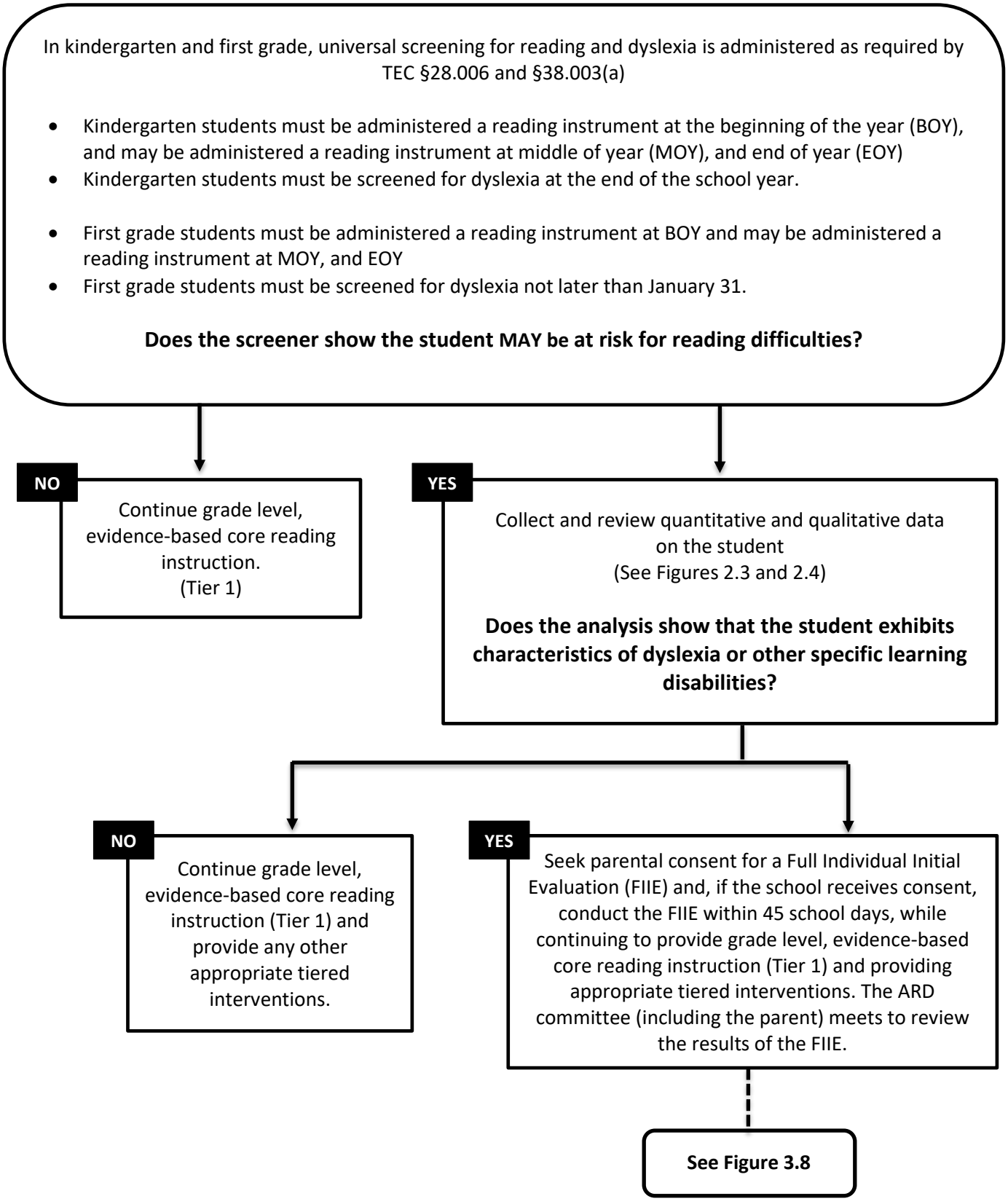
- have knowledge of the student;
- are appropriately trained in the administration of the screening tool;
- are trained to interpret the quantitative and qualitative results from the screening process; and
- recognize characteristics of dyslexia.

The team may consist of the student's classroom teacher, the dyslexia specialist, the individual who administered the screener, a representative of the Language Proficiency Assessment Committee (LPAC) (as appropriate), and an administrator.

It is important to remember that at any point in the data review process a referral for a FIIE under the IDEA may be initiated. Parents also have the right to request a FIIE at any time. Regardless of the process in place for screening and data review, whenever accumulated data indicate that a student continues to struggle with one or more of the components of reading, despite the provision of adequate instruction and intervention, the student must be referred for a full individual and initial evaluation under the IDEA.

Figure 2.5

Universal Screening and Data Review for Reading Risk



Part D: Best Practices for Ongoing Monitoring

Ongoing progress monitoring allows educators to assess student academic performance in order to evaluate student response to evidence-based instruction. Progress monitoring is also used to make diagnostic decisions regarding additional targeted instruction that may be necessary for the student.

While some kindergarten and first grade students may not initially appear to be at risk for dyslexia based on screening results, they may actually still be at risk. Students who have learned to compensate for lack of reading ability and twice-exceptional students are two groups who may not initially appear to be at risk for dyslexia based on the results of a screening instrument.

Compensation

Some older students may not appear at first to exhibit the characteristics of dyslexia. They may demonstrate relatively accurate, but not fluent, reading.

> *The consequence is that such dyslexic older children may appear to perform reasonably well on a test of word reading or decoding; on these tests, credit is given irrespective of how long it takes the individual to respond or if initial errors in reading are later corrected.*
>
> —Shaywitz, S.E., Morris, R., Shaywitz, B.A., The Education of Dyslexic Children from Childhood to Young Adulthood, 2008

Awareness of this developmental pattern is critically important for the diagnosis in older children, young adults, and beyond. According to Shaywitz, et al., examining reading fluency and reading rate would provide more accurate information for these students.

Twice Exceptionality

Twice-exceptional students may not initially appear to be at risk for dyslexia. Twice exceptional, or 2e, is a term used to describe students who are both intellectually gifted and learning disabled, which may include students with dyslexia. Parents and teachers may fail to notice either giftedness or dyslexia in a student as the dyslexia may mask giftedness or the giftedness may mask dyslexia.

The International Dyslexia Association's Gifted and Dyslexic: Identifying and Instructing the Twice Exceptional Student Fact Sheet (2013), identifies the following common characteristics of twice-exceptional students.

- Superior oral vocabulary
- Advanced ideas and opinions
- High levels of creativity and problem-solving ability
- Extremely curious, imaginative, and questioning
- Discrepant verbal and performance skills
- Clear peaks and valleys in cognitive test profile
- Wide range of interests not related to school
- Specific talent or consuming interest area
- Sophisticated sense of humor

For additional information on twice-exceptional students, see Chapter IV, Critical, Evidence-Based Components of Dyslexia Instruction.

For a description of common risk factors of dyslexia that may be seen in older students, refer to Chapter I, Definitions & Characteristics of Dyslexia.

Best Practices in Progress Monitoring

It is essential that schools continue to monitor students for common risk factors for dyslexia in second grade and beyond. In accordance with TEC §38.003(a), school districts **MUST** evaluate for dyslexia at appropriate times. If regular progress monitoring reflects a difficulty with reading, decoding, and/or reading comprehension, it is appropriate to evaluate for dyslexia and/or other learning disabilities. Free tools approved by the commissioner of education as of the 2021-2022 school year can assist districts in measuring student's reading development at first and second grade. For more information on these tools, see the TEA Early Childhood Data Tool Selection Guidance. Schools should be aware that a student may have reached middle school or high school without ever being screened, evaluated, or identified; however, the student may have dyslexia or a related disorder. One goal of ongoing monitoring is to identify these students regardless of their grade level.

Therefore, it is important to remember that a referral for a dyslexia evaluation can be considered at any time kindergarten–high school.

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III. Procedures for the Evaluation and Identification of Students with Dyslexia

> *Science has moved forward at a rapid pace so that we now possess the data to reliably define dyslexia, to know its prevalence, its cognitive basis, its symptoms and remarkably, where it lives in the brain and evidence-based interventions which can turn a sad, struggling child into not only a good reader, but one who sees herself as a student with self-esteem and a fulfilling future.*
>
> —Shaywitz, S.E. Testimony Before the Committee on Science, Space, and Technology, U.S. House of Representatives, 2014

The evaluation and identification process for dyslexia can be multifaceted. The process involves both state and federal requirements that must be followed. The evaluation and identification process for students suspected of having dyslexia is guided by the Individuals with Disabilities Education Act (IDEA)

In Texas and throughout the country, there is a focus on a Response to Intervention (RTI) or a Multi-Tiered System of Supports (MTSS) process as a vehicle for meeting the academic and behavioral needs of all students. The components of the Student Success Initiative (SSI) and other state-level programs offer additional support. Current federal legislation under the Elementary and Secondary Education Act (ESEA), as amended by the Every Student Succeeds Act of 2015 (ESSA), calls for the use of benchmark assessments for early identification of struggling students before they fail. In fact, state law requires the use of early reading assessments that are built on substantial evidence of best practices. Carefully chosen, these assessments can give crucial information about a student's learning and can provide a basis for the tiered intervention model. Through the tiered intervention process, schools can document students' learning difficulties, provide ongoing evaluation, and monitor reading achievement progress for students at risk for dyslexia or other reading difficulties.

Early intervention is further emphasized as the result of research using neuroimaging. Diehl, Frost, Mencl, and Pugh (2011) discuss the need to determine the role that deficits in phonological awareness and phonemic awareness play in reading acquisition, thus improving the methodology for early intervention. The authors note that future research will be enabled by longitudinal studies of phonology remediation using various treatments. "It will be especially important to take a multilevel analysis approach that incorporates genetics, neuroanatomy, neurochemistry, and neurocircuitry, and also to combine the strengths of the different neuroimaging techniques" (Diehl et al., 2011, p. 230). Evaluation followed by structured intervention that incorporates new scientific research must be embraced.

State and Federal Law Regarding Early Identification and Intervention Prior to Formal Evaluation

Both state and federal legislation emphasize early identification and intervention for students who may be at risk for reading disabilities such as dyslexia. Those professionals responsible for working with students with reading difficulties should be familiar with the legislation listed in Figure 3.1 below.

Figure 3.1. State and Federal Laws

TEC §28.006, Reading Diagnosis
This state statute requires schools to administer early reading instruments to all students in kindergarten and grades 1 and 2 to assess their reading development and comprehension. Additionally, the law requires a reading instrument from the commissioner's approved list be administered at the beginning of grade 7 to any student who did not demonstrate proficiency on the sixth-grade reading assessment administered under TEC §39.023(a). If, on the basis of the reading instrument results, students are determined to be at risk for dyslexia or other reading difficulties, the school must notify the students' parents/guardians. According to TEC §28.006(g), the school must also implement an accelerated (intensive) reading program that appropriately addresses the students' reading difficulties and enables them to catch up with their typically performing peers.

TEC §38.003, Screening and Treatment for Dyslexia
Texas state law requires that public school students be screened and tested, as appropriate, for dyslexia and related disorders at appropriate times in accordance with a program approved by the SBOE. The program approved by the SBOE must include screening for each student at the end of the kindergarten year and then again during first grade.

Elementary and Secondary Education Act (ESEA) as reauthorized by the Every Student Succeeds Act of 2015 (ESSA)
The services offered to students who are reported to be at risk for dyslexia or other reading difficulties should align to the requirements of ESSA, which requires schools to implement comprehensive literacy instruction featuring "age-appropriate, explicit, systematic, and intentional instruction in phonological awareness, phonic decoding, vocabulary, language structure, reading fluency, and reading comprehension" (ESSA, 2015).

Equal Education Opportunity Act (EEOA)
This civil rights law ensures that all students are given equal access to educational services regardless of race, color, sex, religion, or national origin. Therefore, research-based interventions are to be provided to all students experiencing difficulties in reading, including ELs, regardless of their proficiency in English.

Individuals with Disabilities Education Act (IDEA)
The most recent reauthorization of this federal act is consistent with ESSA in emphasizing quality of instruction and documentation of student progress. A process based on the student's response to scientific, research-based intervention is one of the criteria included in IDEA that individual states may use in determining whether a student has a specific learning disability, including dyslexia.

As referenced in the 2011 letter from the Office of Special Education Programs (OSEP) to the State Directors of Special Education, states have an obligation to ensure that evaluations of children suspected of having a disability are not delayed or denied because of implementation of the RTI process (Musgrove, 2011). For more information, please visit www2.ed.gov/policy/speced/guid/idea/memosdcltrs/osep11-07rtimemo.pdf.

The Referral Process for Dyslexia and Related Disorders

The determination to refer a student for an evaluation must always be made on a case-by-case basis and must be driven by data-based decisions. The referral process itself can be distilled into a basic framework as

outlined below.

Data-Driven Meeting of Knowledgeable Persons

A team of persons with knowledge of the student, instructional practices, and instructional options meets to discuss data collected, including data obtained during kindergarten and/or first grade screening, and the implications of that data. These individuals include, but are not limited to, the classroom teacher, administrator, dyslexia specialist, and/or interventionist. This team may also include the parents and/or a diagnostician familiar with testing and interpreting evaluation results. This team may have different names in different districts and/or campuses. For example, the team may be called a student success team, student support team, student intervention team, or even something else. Unless the student is already served under IDEA or Section 504, this team of knowledgeable persons is not an Admission, Review, and Dismissal (ARD) committee or a Section 504 committee, although many of these individuals may be on a future committee if the student is referred for an evaluation.

When the Data Does Not Lead to Suspicion of a Disability, Including Dyslexia or a Related Disorder

If the team determines that the data does not give the members reason to suspect that a student has dyslexia, a related disorder, or other disability, the team may decide to provide the student with additional support in the classroom or through the RTI/MTSS process. The student should continue to receive grade level, evidence-based core reading instruction. (Tier 1) and any other appropriate tiered interventions. However, the student is not referred for an evaluation at this time.

When the Data Lead to a Suspicion of a Disability, Including Dyslexia or a Related Disorder

If the team suspects that the student has dyslexia, a related disorder, or another disability included within the IDEA, the team must refer the student for a full individual and initial evaluation (FIIE). In most cases, an FIIE under the IDEA must be completed within 45-school days from the time a district or charter school receives parental consent. The student should continue to receive grade level, evidence-based core reading instruction (Tier 1) and any other appropriate tiered interventions while the school conducts the FIIE.

Parents/guardians always have the right to request a referral for a dyslexia evaluation at any time. Once a parent request for dyslexia evaluation has been made, the school district is obligated to review the student's data history (both formal and informal data) to determine whether there is reason to suspect the student has a disability. If a disability is suspected, the student needs to be evaluated following the guidelines outlined in this chapter. Under the IDEA, if the school refuses the request to evaluate, it must give parents prior written notice of refusal to evaluate, including an explanation of why the school refuses to conduct an FIIE, the information that was used as the basis for the decision, and a copy of the *Notice of Procedural Safeguards*. Should the parent disagree with the school's refusal to conduct an evaluation, the parent has the right to initiate dispute resolution options including; mediation, state complaints, and due process hearings. Additionally, the parent may request an Independent Educational Evaluation (IEE) at public expense. Should the parent believe that their child is eligible for Section 504 aids, accommodations, and services the parent may request an evaluation under Section 504.

Procedures for Evaluation

As discussed in Chapter 2, Child Find is a provision in the federal Individuals with Disabilities Education Act (IDEA), a federal law that requires the state to have policies and procedures in place to ensure that every student in the state who needs special education and related services is located, identified, and evaluated. The purpose of the IDEA is to ensure that students with disabilities are offered a free and appropriate public education (20 U.S.C. §1400(d); 34 C.F.R. §300.1). Because a student suspected of having dyslexia may be a student with a disability under the IDEA, the Child Find mandate includes these students. Therefore, when referring and evaluating students suspected of having dyslexia, LEAs must follow procedures for conducting a full individual and initial evaluation (FIIE) under the IDEA. For detailed information regarding Child Find see https://tea.texas.gov/sites/default/files/Technical%20Assistance%20-%20Child%20Find%20and%20Evaluation%20-%20June%202020%20Revised%28v5%29.pdf

As discussed in Chapter II, all public-school students are required to be screened for dyslexia while in kindergarten and grade 1. Additionally, students enrolling in public schools in Texas must be assessed for dyslexia and related disorders "at appropriate times" (TEC §38.003(a)). The appropriate time depends upon multiple factors including the student's reading performance; reading difficulties; poor response to supplemental, scientifically-based reading instruction; teachers' input; and input from parents/guardians. The appropriate time for assessing is early in a student's school career (19 TAC §74.28). Texas Education Code §28.006, Reading Diagnosis, requires assessment of reading development and comprehension for students in kindergarten, first grade, second grade, and as applicable, seventh grade. While earlier is better, students should be recommended for evaluation for dyslexia even if the reading difficulties appear later in a student's school career.

While schools must follow federal and state guidelines, they must also develop local procedures that address the needs of their student populations. Schools must recommend evaluation for dyslexia if the student demonstrates the following:

- Poor performance in one or more areas of reading and spelling that is unexpected for the student's age/grade
- Characteristics and risk factors of dyslexia indicated in Chapter I: Definitions & Characteristics of Dyslexia

1. Data Gathering

Schools collect data on all students to ensure that instruction is appropriate and scientifically based. Essential components of comprehensive literacy instruction are defined in Section 2221(b) of ESSA as explicit, systematic, and intentional instruction in the following:

- Phonological awareness
- Phonic coding
- Vocabulary
- Language structure
- Reading fluency
- Reading comprehension

When evaluating a student for dyslexia, the collection of various data, as indicated in Figure 3.2 below, will provide information regarding factors that may be contributing to or primary to the student's struggles with reading and spelling.

Cumulative Data

The academic history of each student will provide the school with the cumulative data needed to ensure that underachievement in a student suspected of having dyslexia is not due to lack of appropriate instruction in reading. This information should include data that demonstrate that the student was provided appropriate instruction and include data-based documentation of repeated evaluations of achievement at reasonable intervals (progress monitoring), reflecting formal evaluation of student progress during instruction. These cumulative data also include information from parents/guardians. Sources and examples of cumulative data are provided in Figure 3.2.

Figure 3.2. Sources and Examples of Cumulative Data

- Vision screening
- Hearing screening
- Teacher reports of classroom concerns
- Classroom reading assessments
- Accommodations or interventions provided
- Academic progress reports (report cards)
- Gifted/talented assessments
- Samples of schoolwork
- Parent conference notes
- Results of kindergarten-grade 1 universal screening as required in TEC §38.003
- K–2 reading instrument results as required in TEC §28.006 (English and native language, if possible)
- 7th-grade reading instrument results as required in TEC §28.006
- State student assessment program results as described in TEC §39.022
- Observations of instruction provided to the student
- Previous evaluations
- Outside evaluations
- Speech and language assessment
- School attendance
- Curriculum-based assessment measures
- Instructional strategies provided and student's response to the instruction
- Screening data
- Parent survey

Environmental and Socioeconomic Factors

Information regarding a child's early literacy experiences, environmental factors, and socioeconomic status must be part of the data collected throughout the data gathering process. These data support the determination that difficulties in learning are not due to cultural factors or environmental or economic disadvantage. Studies that have examined language development and the effects of home experiences on young children indicate that home experiences and socioeconomic status have dramatic effects on cumulative vocabulary development (Hart & Risley, 1995). Having data related to these factors may help in determining whether the student's struggles with reading are due to a lack of opportunity or a reading disability, including dyslexia.

Language Proficiency

Much diversity exists among ELs. A student's language proficiency may be impacted by any of the following: native language, English exposure, parent education, socioeconomic status of the family, amount of time in the United States, experience with formal schooling, immigration status, community demographics, and ethnic heritage (Bailey, Heritage, Butler, & Walqui, 2000). ELs may be students served in bilingual and English as a second language (ESL) programs as well as students designated Limited English Proficient (LEP) whose parents have denied services. In addition to the information discussed in the previous section of this chapter, the Language Proficiency Assessment Committee (LPAC) maintains documentation (TAC §89.1220(g)-(i)) that is necessary to consider when identifying ELs with dyslexia. The LPAC is required to meet annually to review student placement and progress and consider instructional accommodations and interventions to address the student's linguistic needs. Since the identification and service delivery process for dyslexia must be aligned to the student's linguistic environment and educational background, involvement of the LPAC is required. Additional data sources for ELs are provided below in Figure 3.3.

Figure 3.3. Additional Data Sources for English Learners

- Home Language Survey
- Assessment related to identification for limited English proficiency (oral language proficiency test and norm-referenced tests—all years available)
- Texas English Language Proficiency Assessment System (TELPAS) information for four language domains (listening, speaking, reading, and writing)
- Instructional interventions provided to address language needs
- Information regarding previous schooling inside and/or outside the United States
- Type of language program model provided and language of instruction

Formal Evaluation

A formal evaluation is not a screening; rather, it is an individualized evaluation used to gather specific data about the student. Formal evaluation includes both formal and informal data. All data will be used to determine whether the student demonstrates a pattern of evidence that indicates dyslexia. Information collected from the parents/guardians also provides valuable insight into the student's early years of language development. This history may help explain why students come to the evaluation with many different strengths and weaknesses; therefore, findings from the formal evaluation will be different for each child. Professionals conducting evaluations for the identification of dyslexia will need to look beyond scores on standardized assessments alone and examine the student's classroom reading performance, educational history, early language experiences, and, when warranted, academic potential to assist with determining reading, spelling, and writing abilities and difficulties. As part of the evaluation when dyslexia is suspected, in addition to the parent and team of qualified professionals required under IDEA, it is recommended that the multi-disciplinary evaluation team include members who have specific knowledge regarding-

- the reading process,
- dyslexia and related disorders, and
- dyslexia instruction.

Notification and Permission

When formal evaluation is recommended, the school must complete the evaluation process as outlined in the IDEA. Procedural safeguards under IDEA must be followed. For more information on procedural safeguards, see TEA's Parent Guide to the Admission, Review, and Dismissal Process (Parent's Guide) and the Notice of Procedural Safeguards.

Tests and Other Evaluation Materials

Test instruments and other evaluation materials must meet the following criteria:

- Used for the purpose for which the evaluation or measures are valid or reliable
- Include material(s) tailored to assess specific areas of educational need and not merely material(s) that are designed to provide a single, general intelligence quotient
- Selected and administered to ensure that when a test is given to a student with impaired sensory, manual, or speaking skills, the test results accurately reflect the student's aptitude, achievement level, or whatever other factor the test purports to measure rather than reflecting the student's impaired sensory, manual, or speaking skills
- Selected and administered in a manner that is not racially or culturally discriminatory
- Include multiple measures of a student's reading abilities such as informal assessment information (e.g., anecdotal records, district universal screenings, progress monitoring data, criterion-referenced evaluations, results of informal reading inventories, classroom observations)
- Administered by trained personnel and in conformance with the instructions provided by the producer of the evaluation materials
- Provided and administered in the student's native language or other mode of communication and in the form most likely to yield accurate information regarding what the child can do academically, developmentally, and functionally unless it is clearly not feasible to provide or administer

Additional Considerations for English Learners

A professional involved in the evaluation, interpretation of evaluation results, and identification of ELs with dyslexia must have the following training/knowledge:

- Knowledge of first and second language acquisition theory
- Knowledge of the written system of the first language: transparent (e.g., Spanish, Italian, German), syllabic (e.g., Japanese-kana), Semitic (e.g., Arabic, Hebrew), and morphosyllabic (e.g., Chinese-Kanji)
- Knowledge of the student's literacy skills in native and second languages
- Knowledge of how to interpret results from a cross-linguistic perspective
- Knowledge of how to interpret TELPAS (Texas English Language Proficiency Assessment System) results
- Knowledge of how to interpret the results of the student's oral language proficiency in two or more languages in relation to the results of the tests measuring academic achievement and cognitive processes as well as academic data gathered and economic and socioeconomic factors

Although data from previous formal testing of the student's oral language proficiency may be available, as required by TEC §29.056, additional assessment of oral language proficiency should be completed for a dyslexia evaluation due to the importance of the information for—

- consideration in relation to academic challenges,
- planning the evaluation, and
- interpreting evaluation results.

If there is not a test in the native language of the student, informal measures of evaluation such as reading a list of words and listening comprehension in the native language may be used.

Domains to Assess Specific to Dyslexia

Academic Skills

The school administers measures that are related to the student's educational needs. Difficulties in the areas of letter knowledge, word decoding, and fluency (rate, accuracy, and prosody) may be evident depending upon the student's age and stage of reading development. In addition, many students with dyslexia may have difficulty with reading comprehension and written composition.

Cognitive Processes

Difficulties in phonological and phonemic awareness are typically seen in students with dyslexia and impact a student's ability to learn letters and the sounds associated with letters, learn the alphabetic principle, decode words, and spell accurately. Rapid naming skills may or may not be weak, but if deficient, they are often associated with difficulties in automatically naming letters, reading words fluently, and reading connected text at an appropriate rate. Memory for letter patterns, letter sequences, and the letters in whole words (orthographic processing) may be selectively impaired or may coexist with phonological processing weaknesses. Finally, various language processes, such as morpheme and syntax awareness, memory and retrieval of verbal labels, and the ability to formulate ideas into grammatical sentences, may also be factors affecting reading (Berninger & Wolf, 2009, pp. 134–135).

Based on the student's academic difficulties, characteristics, and/or language acquisition, additional areas related to vocabulary, listening comprehension, oral language proficiency, written expression, and other cognitive abilities may need to be assessed. Areas for evaluation are provided below in Figure 3.4.

Figure 3.4. Areas for Evaluation

Academic Skills	Cognitive Processes	Possible Additional Areas
• Letter knowledge (name and associated sound) • Reading words in isolation • Decoding unfamiliar words accurately • Reading fluency (rate, accuracy, and prosody are assessed) • Reading comprehension • Spelling	• Phonological/phonemic awareness • Rapid naming of symbols or objects	• Vocabulary • Listening comprehension • Verbal expression • Written expression • Handwriting • Memory for letter or symbol sequences (orthographic processing) • Mathematical calculation/reasoning • Phonological memory • Verbal working memory • Processing speed

Review and Interpretation of Data and Evaluations

To appropriately **understand** evaluation data, the ARD committee must **interpret** test results in light of the student's educational history, linguistic background, environmental or socioeconomic factors, and any other pertinent factors that affect learning. When considering the condition of dyslexia, in addition to required ARD committee members, the committee should also include members who have specific knowledge regarding—

- the reading process,
- dyslexia and related disorders, and
- dyslexia instruction.

A determination must first be made regarding whether a student's difficulties in the areas of reading and spelling reflect a pattern of evidence for the primary characteristics of dyslexia with unexpectedly low performance for the student's age and educational level in **some or all** of the following areas:

- Reading words in isolation
- Decoding unfamiliar words accurately and automatically
- Reading fluency for connected text (rate and/or accuracy and/or prosody)
- Spelling (an isolated difficulty in spelling would not be sufficient to identify dyslexia)

Another factor to consider when interpreting test results is the student's linguistic background. The nature of the writing system of a language impacts the reading process. Thus, the identification guideposts of dyslexia in languages other than English may differ. For example, decoding in a language with a transparent written language (e.g., Spanish, German) may not be as decisive an indicator of dyslexia as reading rate. A transparent written language has a close letter/sound correspondence (Joshi & Aaron, 2006). Students with

dyslexia who have or who are being taught to read and write a transparent language may be able to decode real and nonwords adequately but demonstrate serious difficulties in reading rate with concurrent deficiencies in phonological awareness and rapid automatized naming (RAN).

Figure 3.5. Dyslexia in Transparent and Opaque Orthographies	
Opaque	Transparent
Early and marked difficulty with word-level reading Fluency and comprehension often improve once decoding is mastered	Less difficulty with word-level reading More difficulty with fluency and comprehension

Figure 3.6. Characteristics of Dyslexia in English and Spanish	
English	**Spanish**
Phonological awareness Rapid naming Regular/irregular decoding Fluency Spelling	Phonological awareness—may be less pronounced Rapid naming Decoding—fewer "irregular words" in Spanish Fluency—often a key indicator Spelling—may show fewer errors than in English, but still more than students that do not have dyslexia
Reading comprehension may be a weakness in both English and Spanish.	

Findings support guidance in the interpretation of phonological awareness test scores.

> *There is evidence that blending skills develop sooner than analysis skills, and that students can have good blending skills and inadequate reading development. Only when both blending and analysis skills are mastered do we see benefits for reading development.*
>
> —Kilpatrick, D.A. *Essentials of Assessing, Preventing, and Overcoming Reading Difficulties*, 2015

With this in mind, when determining phonological awareness deficits, evaluation personnel should examine subtest scores, including discreet phonological awareness skills, instead of limiting interpretation to composite scores since a deficit in even one skill will limit reading progress.

Based on the above information and guidelines, should the ARD committee determine that the student exhibits weaknesses in reading and spelling, the committee will then examine the student's data to determine whether these difficulties are **unexpected** in relation to the student's other abilities, sociocultural factors, language difference, irregular attendance, or lack of appropriate and effective instruction. For example, the student may exhibit strengths in areas such as reading comprehension, listening comprehension, math reasoning, or verbal ability yet still have difficulty with reading and spelling. **Therefore, it is not one single indicator but a preponderance of data (both informal and formal) that provide the committee with evidence for whether these difficulties are unexpected.**

Dyslexia Identification

If the student's difficulties are unexpected in relation to other abilities, the ARD committee must then determine if the student has dyslexia. For ELs, an LPAC representative must be included on the ARD committee. The list of questions in Figure 3.7 below must be considered when making a determination regarding dyslexia.

Figure 3.7. Questions to Determine the Identification of Dyslexia

- Do the data show the following characteristics of dyslexia?
  - Difficulty with accurate and/or fluent word reading
  - Poor spelling skills
  - Poor decoding ability
- Do these difficulties (typically) result from a deficit in the phonological component of language?

  (Please be mindful that average phonological scores alone do not rule out dyslexia.)
- Are these difficulties **unexpected** for the student's age in relation to the student's other abilities and provision of effective classroom instruction?

If, through the evaluation process, it is established that the student has the condition of dyslexia, as described in Chapter 1, then the student meets the first prong of eligibility under the IDEA (identification of condition). In other words, the identification of dyslexia, using the process outlined in this chapter, meets the criterion for the condition of a specific learning disability in basic reading and/or reading fluency. However, the presence of a disability condition alone, is not sufficient to determine if the student is a student with a disability under the IDEA. Eligibility under the IDEA consists of both identification of the condition and a corresponding need for specially designed instruction as a result of the disability.

In IDEA, dyslexia is considered one of a variety of etiological foundations for specific learning disability (SLD). Section 34 C.F.R. §300.8(c)(10) states the following:

> *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 to do mathematical calculations, including conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia.*

The term *SLD* does not apply to children who have learning difficulties that are primarily the result of visual, hearing, or motor disabilities; of intellectual disability; of emotional disturbance; or of environmental, cultural, or economic disadvantage.

The IDEA evaluation requirements for SLD eligibility in 34 C.F.R. §300.309(a)(1) specifically designate the following areas for a learning disability in reading: basic reading skills (dyslexia), reading fluency skills, and/or reading comprehension.

The October 23, 2015 letter from the Office of Special Education and Rehabilitative Services (OSERS) (Dear Colleague: Dyslexia Guidance) states that dyslexia, dyscalculia, and dysgraphia are conditions that could qualify a child as a child with a specific learning disability under the IDEA. The letter further states that there is nothing in the IDEA that would prohibit the use of the terms *dyslexia*, *dyscalculia*, and *dysgraphia* in the IDEA evaluation, eligibility determinations, or IEP documents. For more information, please visit https://www2.ed.gov/policy/speced/guid/idea/memosdcltrs/guidance-on-dyslexia-10-2015.pdf.

A 2018 Letter to the Administrator Addressed from the Texas Education Agency regarding the provision of services for students with dyslexia and related disorders states that any time it is suspected that a student requires special education or related services to provide appropriate reading supports and interventions, a referral for an FIIE should be initiated. The letter further states that all students who are identified with dyslexia or a related disorder *and* who require special education services because of dyslexia or a related disorder are eligible under the IDEA for special education and related services as students with a specific learning disability. For more information, please visit https://tea.texas.gov/About_TEA/News_and_Multimedia/Correspondence/TAA_Letters/Provision_of_Services_for_Students_with_Dyslexia_and_Related_Disorders_-_Revised_June_6,_2018/

Once the condition of dyslexia has been identified, a determination must be made regarding the most appropriate way to serve the student. If a student with dyslexia is found eligible for special education (i.e., student requires specially designed instruction), the student's IEP must include appropriate reading instruction. Appropriate reading instruction includes the components and delivery of dyslexia instruction discussed in Chapter IV: Critical, Evidence-Based Components of Dyslexia Instruction. If a student has previously met special education eligibility and is later identified with dyslexia, the ARD committee should include in the IEP goals that reflect the need for dyslexia instruction and determine the least restrictive environment for delivering the student's dyslexia instruction.

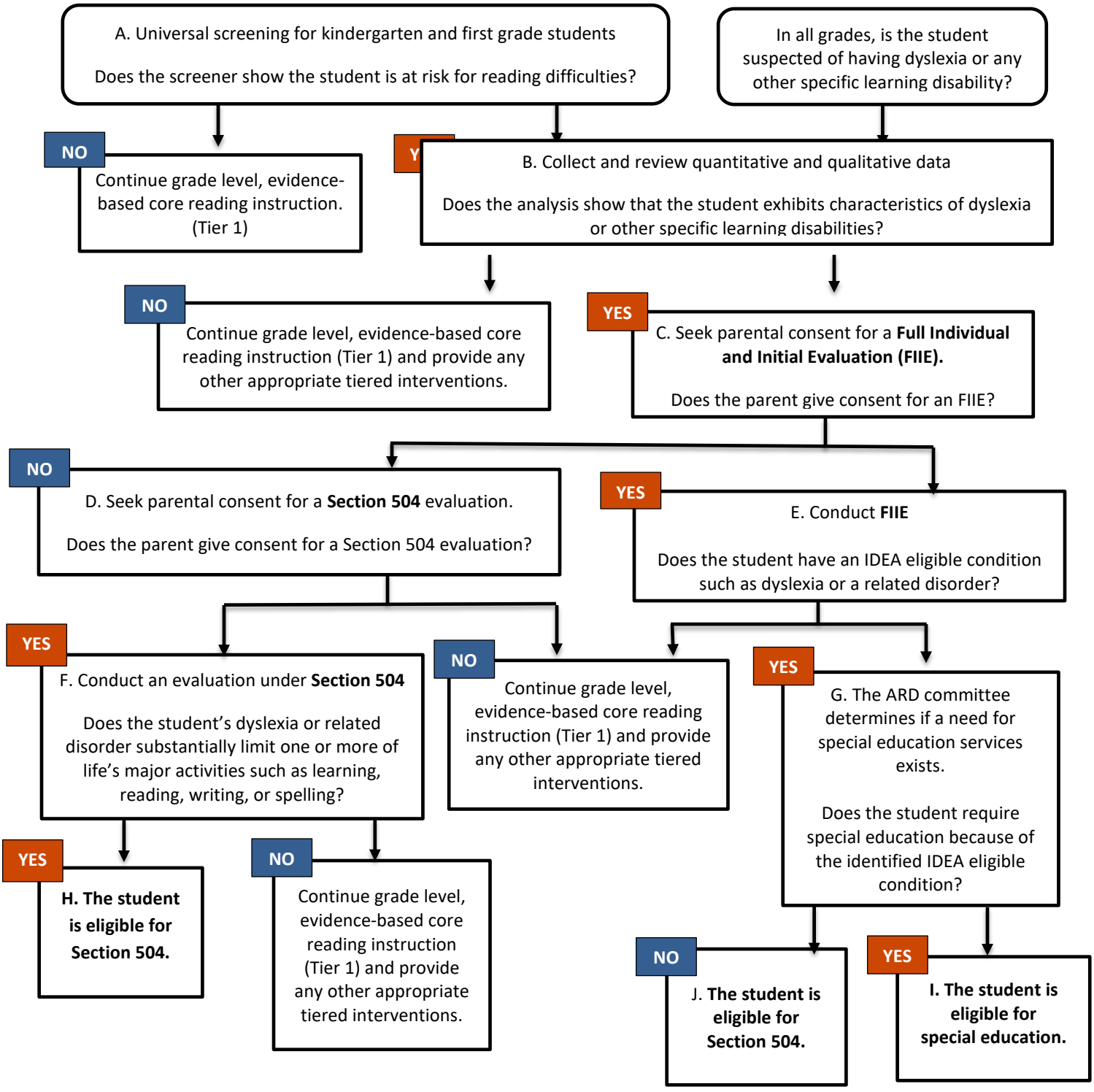
If—based on the data—the student is identified with dyslexia, but is not eligible for special education, the student may receive dyslexia instruction and accommodations under Section 504.

A student who is found not eligible under the IDEA, but who is identified with the condition of dyslexia through the FIIE process should not be referred for a second evaluation under Section 504. Instead, the Section 504 committee will use the FIIE and develop an appropriate plan for the student without delay.

For students eligible for Section 504, a Section 504 committee will develop the student's Section 504 Plan, which must include appropriate reading instruction to meet the individual needs of the student. Appropriate reading instruction includes the components and delivery of standard protocol dyslexia instruction identified in Chapter IV: Critical, Evidence-Based Components of Dyslexia Instruction. Revision of the Section 504 Plan will occur as the student's response to instruction and to the use of accommodations, if any, is observed. Changes in instruction and/or accommodations must be supported by current data (e.g., classroom performance and dyslexia program monitoring).

Figure 3.8

Pathways for the Identification and Provision of Instruction for Students with Dyslexia



*See next page for additional detail.

Pathway to the Identification and Provision of Instruction for Students with Dyslexia

A. Universal Screening for reading and dyslexia is administered to all students in kindergarten and first grade as required by TEC §28.006 and §38.003(a).
B. If a student is at risk for reading difficulties or the student is suspected of having dyslexia or any other specific learning disability, collect and review quantitative and qualitative data on the student. See Figures 2.3 and 2.4 in Dyslexia Handbook for more information.
C. If the analysis shows that the student exhibits characteristics of dyslexia or other specific learning disabilities, seek parental consent for a Full Individual and Initial Evaluation (FIIE), while continuing to provide grade level, evidence-based core reading instruction (Tier 1) and providing appropriate tiered interventions.

D. For students suspected of having dyslexia, if the parent does not give consent for an FIIE, seek parental consent for a Section 504 evaluation, while continuing to provide grade level, evidence-based core reading instruction (Tier 1) and providing appropriate tiered interventions.	**E.** If the parent gives consent for an FIIE, conduct the FIIE within 45 school days (subject to limited exceptions) of the date of receipt of parent consent, while continuing to provide grade level, evidence-based core reading instruction (Tier 1) and providing appropriate tiered interventions. The ARD committee (including the parent) must meet to review the results of the FIIE.
F. If the parent gives consent for a Section 504 evaluation, conduct an evaluation under Section 504 while continuing to provide grade level, evidence-based core reading instruction (Tier 1) and providing appropriate tiered interventions.	**G.** If a student has an IDEA eligible condition such as dyslexia or a related disorder, the ARD committee determines if a need for special education services exists.
H. If the student's dyslexia or related disorder substantially limits one or more of life's major activities such as learning, reading, writing, or spelling, the student is eligible for Section 504, the 504 committee (parent participation is recommended) develops a Section 504 plan for the student to provide services including standard protocol dyslexia instruction, accommodations, and/or related aids specific to the student's disability.	**I.** If the student requires special education because of the identified IDEA eligible condition, the student is eligible for special education. The ARD committee develops the IEP for the student to receive specially designed instruction which can include **any appropriate special education and related services, and general education programs and services**, including standard protocol dyslexia instruction. While an IEP is individualized to the student, the IEP should address critical, evidence-based components of dyslexia instruction such as phonological awareness, sound-symbol association, syllabication, orthography, morphology, syntax, reading comprehension, and reading fluency. The determination of eligibility and the development of an IEP, if the student is eligible, must be done within 30 days (subject to limited exceptions) from the date that the written FIIE evaluation report is completed. Obtain parental consent for special education services.
	J. If the parent declines, the LEA must still provide all general education services including any protections available under Section 504.

Reevaluation for Dyslexia Identification and Accommodations

> *Dyslexia is a lifelong condition. However, with proper help, many people with dyslexia can learn to read and write well. Early identification and treatment is the key to helping individuals with dyslexia achieve in school and in life.*
>
> —The International Dyslexia Association
> http://www.interdys.org/ewebeditpro5/upload/DyslexiaBasicsREVMay2012.pdf

There are many initiatives, programs, evaluations, and data available for use in identification, placement, and program planning for students, including ELs, who struggle with dyslexia. Evaluation and ongoing progress monitoring are key components that must be considered by trained personnel.

A 2014 U.S. Department of Justice technical assistance document summarized regulations regarding testing accommodations for individuals with disabilities as follows.

> *The Americans with Disabilities Act (ADA) ensures that individuals with disabilities have the opportunity to fairly compete for and pursue such opportunities by requiring testing entities to offer exams in a manner accessible to persons with disabilities. When needed testing accommodations are provided, test-takers can demonstrate their true aptitude.*

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IV. Critical, Evidence-Based Components of Dyslexia Instruction

> *Although dyslexia affects individuals over the life span . . . reading skills can be increased with the right early intervention and prevention programs . . . It is clear from the consensus of scientifically based reading research that the nature of the educational intervention for individuals with reading disabilities and dyslexia is critical.* (pp. 21–22)
>
> — Birsh, J. R. Connecting Research and Practice, 2018

Effective literacy instruction is essential for all students and is especially critical for students identified with dyslexia. High-quality core classroom reading instruction can give students identified with dyslexia a foundation upon which intervention instruction can have a more significant impact.

Texas Education Code §38.003(b) states, "in accordance with the program approved by the State Board of Education, the board of trustees of each school district shall provide for the treatment of any student determined to have dyslexia or a related disorder." SBOE rules in 19 TAC §74.28 require that each school must provide an identified student access at his/her campus to an instructional program that meets the requirements in SBOE rule and to the services of a teacher trained in dyslexia and related disorders. While the components of instruction for students with dyslexia include good teaching principles for all teachers, the explicitness and intensity of the instruction, fidelity to program descriptors, grouping formats, and training and skill of the teachers are wholly different from core classroom instruction and must be considered when making individual placement decisions.

Standard Protocol Dyslexia Instruction

For the student who has not benefited from the research-based core reading instruction, the components of instruction will include additional focused intervention as appropriate for the reading needs of the student with dyslexia. Standard protocol dyslexia instruction provides evidence-based, multisensory structured literacy instruction for students with dyslexia. A standard protocol dyslexia instructional program must be explicit, systematic, and intentional in its approach. This instruction is designed for all students with dyslexia and will often take place in a small group setting. Standard protocol dyslexia instruction must be—

- evidence-based and effective for students with dyslexia;
- taught by an appropriately trained instructor; and
- implemented with fidelity.

Instructional decisions for a student with dyslexia must be made by a committee (Section 504 or ARD) that is knowledgeable about the instructional components and approaches for students with dyslexia. It is important to remember that while dyslexia instruction is most successful when provided as early as possible, older children with reading disabilities will also benefit from focused and intensive remedial instruction.

In accordance with 19 TAC §74.28(e), districts must purchase or develop an evidence-based reading program for students with dyslexia and related disorders that incorporates **all** the components of instruction and instructional approaches described in the sections below. As is the case with any instructional program,

differentiation that does not compromise the fidelity of a program may be necessary to address different learning styles and ability levels and to promote progress among students receiving dyslexia instruction. While districts and charter schools must implement an evidence-based instructional program for students with dyslexia that meets each of the components described in this chapter, standard protocol dyslexia instruction provided to students may focus on components of the program that best meet the student's needs. For example, this may occur when a student with dyslexia who has participated in standard protocol dyslexia instruction in the past, but continues to need remediation in some, but not all of, the components (e.g. fluency, written expression).

Specially Designed Instruction

For students with dyslexia who have been determined eligible for and who are receiving special education services, specially designed instruction must also address the critical, evidence-based components described in this chapter. Specially designed instruction differs from standard protocol dyslexia instruction in that it offers a more individualized program specifically designed to meet a student's unique needs. Note that participation in standard protocol dyslexia instruction must be considered for all students, including those receiving dyslexia instruction under the IDEA. Standard protocol dyslexia instruction could be part of the specially designed instruction and services provided to meet the student's needs.

Critical, Evidence-Based Components of Dyslexia Instruction

- **Phonological awareness**—"Phonological awareness is the understanding of the internal sound structure of words. A phoneme is the smallest unit of sound in a given language that can be recognized as being distinct from other sounds. An important aspect of phonological awareness is the ability to segment spoken words into their component phonemes [phonemic awareness]." (Birsh, 2018, p. 26).

- **Sound-symbol association**—Sound-symbol association is the knowledge of the various speech sounds in any language to the corresponding letter or letter combinations that represent those speech sounds. The mastery of sound-symbol association (alphabetic principle) is the foundation for the ability to read (decode) and spell (encode) (Birsh, 2018, p. 26). "Explicit phonics refers to an organized program in which these sound symbol correspondences are taught systematically" (Berninger & Wolf, 2009, p. 53).

- **Syllabication**—"A syllable is a unit of oral or written language with one vowel sound. Instruction must include the six basic types of syllables in the English language; closed, open, vowel-consonant-e, r-controlled, vowel pair (or vowel team), and final stable syllable. Syllable division rules must be directly taught in relation to the word structure" (Birsh, 2018, p. 26).

- **Orthography**—Orthography is the written spelling patterns and rules in a given language. Students must be taught the regularity and irregularity of the orthographic patterns of a language in an explicit and systematic manner. The instruction should be integrated with phonology and sound-symbol knowledge.

- **Morphology**—"Morphology is the study of how morphemes are combined to form words. A morpheme is the smallest unit of meaning in the language" (Birsh, 2018, p. 26).

- **Syntax**—"Syntax is the set of principles that dictate sequence and function of words in a sentence in

order to convey meaning. This includes grammar, sentence variation, and the mechanics of language" (Birsh, 2018, p. 26).

- **Reading comprehension**—Reading comprehension is the process of extracting and constructing meaning through the interaction of the reader with the text to be comprehended and the specific purpose for reading. The reader's skill in reading comprehension depends upon the development of accurate and fluent word recognition, oral language development (especially vocabulary and listening comprehension), background knowledge, use of appropriate strategies to enhance comprehension and repair it if it breaks down, and the reader's interest in what he or she is reading and motivation to comprehend its meaning (Birsh, 2018, p.14; Snow, 2002).

- **Reading fluency**—"Reading fluency is the ability to read text with sufficient speed and accuracy to support comprehension"(Moats & Dakin, 2008, p. 52). Fluency also includes prosody. Teachers can help promote fluency with several interventions that have proven successful in helping students with fluency (e.g., repeated readings, word lists, and choral reading of passages) (Henry, 2010, p. 104).

In addition, other areas of language processing skills, such as written expression, which require integration of skills, are often a struggle for students with dyslexia. Moats and Dakin (2008) posit the following:

> *The ability to compose and transcribe conventional English with accuracy, fluency, and clarity of expression is known as basic writing skills. Writing is dependent on many language skills and processes and is often even more problematic for children than reading. Writing is a language discipline with many component skills that must be directly taught. Because writing demands using different skills at the same time, such as generating language, spelling, handwriting, and using capitalization and punctuation, it puts a significant demand on working memory and attention. Thus, a student may demonstrate mastery of these individual skills, but when asked to integrate them all at once, mastery of an individual skill, such as handwriting, often deteriorates. To write on demand, a student has to have mastered, to the point of being automatic, each skill involved* (p. 55).

Both the teacher of dyslexia and the regular classroom teacher should provide multiple opportunities to support intervention and to strengthen these skills; therefore, responsibility for teaching reading and writing must be shared by classroom teachers, reading specialists, interventionists, and teachers of dyslexia programs.

Delivery of Dyslexia Instruction

While it is necessary that students are provided instruction in the above content, it is also critical that the way in which the content is delivered be consistent with research-based practices. Principles of effective intervention for students with dyslexia include **all** of the following:

- **Simultaneous, multisensory (VAKT)**—"Teaching is done using all learning pathways in the brain (visual, auditory, kinesthetic, tactile) simultaneously in order to enhance memory and learning" (Birsh, 2018, p. 26). "Children are actively engaged in learning language concepts and other information, often by using their hands, arms, mouths, eyes, and whole bodies while learning" (Moats & Dakin, 2008, p. 58).

- **Systematic and cumulative**—"Multisensory language instruction requires that the organization of material follow order of the language. The sequence must begin with the easiest concepts and most basic elements and progress methodically to more difficult material. Each step must also be based on [elements] already learned. Concepts taught must be systematically reviewed to strengthen memory" (Birsh, 2018, p. 26)**.**

- **Explicit instruction**—"Explicit instruction is explained and demonstrated by the teacher one language and print concept at a time, rather than left to discovery through incidental encounters with information. Poor readers do not learn that print represents speech simply from exposure to books or print" (Moats & Dakin, 2008, p. 58). Explicit Instruction is "an approach that involves direct instruction: The teacher demonstrates the task and provides guided practice with immediate corrective feedback before the student attempts the task independently" (Mather & Wendling, 2012, p. 326).

- **Diagnostic teaching to automaticity**—"The teacher must be adept at prescriptive or individualized teaching. The teaching plan is based on careful and [continual] assessment of the individual's needs. The content presented must be mastered to the degree of automaticity" (Birsh, 2018, p. 27). "This teacher knowledge is essential for guiding the content and emphasis of instruction for the individual student"(Moats & Dakin, 2008, p. 58). "When a reading skill becomes automatic (direct access without conscious awareness), it is performed quickly in an efficient manner" (Berninger & Wolf, 2009, p. 70).

- **Synthetic instruction**—"Synthetic instruction presents the parts of the language and then teaches how the parts work together to form a whole" (Birsh, 2018, p. 27).

- **Analytic instruction**—"Analytic instruction presents the whole and teaches how this can be broken into its component parts" (Birsh, 2018, p. 27).

As appropriate intervention is provided, students with dyslexia make significant gains in reading. Effective instruction is highly-structured, systematic, and explicit, and it lasts for sufficient duration. With regard to explicit instruction, Torgesen (2004) states, "Explicit instruction is instruction that does not leave anything to chance and does not make assumptions about skills and knowledge that children will acquire on their own" (p. 353).

In addition, because effective intervention requires highly structured and systematic delivery, it is critical that those who provide intervention for students with dyslexia be trained in the program used and that the program is implemented with fidelity.

Sources for Critical, Evidence-Based Components and Delivery of Dyslexia Instruction

Berninger, V. W., & Wolf, B. (2009). *Teaching students with dyslexia and dysgraphia: Lessons from teaching and science.* Baltimore, MD: Paul H. Brookes Publishing.

Birsh, J. R. (2018). Connecting research and practice. In J. R. Birsh, *Multisensory teaching of basic language skills* (4th ed., pp21–34). Baltimore, MD: Paul H. Brookes Publishing.

Henry, M. K. (2010). *Unlocking literacy: Effective decoding and spelling instruction* (2nd ed.). Baltimore, MD: Paul H. Brookes Publishing.

The International Multisensory Structured Language Council. (2013). *Multisensory structured language programs: Content and principles of instruction*. Retrieved from https://www.imslec.org/directory.asp?action=instruction.

Mather, N., & Wendling, B. J. (2012). *Essentials of dyslexia assessment and intervention*. Hoboken, NJ: John Wiley & Sons.

Moats, L. C, & Dakin, K. E. (2008). *Basic facts about dyslexia and other reading problems.* Baltimore, MD: The International Dyslexia Association.

Providers of Dyslexia Instruction

In order to provide effective intervention, school districts are encouraged to employ highly trained individuals to deliver dyslexia instruction. Teachers, such as reading specialists, master reading teachers, general education classroom teachers, or special education teachers, who provide dyslexia intervention for students are not required to hold a specific license or certification. However, these educators must at a minimum have additional documented dyslexia training aligned to 19 TAC §74.28(c) and must deliver the instruction with fidelity. This includes training in critical, evidence-based components of dyslexia instruction such as phonological awareness, sound-symbol association, syllabication, orthography, morphology, syntax, reading comprehension, and reading fluency. In addition, they must deliver multisensory instruction that simultaneously uses all learning pathways to the brain, is systematic and cumulative, is explicitly taught, uses diagnostic teaching to automaticity, and includes both analytic and synthetic approaches. See pages 39 – 41 for a description of these components of instruction and delivery. A provider of dyslexia instruction does not have to be certified as a special educator when serving a student who also receives special education and related services if that provider is the most appropriate person to offer dyslexia instruction.

Although Texas does not have a certification requirement specific to teachers providing intervention to students with dyslexia, opportunities for those who provide dyslexia instruction to pursue a certification and/or license are available through several professional organizations as well as through the Texas Department of Licensing and Regulation. Certification and licensing options are outlined in Figure 4.1 below. More information concerning licensure in the State of Texas, may also be found in Texas Occupations Code, Chapter 403. (See Appendix C, State Laws and Rules Related to Dyslexia).

The effort to train professionals who work with students with dyslexia is also supported by The International Dyslexia Association (IDA) Position Statement: Dyslexia Treatment Programs (March, 2009), which states the following:

> *Professional practitioners, including teachers or therapists, should have had specific preparation in the prevention and remediation of language-based reading and writing difficulties. Teachers and therapists should be able to state and provide documentation of their credentials in the prevention and remediation of language-based reading and writing difficulties, including program-specific training recommended for the use of specific programs* (pp. 1–2).

Providers of dyslexia instruction must be prepared to use the techniques, tools, and strategies outlined in the previous sections of this chapter. They may also serve as trainers and consultants in dyslexia and related disorders for regular, remedial, and special education teachers.

Figure 4.1. Training Requirements for Educators Providing Dyslexia Services								
Dyslexia Certification/License	**Licensing Body**	**Degree Required**	**Training Program**	**Course Contact Hours**	**Practicum Hours**	**Direct Observations**	**Certification Exam**	**Continuing Education Requirement**
Educator certification* as appropriate	State Board for Educator Certification (SBEC)	Bachelors	Training which meets components of instruction and delivery	Varies with program	Varies with program	Varies with program	None	None
*Teachers, such as reading specialists, master reading teachers, general education classroom teachers, or special education teachers are not required to hold a specific license or certification to provide dyslexia intervention for students; however, they must at a minimum have additional documented dyslexia training aligned to 19 TAC §74.28(c) and must deliver the instruction with fidelity.								
Licensed Dyslexia Therapist (LDT)	Texas Department of Licensing and Regulation (TDLR)	Masters	IMSLEC Accredited or other MSLE Program	200	700	10	yes	20 hrs/2 yrs
Licensed Dyslexia Practitioner (LDP)	Texas Department of Licensing and Regulation (TDLR)	Bachelors	IMSLEC Accredited or other MSLE	45	60	5	yes	20 hrs/2 yrs
Certifed Academic Language Therapist (CALT)	Academic Language Therapy Association (ALTA)	Bachelors	IMSLEC Accredited or other MSLE	200	700	10	yes	10 hrs/1 yr
Certified Academic Language Practitioner (CALP)	Academic Language Therapy Association (ALTA)	Bachelors	IMSLEC Accredited or other MSLE Program	45	60	5	yes	10 hrs/1 yr
Certified Structured Literacy/Dyslexia Specialist	Center for Effective Reading Instruction (CERI)	Bachelors	IDA Accredited	135	30	3	yes	10 hrs/1 yr
Certified Structured Literacy/Dyslexia Interventionist	Center for Effective Reading Instruction (CERI)	Bachelors	IDA Accredited	90	30	3	yes	10 hrs/1 yr
Wilson Level II Certification/Therapist	Wilson Language Training	Bachelors	IDA Accredited	200	215	11+	yes	50 hrs/5 yrs
Wilson Level I Certification/Practitioner	Wilson Language Training	Bachelors	IDA Accredited	105	65	5+	yes	50 hrs/5 yrs
AOGPE Fellow Level	Academy of Orton-Gillingham Practitioners and Educators (AOGPE)	Masters	AOGPE	250	600	13	no	none
AOGPE Certified Level	Academy of Orton-Gillingham Practitioners and Educators (AOGPE)	Bachelors	AOGPE	160	300	10	no	none
AOGPE Associate Level	Academy of Orton-Gillingham Practitioners and Educators (AOGPE)	Bachelors	AOGPE	Option A - 60 Option B - 70	Option A - 100 1 to 1 hours Option B - 50 1 to 1 hours; & 50 group hours	10	no	none

Please note that certification and licensing requirements may change with time. For more complete and up-to-date information, contact the specific licensing body.

Professional Development Relative to Dyslexia for All Teachers

Research consistently confirms the impact that a knowledgeable teacher can have on the success or failure of even the best reading programs (Shaywitz, 2003). To ensure that teachers are knowledgeable about dyslexia, TEC §21.054(b) and 19 TAC §232.11(e) require educators who teach students with dyslexia to be

trained in new research and practices related to dyslexia as a part of their continuing professional education (CPE) hours.

http://www.statutes.legis.state.tx.us/Docs/ED/htm/ED.21.htm

http://ritter.tea.state.tx.us/sbecrules/tac/chapter232/ch232a.html#232.11

Educator Preparation Programs

According to TEC §21.044(b), all candidates completing an educator preparation program must receive instruction in detection and education of students with dyslexia. This legislation ensures that newly certified teachers will have knowledge of dyslexia prior to entering the classroom.

https://statutes.capitol.texas.gov/Docs/ED/htm/ED.21.htm#21.044

Instructional Intervention Consideration for English Learners with Dyslexia

English Learners (Els) receiving dyslexia services will have unique needs. Provision of dyslexia instruction should be in accordance with the program model the student is currently receiving (e.g., dual language, transitional bilingual, ESL). Interventionists working with ELs should have additional training on the specialized needs of ELs.

Learning to read, write, and spell in two languages can be facilitated by building on a student's native language knowledge and helping to transfer that knowledge to a second language. While direct, systematic instruction is still required for all aspects of reading, additional explicit instruction will be needed to address the similarities and differences in sounds, syllable structure, morphology, orthography, and syntax between the first and second languages.

For example, instructional considerations may include capitalizing on familiar sound-symbol correspondences. Direct and systematic instruction of the cross-linguistic correlations is beneficial for ELs. Instruction can subsequently include those sound-symbol correlations that partially overlap or present a slight variation from the native language to the second language. Unfamiliar phonemes and graphemes then can be presented to ELs. A systematic approach will enhance instruction and assist the bilingual student in transferring native language and literacy knowledge to second language and literacy acquisition.

For ELs learning to read in English and not in their native language, progress in reading may be hindered due to limited vocabulary in English. Therefore, in addition to all the components of effective instruction previously discussed, intervention for ELs also must emphasize oral language development (Cardenas-Hagan, 2018). Because the English language is derived from Anglo-Saxon, Latin, Greek, French, and other languages, ELs can expand their oral language and vocabulary knowledge by understanding the cognates (baseball/béisbol or leader/lider) that exist in their native language and English. The similarities of words in the native language and English must be explicitly taught.

It is also necessary to incorporate ESL strategies during the intervention process and in all content areas. In Texas, school districts are required to implement the English Language Proficiency Standards (ELPS) as an

integral part of each subject area in the required curriculum (TAC §74.4(a)). Dyslexia instruction for ELs must incorporate the ELPS. A few strategies to consider include the following:

- Establish routines so that ELs understand what is expected of them
- Provide native language support when giving directions or when students do not understand the task
- Provide opportunities for repetition and rehearsal so that the new information can be learned to mastery
- Adjust the rate of speech and the complexity of the language used according to the second language proficiency level of each student
- Provide extra time for the EL to process the English language. This is especially necessary during the early stages of second language development
- Provide extra time for the EL to formulate oral and written responses
- Emphasize text that includes familiar content and explain the structure of the text

Source for Instructional Intervention Consideration for English Learners (ELs) with Dyslexia

19 Texas Administrative Code §74.4, English Language Proficiency Standards. (2007).

Cardenas-Hagan, E. (2018). Language and literacy development among English language learners. In J. R. Birsh, *Multisensory teaching of basic language skills* (4th ed.) (pp. 720–754). Baltimore, MD: Paul H. Brookes Publishing.

Research-Based Best Practices

It is important to note that in Texas, the approach to teaching students with dyslexia is founded on research-based best practices. The ideas upon which the state's approach is based are summarized here.

- Gains in reading can be significant if students with reading problems are provided systematic, explicit, and intensive reading instruction of sufficient duration in phonemic awareness, phonics, fluency, vocabulary (e.g., the relationships among words and the relationships among word structure, origin, and meaning), reading comprehension strategies, and writing.
- A failure to learn to read impacts a person's life significantly. The key to preventing this failure for students with dyslexia is early identification and early intervention.
- Instruction by a highly skilled and knowledgeable educator who has specific preparation in the remediation of dyslexia is necessary.

It is vital to start evidence-based interventions as soon as possible. Effective treatments for dyslexia should consist of explicit academic teaching of reading and spelling skills.

The following research reflects the essential components of dyslexia instruction discussed above and may serve as additional sources of information for those working with students identified with dyslexia. The similarities between the state's approach and the research are noted in bold. Unless otherwise indicated, the following pages contain excerpts from the resources cited.

1. August and Shanahan (2006, pp. 3–5) state the following:
    - **Instruction that provides substantial coverage in the key components of reading—identified by the National Reading Panel (NICHD, 2000) as phonemic awareness, phonics, fluency, vocabulary, and text comprehension**—has clear benefits for language-minority students.
    - **Instruction in the key components of reading** is necessary—but not sufficient—for teaching language-minority students to read and write proficiently in English. Oral proficiency in English is critical as well, but student performance suggests that it is often overlooked in instruction.
    - Oral proficiency and literacy in the first language can be used to facilitate literacy development in English.

August, D., & Shanahan, T. (Eds.). (2006). *Executive summary: Developing literacy in second-language learners: Report of the National Literacy Panel on language-minority children and youth.* Mahwah, NJ: Lawrence Erlbaum.

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2. Berninger and Wolf (2009, p. 49–50) state the following:

    Until children are reading without effort, each reading lesson should consist of **teacher-directed, explicit, systematic instruction** in 1) phonological awareness; 2) applying phonics (alphabetic principle) and morphology to decoding; 3) applying background knowledge already learned to unfamiliar words or concepts in material to be read (activating prior knowledge); 4) both oral reading and silent reading, with appropriate instructional materials; 5) activities to develop oral reading fluency; and 6) reading comprehension.

Berninger, V. W., & Wolf, B. J. (2009). *Teaching students with dyslexia and dysgraphia: Lessons from teaching and science.* Baltimore, MD: Paul H. Brookes Publishing.

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3. Birsh (2018, p. 3) states the following:

    Teachers need to undergo extensive **preparation in the disciplines inherent in literacy**, which include the following:
    - Language development
    - **Phonology** and **phonemic awareness**
    - Alphabetic knowledge
    - Handwriting
    - **Decoding (reading)**
    - **Spelling (encoding)**
    - **Fluency**
    - **Vocabulary**
    - **Comprehension**
    - Composition

- Testing and assessment
- Lesson planning
- Behavior management
- Study skills
- History of the English language
- Technology
- Needs of older struggling students

Birsh, J. R. (2018). Connecting research and practice. In J. R. Birsh, *Multisensory teaching of basic language skills* (4th ed., pp. 2–34). Baltimore, MD: Paul H. Brookes Publishing.

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4. Clark and Uhry (2004, pp. 89–92) state the following:
    - Children with dyslexia need the following:
        - **Direct, intensive, and systematic** input from and interaction with the teacher
        - Immediate feedback from the teacher
        - Careful pacing of instruction
        - **Systematic** structured progression from the simple to the complex
    - Other components of instruction include the following:
        - Learning to mastery
        - Multisensory instruction

Clark, D., & Uhry, J. (Eds.). (2004). Dyslexia: Theory and practice of instruction (3rd ed.). Austin, TX: Pro-Ed.

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5. Henry (2010, p. 21) states the following:

> By teaching the concepts inherent in the word origin and word structure model across a decoding-spelling continuum from the early grades through at least eighth grade, and by using technology when it serves to reinforce these concepts, teachers ensure that students have strategies to decode and spell most words in the English language. This framework and continuum readily organize a large body of information for teachers and their students. Not only do students gain a better understanding of English word structure, but they also become better readers and spellers.

Henry, M. K. (2010). *Unlocking literacy: Effective decoding and spelling instruction* (2nd ed.). Baltimore, MD: Paul H. Brookes Publishing.

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6. Mather and Wendling (2012, p. 171) state the following:

   Individuals with dyslexia need to

   - understand how phonemes (sounds) are represented with graphemes (letters);
   - learn how to blend and segment phonemes to pronounce and spell words;
   - learn how to break words into smaller units, such as syllables, to make them easier to pronounce;
   - learn to recognize and spell common orthographic graphic patterns (e.g., -tion);
   - learn how to read and spell words with irregular elements (e.g., ocean); and
   - spend time engaged in meaningful reading and writing activities.

Mather, N. M., & Wendling, B. J. (2012). *Essentials of dyslexia assessment and intervention*. Hoboken, NJ: John Wiley & Sons.

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7. Moats (1999, pp. 7–8) states that

   Well designed, controlled comparisons of instructional approaches have consistently supported these components and practices in reading instruction:

   - **direct teaching** of decoding, comprehension, and literature appreciation;
   - **phoneme awareness** instruction;
   - **systematic and explicit instruction** in the code system of written English;
   - daily exposure to a variety of texts, as well as incentives for children to read independently and with others;
   - **vocabulary** instruction that includes a variety of complementary methods designed to explore the relationships among words and the relationships among word structure, origin, and meaning;
   - **comprehension** strategies that include prediction of outcomes, summarizing, clarification, questioning, and visualization; and
   - frequent **writing** of prose to enable a deeper understanding of what is read.

Moats, L. C. (1999). *Teaching reading is rocket science: What expert teachers of reading should know and be able to do* (Item No. 39-0372). Washington, DC: American Federation of Teachers.

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8. Moats (1999, pp. 7– 20) states the following:

   The **knowledge and skills needed to teach reading** include the following:

   - The psychology of reading and reading development
     - Basic facts about reading
     - Characteristics of poor and novice readers
     - Environmental and physiological factors in reading development
     - How reading and spelling develop

- Knowledge of the language structure
    - **Phonology**
    - **Phonetics**
    - **Morphology**
    - **Orthography**
    - **Semantics**
    - **Syntax and text structure**
- Practical skills of instruction—use of validated instructional practices
- Assessment of classroom reading and writing skills

Moats, L. C. (1999). *Teaching reading is rocket science: What expert teachers of reading should know and be able to do* (Item No. 39-0372). Washington, DC: American Federation of Teachers.

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9. The National Reading Panel's (2000) *Report of the National Reading Panel* highlights the following:

    Emphasis is placed on the importance of **identifying early** which children are at risk for reading failure and **intervening quickly** to help them.

    How reading is taught matters—reading instruction is most effective when it is taught **comprehensively, systematically, and explicitly**.

National Reading Panel. (2000). *Report of the National Reading Panel: Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction.* Washington, DC: National Institute of Child Health and Human Development.

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10. Shaywitz (2005, pp. 257–262) outlines the following essentials for a successful reading intervention and effective early intervention program:

    Essentials of a successful reading intervention include the following:

    - **Early intervention**—The best intervention begins in kindergarten with remediation beginning in first grade.
    - **Intense instruction**—Reading instruction must be delivered with great intensity. Optimally, a child who is struggling to read should be given instruction in a group of three and no larger than four students, and the child should receive this focused reading instruction at least four, and preferably five, days a week.
    - **High-quality instruction**—High-quality instruction is provided by a highly qualified teacher. Recent studies highlight the difference that a teacher can make in the overall success or failure of a reading program.
    - **Sufficient duration**—One of the most common errors in teaching a student with dyslexia to read is to withdraw prematurely the instruction that seems to be working. A child who is reading accurately but not fluently at grade level still requires intensive readinginstruction.

Essentials of an effective **early intervention** program include the following:

- Systematic and direct instruction in the following:
  - **Phonemic awareness**—noticing, identifying, and manipulating the sounds of spoken language
  - **Phonics**—how letters and letter groups represent the sounds [of] spoken language
  - Sounding out words (decoding)
  - Spelling
  - Reading sight words
  - **Vocabulary** and concepts
  - **Reading comprehension** strategies
- Practice in applying the above skills in reading and in writing
- **Fluency** training
- Enriched language experiences: listening to, talking about, and telling stories

Shaywitz, S. (2003). Overcoming dyslexia: A new and complete science-based program for reading problems at any level. New York, NY: Alfred A. Knopf.

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11. Torgesen (2004, p. 376) states the following:

> The first implication for practice and educational policy is that schools must work to provide **preventive interventions** to eliminate the enormous reading practice deficits that result from prolonged reading failure. The second implication is that schools must find a way to provide interventions for older children with reading disabilities that are appropriately focused and sufficiently intensive.

Torgesen, J. K. (2004). Lessons learned from research on interventions for students who have difficulty learning to read. In P. McCardle, & V. Chhabra (Eds.), *The voice of evidence in reading research* (pp. 355–382). Baltimore, MD: Paul H. Brookes Publishing.

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12. Vaughn and Linan-Thompson (2003, pp. 299–320) state the following:

- Mounting evidence suggests that most students with reading problems can make significant gains in reading if provided **systematic, explicit, and intensive** reading instruction based on critical elements associated with improved reading such as **phonemic awareness, phonics, fluency in word recognition and text reading, and comprehension.**
- There were no statistically significant differences between students receiving intervention instruction in a teacher-to-student ratio of 1:1 or 1:3 though both groups outperformed students in a 1:10 teacher to student ratio.
- Student progress determined the length of intervention.

Vaughn, S., & Linan-Thompson, S. (2003). Group size and time allotted to intervention. In B. Foorman (Ed.), *Preventing and remediating reading difficulties* (pp. 275–320). Parkton, MD: York Press.

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13. The International Dyslexia Association (2009, pp. 1–2) states the following:

> Professional practitioners, including **teachers or therapists, should have had specific preparation in the prevention and remediation of language-based reading and writing difficulties**. Teachers and therapists should be able to state and provide documentation of their credentials in the prevention and remediation of language-based reading and writing difficulties, including program-specific training recommended for the use of specific programs.

The International Dyslexia Association. (2009, March). *Position statement: Dyslexia treatment programs*.

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14. The International Dyslexia Association's *Knowledge and Practice Standards for Teachers of Reading* provides **standards for teachers** of students with dyslexia.

The International Dyslexia Association. (2010). *Knowledge and practice standards for teachers of reading*.

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15. The International Multisensory Structured Language Education Council (IMSLEC) provides accreditation in quality training courses for the professional preparation of multisensory **structured language education specialists**.

International Multisensory Structured Language Education Council (IMSLEC): http://www.imslec.org

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Ineffective Treatment for Dyslexia

Interventions that claim to treat dyslexia in the absence of print are generally ineffective. Claims of ineffective treatments for dyslexia may use terms or techniques described as "brain training," "crossing the midline," "balance therapy," and others. While some treatments may ameliorate conditions other than dyslexia, their use for students with dyslexia has not been proven effective. Figure 4.2 addresses some commonly advertised interventions that may be purported to treat dyslexia, but scientific, peer-reviewed research has demonstrated ineffective results for students with dyslexia.

Figure 4.2. Treatments Ineffective for Dyslexia

Examples	What Research Has Found	Citation
Colored Overlays and Colored Lenses	"Consistent with previous reviews and advice from several professional bodies, we conclude that the use of coloured overlays to ameliorate reading difficulties cannot be endorsed and that any benefits reported in clinical settings are likely to be the result of placebo, practice, or Hawthorne effects."	Griffiths, P.G., Taylor, R.H., Henderson, L.M., & Barrett, B.T. (2016). The effect of coloured overlays and lenses on reading: a systematic review of the literature. *Ophthalmic & Physiological Optics, 36,* 519–544. https://doi.org/ 10.1111/opo.12316
Specialized fonts designed for people with dyslexia	"Dyslexie font did not lead to improved reading compared to normal 'Arial' font, nor was it preferred by most students."	Kuster, S. M., van Weerdenburg, M., Gompel, M., & Bosman, A. M. (2018). Dyslexie font does not benefit reading in children with or without dyslexia. *Annals of Dyslexia*, *68*, 25-42. https://doi.org/10.1007/s11881-017-0154-6
Vision Therapy	"Scientific evidence does not support the claims that visual training, muscle exercises, ocular pursuit-and-tracking exercises, behavioral/ perceptual vision therapy, 'training' glasses, prisms, and colored lenses and filters are effective direct or indirect treatments for learning disabilities. There is no valid evidence that children who participate in vision therapy are more responsive to educational instruction than children who do not participate."	Handler, S.M., Fierson, W.M., et al. (2011). Joint technical report - learning disabilities, dyslexia, and vision. *Pediatrics*, 127, e818-56. https://doi.org/10.1542/peds.2010-3670
Specific Working Memory Training Programs	"The authors conclude that working memory training programs appear to produce short-term, specific training effects that do not generalize to measures of 'real-world' cognitive skills. These results seriously question the practical and theoretical importance of current computerized working memory programs as methods of training working memory skills."	Melby-Lervåg, M., Redick, T. & Hulme, C. (2016). Working memory training does not improve performance on measures of intelligence or other measures of "far transfer": Evidence from a meta-analytic review. *Perspectives on Psychological Science, 11*, 512-534. https://DOI: 10.1177/1745691616635612

Instructional Accommodations for Students with Disabilities

Students with dyslexia who receive dyslexia instruction that contains the components described in this chapter will be better equipped to meet the demands of grade-level or course instruction. In addition to dyslexia instruction, accommodations provide the student with dyslexia effective and equitable access to grade-level or course instruction in the general education classroom. **Accommodations are not one size fits all; rather, the impact of dyslexia on each individual student determines the necessary accommodation.** Listed below are **examples** of reasonable classroom accommodations:

- Copies of notes (e.g., teacher- or peer-provided)
- Note-taking assistance
- Additional time on class assignments and tests
- Reduced/shortened assignments (e.g., chunking assignments into manageable units, fewer items given on a classroom test or homework assignment without eliminating concepts, or student planner to assist with assignments)
- Alternative test location that provides a quiet environment and reduces distractions
- Priority seating assignment
- Oral reading of directions or written material
- Word banks
- Audiobooks
- Text to speech
- Speech to text
- Electronic spellers
- Electronic dictionaries
- Formula charts
- Adaptive learning tools and features in software programs

Accommodations are changes to materials, actions, or techniques, including the use of technology, that enable students with disabilities to participate meaningfully in grade-level or course instruction. The use of accommodations occurs primarily during classroom instruction as educators use various instructional strategies to meet the needs of each student. A student may need an accommodation only temporarily while learning a new skill, or a student might require the accommodation throughout the school year and over several years including beyond graduation.

Decisions about which accommodations to use are very individualized and should be made for each student by that student's ARD or Section 504 committee, as appropriate. Students can, and should, play a significant role in choosing and using accommodations. Students need to know what accommodations are possible, and then, based on knowledge of their personal strengths and limitations, they select and try accommodations that might be useful for them. The more input students have in their own accommodation choices, the more likely it is that they will use and benefit from the accommodations.

When making decisions about accommodations, instruction is always the foremost priority. Not all accommodations used in the classroom are allowed during a state assessment. However, an educator's ability to meet the individual needs of a student with dyslexia or provide support for the use of an accommodation should not be limited by whether an accommodation is allowable on a state assessment.

In order to make accommodation decisions for students, educators should have knowledge of the Texas Essential Knowledge and Skills (TEKS) and how a student performs in relation to them. Educators should also collect and analyze data pertaining to the use and effectiveness of accommodations (e.g., assignment/test scores with and without the accommodation, observational reports from parents and teachers) so that informed educational decisions can be made for each student. By analyzing data, an educator can determine if the accommodation becomes inappropriate or unnecessary over time due to the student's changing needs. Likewise, data can confirm for the educator that the student still struggles in certain areas and should continue to use the accommodation.

For more information about accommodations, see Accommodations for students with Disabilities available at https://dyslexiaida.org/accommodations-for-students-with-dyslexia/.

Access to Instructional Materials for Students with Disabilities

Accessible instructional materials (AIM) are textbooks and related core instructional materials that have been converted into specialized formats (e.g., Braille, audio, digital text, or large print) for students who are blind or have low vision, have a physical disability, or have a reading disability such as dyslexia. Digital books or text-to-speech functions on computers and mobile devices provide access to general education curriculum for students with dyslexia. **Bookshare** and **Learning Ally** provide electronic access to digitally recorded materials for students with print disabilities. TEA provides links to these resources as well as other accessible instructional materials for students with disabilities at http://www.tea.state.tx.us/index2.aspx?id=2147487109.

Texas State Student Assessment Program Accommodations for Students with Disabilities

Educators, parents, and students must understand that accommodations provided during classroom instruction and testing might differ from accommodations allowed for use on state assessments. The state assessment is a standardized tool for measuring every student's learning in a reliable, valid, and secure manner. An accommodation used in the classroom for learning may invalidate or compromise the security and integrity of the state assessment; therefore, not all accommodations suitable for instruction are allowed during the state assessments. It is important to keep in mind that the policies for accommodation use on state assessments **should not** limit an educator's ability to develop individualized materials and techniques to facilitate student learning. **Instruction comes first** and can be customized to meet the needs of each student.

For the purposes of the statewide assessments, students needing accommodations due to a disability include the following:

- Students with an identified disability who receive special education services and meet established eligibility criteria for certain accommodations
- Students with an identified disability who receive Section 504 services and meet established eligibility criteria for certain accommodations
- Students with a disabling condition who do not receive special education or Section 504 services but meet established eligibility criteria for certain accommodations

For students who receive special education or Section 504 services, the decision for student use of accommodations during the statewide assessments is made by the ARD or Section 504 committee. In those

rare instances where a student does not receive services but meets the eligibility criteria due to a disabling condition, the decision about using accommodations on the statewide assessments is made by the appropriate team of people at the campus level, such as the RTI team or student assistance team. For more information about accommodations on statewide assessments, visit https://tea.texas.gov/accommodations/.

Enrollment in Gifted/Talented and Advanced Academic Programs

A student who has been identified with dyslexia can also be a gifted learner, or a twice-exceptional learner. A twice-exceptional learner is a child or youth who performs at or shows the potential for performing at a remarkably high level of accomplishment when compared to others of the same age, experience, or environment and who exhibits high-performance capability in an intellectual, creative, or artistic area; possesses an unusual capacity for leadership; or excels in a specific academic field and who also gives evidence of one or more disabilities as defined by federal or state eligibility criteria. Disability criteria may include the following:

- Learning disabilities
- Speech and language disorders
- Emotional/behavioral disorders
- Physical disabilities
- Traumatic brain injury
- Autism spectrum disorder
- Sensory disabilities (hearing impaired, visually impaired, blind-deaf)
- Other health impairments that limit strength, vitality, or alertness (such as ADHD)

Twice-exceptional students make up a highly diverse group of learners. While they do not form a simple, homogenous group, there are indicators that tend to be typical of many children who are both gifted and who also have a disability. Cognitive and affective indicators may include strengths such as extreme curiosity and questioning, high levels of problem-solving and reasoning skills, and advanced ideas/opinions which they are uninhibited about expressing. Cognitive and affective challenges twice-exceptional learners may exhibit include discrepant verbal and performance abilities, deficient or extremely uneven academic skills, and auditory and/or visual processing problems which may cause them to respond or work slowly or appear to think slowly. For more information regarding general characteristics of twice-exceptional learners, please see www.gtequity.org/twice/docs/generalcharacteristics.pdf on TEA's Equity in G/T Education website.

Due to the diversity of twice-exceptional students, the identification of twice-exceptional learners can be challenging. Evaluation and identification require those vested in the education of these learners to be knowledgeable of the unique characteristics and behaviors demonstrated by twice-exceptional learners. Often the disability masks the giftedness, emphasizing barriers to learning instead of the potential that the learner has as a result of the gifted attributes. Conversely, the giftedness may mask the disability, which may result in the student experiencing gaps in learning compounded by the disability, thus affecting how the learner perceives his or her abilities.

Twice-exceptional students must be provided access to all service and course options available to other students. Section 504 and Title II of the Americans with Disabilities Act (ADA), require that qualified students with disabilities be given the same opportunities to compete for and benefit from accelerated programs and classes as are given to students without disabilities [34 C.F.R. §104.4(b)(1)(ii) and 28 C.F.R. §35.130(b)(1)(ii)]. **A student with a disability such as dyslexia or a related disorder may not be denied admission to an accelerated or advanced class or program solely because of the student's need for special education or related aids or services or because the student has an IEP or Section 504 Plan.**

Additionally, a student with a disability may not be prohibited from using special education or related aids as a condition of participating in an accelerated or advanced class or program. Participation by a student with a disability in an accelerated or advanced class or program generally would be considered part of the regular education referenced in IDEA and Section 504 regulations. Thus, if a qualified student with a disability requires related aids and services to participate in a regular education class or program, the school cannot deny that student the needed related aids and services in an accelerated or advanced class or program. It is important to note that a district or school does not have to provide a student with an accommodation or modification "that fundamentally alters the nature of" an accelerated or advanced course or program. Rather, a district or school "must consider a student's ability to participate in the program with reasonable accommodations." (*G.B.L. v. Bellevue School District #405*).

In determining the appropriate courses and programs, the following questions should be considered by a twice-exceptional learner's ARD or Section 504 committee:

- Does the student meet the basic eligibility or admission requirements applied to ALL students?
- Does the student need special education or related aids and services to receive FAPE?
- Do the academic accommodations or related aids and services constitute a fundamental alteration of the program?

The U.S. Department of Education's Office for Civil Rights offers information for addressing students with disabilities seeking enrollment in advanced academic programs such as Advanced Placement and International Baccalaureate courses. For more information, see the Dear Colleague Letter regarding Access by Students with Disabilities to Accelerated Programs at https://www2.ed.gov/about/offices/list/ocr/letters/colleague-20071226.html.

Additional support, information, and resources are available through the Equity in Gifted/Talented (G/T) Education website at www.gtequity.org/index.php. The *Texas State Plan for the Education of Gifted/Talented Students*, available at www.tea.state.tx.us/index2.aspx?id=6420, mandates that once any student is identified as gifted, he/she must be provided gifted/talented services that are commensurate with his/her abilities (1.4C, 1.6C, 2.1C, and 3.3C). Additionally, due to the disability, twice-exceptional learners should have an IEP through special education services or a Section 504 Plan through general education. Additional support for districts serving twice-exceptional students is available at www.gtequity.org/twice.php.

Sources for Enrollment in Gifted/Talented and Advanced Academic Programs

G.B.L. v. Bellevue Sch. Dist. #405. IDELR 186. No. 2:2012cv00427. (U.S. District Court, W.D. Washington, 2013).

Texas Education Agency. (2008–2015). Equity in G/T Education: Twice-Exceptional Students and G/T Services. Retrieved from http://www.gtequity.org.

Texas State Board of Education. (2009). *Texas State Plan for the Education of Gifted/Talented Students.* Retrieved from https://tea.texas.gov/Academics/Special_Student_Populations/Gifted_and_Talented_Education/Gifted_Talented_Education/.

U.S. Department of Education, Office for Civil Rights. Dear Colleague Letter regarding Access by Students with Disabilities to Accelerated Programs. (December 26, 2007). Retrieved from https://www2.ed.gov/about/offices/list/ocr/letters/colleague-20071226.html.

V. Dysgraphia

Texas state law requires districts and charter schools to identify students who have dyslexia and related disorders. Texas Education Code §38.003 identifies the following examples of related disorders: developmental auditory imperception, dysphasia, specific developmental dyslexia, developmental dysgraphia, and developmental spelling disability. Recent research in the field of dysgraphia has prompted the addition of the following guidance regarding the evaluation, identification, and provision of services for students with dysgraphia.

Definition and Characteristics of Dysgraphia

Difficulty with handwriting frequently occurs in children with dyslexia. When Texas passed dyslexia legislation, the co-existence of poor handwriting with dyslexia was one reason why dysgraphia was called a related disorder. Subsequently, dyslexia and dysgraphia have been found to have diverse co-morbidities, including phonological awareness (Döhla and Heim, 2016). However, dyslexia and dysgraphia are now recognized to be distinct disorders that can exist concurrently or separately. They have different brain mechanisms and identifiable characteristics.

Dysgraphia is related to dyslexia as both are language-based disorders. In dyslexia, the impairment is with word-level skills (decoding, word identification, spelling). Dysgraphia is a written language disorder in serial production of strokes to form a handwritten letter. This involves not only motor skills but also language skills—finding, retrieving and producing letters, which is a subword-level language skill. The impaired handwriting may interfere with spelling and/or composing, but individuals with only dysgraphia do not have difficulty with reading (Berninger, Richards, & Abbott, 2015).

A review of recent evidence indicates that dysgraphia is best defined as a neurodevelopmental disorder manifested by illegible and/or inefficient handwriting due to difficulty with letter formation. This difficulty is the result of deficits in graphomotor function (hand movements used for writing) and/or storing and retrieving orthographic codes (letter forms) (Berninger, 2015). Secondary consequences may include problems with spelling and written expression. The difficulty is not solely due to lack of instruction and is not associated with other developmental or neurological conditions that involve motor impairment.

The characteristics of dysgraphia include the following:

- Variably shaped and poorly formed letters
- Excessive erasures and cross-outs
- Poor spacing between letters and words
- Letter and number reversals beyond early stages of writing
- Awkward, inconsistent pencil grip
- Heavy pressure and hand fatigue
- Slow writing and copying with legible or illegible handwriting (Andrews & Lombardino, 2014)

Additional consequences of dysgraphia may also include:

- Difficulty with unedited written spelling
- Low volume of written output as well as problems with other aspects of written expression

Dysgraphia is not:

- Evidence of a damaged motor nervous system
- Part of a developmental disability that has fine motor deficits (e.g., intellectual disability, autism, cerebral palsy)
- Secondary to a medical condition (e.g., meningitis, significant head trauma, brain trauma)
- Association with generalized developmental motor or coordination difficulties (Developmental Coordination Disorder)
- Impaired spelling or written expression with typical handwriting (legibility and rate) (Berninger, 2004)

Dysgraphia can be due to:

- Impaired feedback the brain is receiving from the fingers
- Weaknesses using visual processing to coordinate hand movement and organize the use of space
- Problems with motor planning and sequencing
- Difficulty with storage and retrieval of letter forms (Levine, 1999)

Despite the widespread beliefs that handwriting is purely a motor skill or that only multisensory methods are needed to teach handwriting, multiple language processes are also involved in handwriting. Handwriting draws on language by hand (letter production), language by ear (listening to letter names when writing dictated letters), language by mouth (saying letter names), and language by eye (viewing the letters to be copied or reviewing for accuracy the letters that are produced from memory) (Berninger & Wolf, 2016).

Sources for Definition and Characteristics of Dysgraphia

Andrews, J. and Lombardino, L. (2014). Strategies for teaching handwriting to children with writing disabilities. ASHA SIG1 Perspectives on Language Learning Education. 21:114-126.

Berninger, V.W. (2004). Understanding the graphia in dysgraphia. In Developmental Motor Disorders: A Neuropsychological Perspective. D. Dewry and D. Tupper (Eds.), New York, NY, US: Guilford Press.

Berninger, V.W. (2015). *Interdisciplinary frameworks for schools: Best practices for serving the needs of all student.* Washington, D.C.: American Psychological Association.

Berninger, V.W., Richards, T.L. and Abbott, R. D. (2015) *Differential Diagnosis of Dysgraphia, Dyslexia, and OWL LD: Behavioral and Neuroimaging Evidence.* Read Writ. 2015 Oct;28(8):1119-1153.

Berninger, V., & Wolf, B. (2016). Dyslexia, Dysgraphia, OWL LD, and Dyscalculia: Lessons from Science and Teaching (Second ed.). Baltimore, Maryland: Paul H Brookes Publishing.

Döhla, D. and Heim, S. (2016). *Developmental dyslexia and dysgraphia: What can we learn from the one about the other?* Frontiers in Psychology. 6:2045.

Levine, M.D. (1999). *Developmental Variation and Learning Disorders.* Cambridge, MA: Educators Publishing Service, Inc.

Procedures for Identification

The process of identifying dysgraphia will follow Child Find procedures for conducting a full individual and initial evaluation (FIIE) under the IDEA. These procedural processes require coordination among the teacher, campus administrators, diagnosticians, and other professionals as appropriate when factors such as a student's English language acquisition, previously identified disability, or other special needs are present.

The first step in the evaluation process, data gathering, should be an integral part of the district's or charter school's process for any student exhibiting learning difficulties. Documentation of the following characteristics of dysgraphia could be collected during the data gathering phase:

- Slow or labored written work
- Poor formation of letters
- Improper letter slant
- Poor pencil grip
- Inadequate pressure during handwriting (too hard or too soft)
- Excessive erasures
- Poor spacing between words
- Poor spacing inside words
- Inability to recall accurate orthographic patterns for words
- "b" and "d" reversals beyond developmentally appropriate time
- Inability to copy words accurately
- Inability of student to read what was previously written
- Overuse of short familiar words such as "big"
- Avoidance of written tasks
- Difficulty with visual-motor integrated sports or activities

While schools must follow federal and state guidelines, they must also develop procedures that address the needs of their student populations. Schools shall recommend evaluation for dysgraphia if the student demonstrates the following:

- Impaired or illegible handwriting that is unexpected for the student's age/grade
- Impaired handwriting that interferes with spelling, written expression, or both that is unexpected for the student's age/grade

1. Data Gathering

Schools collect data on all students to ensure that instruction is appropriate and scientifically based. Essential components of comprehensive literacy instruction, including writing, are defined in Section 2221(b) of ESSA as explicit instruction in writing, including opportunities for children to write with clear purposes, with critical reasoning appropriate to the topic and purpose, and with specific instruction and feedback from instructional staff.

Any time from kindergarten through grade 12 a student continues to struggle with one or more components of writing, schools must collect additional information about the student. Schools should use previously

collected as well as current information to evaluate the student's academic progress and determine what actions are needed to ensure the student's improved academic performance. The collection of various data, as indicated in Figure 5.1 below, will provide information regarding factors that may be contributing to or primary to the student's struggles with handwriting, spelling, and written expression.

Cumulative Data

The academic history of each student will provide the school with the cumulative data needed to ensure that underachievement in a student suspected of having dysgraphia is not due to lack of appropriate instruction in handwriting, spelling, and written expression. This information should include data that demonstrate that the student was provided appropriate instruction and include data-based documentation of repeated evaluations of achievement at reasonable intervals (progress monitoring), reflecting formal evaluation of student progress during instruction. This cumulative data also include information from parents/guardians. Sources and examples of cumulative data are provided in Figure 5.1.

Figure 5.1. Sources and Examples of Cumulative Data

- Vision screening
- Teacher reports of classroom concerns
- Parent reports of concerns about handwriting, spelling, or written expression
- Classroom handwriting assessments
- Classroom spelling assessments
- Samples of written work (e.g., journal, story responses, writing samples, etc.)
- Accommodations or interventions provided
- Academic progress reports (report cards)
- Gifted/talented assessments
- Samples of written schoolwork (both timed and untimed)
- State student assessment program results as described in TEC §39.022
- Observations of instruction provided to the student
- Full Individual and Initial Evaluation
- Outside evaluations
- Speech and language assessment
- School attendance
- Curriculum-based assessment measures
- Instructional strategies provided and student's response to the instruction
- Universal screening
- Parent survey

2. Formal Evaluation

After data gathering, the next step in the process is formal evaluation. This is not a screening; rather, it is an individualized evaluation used to gather evaluation data. Formal evaluation includes both formal and informal data. All data will be used to determine whether the student demonstrates a pattern of evidence for dysgraphia. Information collected from the parents/guardians also provides valuable insight into the student's early years of written language development. This history may help to explain why students come to the evaluation with many different strengths and weaknesses; therefore, findings from the formal evaluation will be different for each child. Professionals conducting evaluations for the identification of dysgraphia will need to look beyond scores on standardized assessments alone and examine the student's classroom writing performance, educational history, and early language experiences to assist with determining handwriting, spelling, and written expression abilities and difficulties.

Notification and Permission

When formal evaluation is recommended, the school completes the evaluation process as outlined in IDEA. Procedural safeguards under the IDEA must be followed. For more information on procedural safeguards,

see Appendix D, IDEA/Section 504 Side-by-Side Comparison, and TEA's Parent Guide to the Admission, Review, and Dismissal Process (Parent's Guide) and Notice of Procedural Safeguards

Tests and Other Evaluation Materials

Test instruments and other evaluation materials must meet the following criteria:

- Be used for the purpose for which the evaluation or measures are valid or reliable
- Include material tailored to assess specific areas of educational need and not merely materials that are designed to provide a single general intelligence quotient
- Be selected and administered to ensure that, when a test is given to a student with impaired sensory, manual, or speaking skills, the test results accurately reflect the student's aptitude, achievement level, or whatever other factor the test purports to measure, rather than reflecting the student's impaired sensory, manual, or speaking skills
- Be selected and administered in a manner that is not racially or culturally discriminatory
- Include multiple measures of a student's writing abilities such as informal assessment information (e.g., anecdotal records, district universal screenings, progress monitoring data, criterion-referenced evaluations, samples of written work, classroom observations)
- Be administered by trained personnel and in conformance with the instructions provided by the producer of the evaluation materials
- Be provided and administered in the student's native language or other mode of communication and in the form most likely to yield accurate information regarding what the child can do academically, developmentally, and functionally, unless it is clearly not feasible to provide or administer

Domains to Assess

Academic Skills

The school administers measures that are related to the student's educational needs. Difficulties in the areas of letter formation, orthographic awareness, and general handwriting skills may be evident dependent on the student's age and writing development. Additionally, many students with dysgraphia may have difficulty with spelling and written expression.

Cognitive Processes

The process of handwriting requires the student to rely on memory for letters or symbol sequences, also known as orthographic processing. Memory for letter patterns, letter sequences, and the letters in whole words may be selectively impaired or may coexist with phonological processing weaknesses. When spelling, a student must not only process both phonological and orthographic information, but also apply their knowledge of morphology and syntax (Berninger & Wolf, 2009).

Figure 5.2. Areas for Evaluation of Dysgraphia

Academic Skills	Cognitive Processes	Possible Additional Areas
• Letter formation • Handwriting • Word/sentence dictation (timed and untimed) • Copying of text • Written expression • Spelling • Writing fluency (both accuracy and fluency)	• Memory for letter or symbol sequences (orthographic processing)	• Phonological awareness • Phonological memory • Working memory • Letter retrieval • Letter matching

Berninger, V. W., & Wolf, B. (2009). *Teaching students with dyslexia and dysgraphia lessons from teaching and science*. Baltimore, MD: Paul H. Brookes Publishing.

To make an informed determination the ARD, committee must include members who are knowledgeable about the following:

- Student being assessed
- Evaluation instruments being used
- Interpretation of the data being collected

Additionally, the committee members should have knowledge regarding

- the handwriting process;
- dysgraphia and related disorders;
- dysgraphia instruction, and;
- district or charter school, state, and federal guidelines for evaluation.

Review and Interpretation of Data and Evaluation

To appropriately understand evaluation data, the ARD committee must interpret tests results in light of the student's educational history, linguistic background, environmental or socioeconomic factors, and any other pertinent factors that affect learning.

A determination must first be made regarding whether a student's difficulties in the areas of writing and spelling reflect a pattern of evidence for the primary characteristics of dysgraphia with unexpectedly low performance for the student's age and educational level in some or all of the following areas:

- Handwriting
- Writing fluency (accuracy and rate)
- Written Expression
- Spelling

Based on the above information and guidelines, should the ARD committee determine that the student exhibits weakness in writing and spelling, the committee will then examine the student's data to determine whether these difficulties are unexpected in relation to the student's other abilities, sociocultural factors, language differences, irregular attendance, or lack of appropriate and effective instruction. For example, the student may exhibit strengths in areas such as reading comprehension, listening comprehension, oral verbal ability, or math reasoning yet still have difficulty with writing and spelling.
Therefore, it is not one single indicator, but a preponderance of informal and formal data that provide the committee with evidence for whether these difficulties are unexpected.

Dysgraphia Identification

If the student's difficulties are unexpected in relation to other abilities, the ARD committee must then determine if the student has dysgraphia. The list of questions in Figure 5.3 below must be considered when making a determination regarding dysgraphia.

Figure 5.3. Questions to Determine the Identification of Dysgraphia

- Do the data show the following characteristics and consequences of dysgraphia?
    - Illegible and/or inefficient handwriting with variably shaped and poorly formed letters Difficulty with unedited written spelling
    - Low volume of written output as well as problems with other aspects of written expression
- Do these difficulties (typically) result from a deficit in graphomotor function (hand movements used for writing) and/or storing and retrieving orthographic codes (letter forms)?
- Are these difficulties unexpected for the student's age in relation to the student's other abilities and the provision of effective classroom instruction?

Once dysgraphia has been identified, a determination must be made regarding the most appropriate way to serve the student.

The ARD committee will determine whether the student who has dysgraphia is eligible under IDEA as a student with a specific learning disability. The student is eligible for services under IDEA if he/she has dysgraphia and, because of the dysgraphia needs special education services. The October 23, 2015 letter from the Office of Special Education and Rehabilitative Services (OSERS) (Dear Colleague: Dyslexia Guidance) states that dyslexia, dyscalculia, and dysgraphia are conditions that could qualify a child as a

child with a specific learning disability under IDEA. The letter further states 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. For more information, please visit https://www2.ed.gov/policy/speced/guid/idea/memosdcltrs/guidance-on-dyslexia-10-2015.pdf.

If the student with dysgraphia is found eligible for special education, the student's IEP must include appropriate writing instruction, which might include instruction from a related services provider.

If the student is identified with dysgraphia but is not considered a student with a disability under the IDEA (because the student does not need specially designed instruction), then the student may receive appropriate accommodations and services under Section 504. Students are protected under Section 504 if the physical or mental impairment (dysgraphia) substantially limits one or more major life activities, such as the specific activity of writing. Additionally, the Section 504 committee, in determining whether a student has a disability that substantially limits the student in a major life activity (writing), must not consider the ameliorating effects of any mitigating measures that student is using.

Revision of the Section 504 Plan will occur as the student's response to instruction and to the use of accommodations, if any, is observed. Changes in instruction and/or accommodations must be supported by current data (e.g., classroom performance and dyslexia program monitoring).

Instruction for Students with Dysgraphia

> ". . . Done right, early handwriting instruction improves students' writing. Not just its legibility, but its *quantity and quality*." (p. 49)
>
> —S. Graham, Want to Improve Children's Writing? Don't Neglect Their Handwriting, *American Educator*, 2010

Graham and his colleagues describe two reasons for teaching handwriting effectively. The first reason is what they call the Presentation Effect. Research demonstrates that, in general, a reader's evaluation of a composition's quality is influenced by how neatly it is written (Graham, Harris, & Hebert, 2011). The second reason that educational scientists give for teaching handwriting effectively is called the Writer Effect. Research demonstrates that handwriting difficulties interfere with other writing processes such as expression of ideas and organization. In fact, a 2016 meta-analysis showed that handwriting instruction improved students' writing fluency, quantity, and quality. The findings of this research report were dramatic, showing moderate effects on writing fluency and very large effects on the number of words students wrote and the quality of their compositions (Santangelo & Graham, 2016).

> *Handwriting interferes with other writing processes or consumes an inordinate amount of cognitive resources, at least until handwriting becomes automatic and fluent … Handwriting-instructed students made greater gains than peers who did not receive handwriting instruction in the quality of their writing, how much they wrote, and writing fluency.* (p. 226)
>
> —Santangelo & Graham, A Comprehensive Meta-Analysis of Handwriting Instruction, 2016

Supporting Students Struggling with Handwriting

Between 10% and 30% of students struggle with handwriting. Early difficulties in this area are significantly correlated with poorer performance on composition tasks. The following are research-based elements of

effective handwriting instruction. These elements, which apply to both manuscript and cursive handwriting, may not necessarily apply to an entire class but instead may be used to support instructional methods delivered in small groups with students whose penmanship is illegible or dysfluent.

1. Show students how to hold a pencil.
2. Model efficient and legible letter formation.
3. Provide multiple opportunities for students to practice effective letter formation.
4. Use scaffolds, such as letters with numbered arrows showing the order and direction of strokes.
5. Have students practice writing letters from memory.
6. Provide handwriting fluency practice to build students' automaticity.
7. Practice handwriting in short sessions.

—Adapted from Berninger et al., 1997; Berninger et al., 2006; Denton, Cope, & Moser, 2006; Graham et al., 2012; Graham, Harris, & Fink, 2000; Graham & Weintrub, 1996.

Some students who struggle with handwriting may actually have dysgraphia. Dysgraphia may occur alone, or with dyslexia. An assessment for dysgraphia, as it relates to dyslexia, is important in order to determine whether children need additional explicit, systematic instruction in handwriting only; handwriting and spelling; or handwriting, spelling, and written expression along with word reading and decoding (IDA, 2012).

Texas Education Code §38.003(b) states, "In accordance with the program approved by the State Board of Education, the board of trustees of each school district shall provide for the treatment of any student determined to have dyslexia or a related disorder."

While it is important for students with dysgraphia to receive the research-based elements of handwriting, spelling, and written language instruction as part of the core curriculum, for those students who require additional supports and services for dysgraphia, instructional decisions must be made by a committee (either Section 504 or ARD) that is knowledgeable about the instructional elements and delivery of instruction that is consistent with research-based practice.

Handwriting

The research-based elements for effective instruction of handwriting as stated above for all students are the same for students with dysgraphia. However, the intensity, frequency, and delivery of instruction may need to be adjusted to meet specific student need as determined by the Section 504 or ARD committee. Figure 5.4 below provides a hierarchy of instruction for handwriting as a reference to best practice:

Figure 5.4. Handwriting Hierarchy of Instruction	
Posture	Also known as "Watch Our Writing" (W.O.W) • Feet are flat on the floor • Back is straight • Paper slanted so that the edge of the paper is parallel to the writing arm • Paper anchored with non-writing hand • Pencil grip and position correct
Grip	Normal tripod grip with pencil resting on first joint of middle finger with the thumb and index fingers holding the pencil in place at a 45° angle.
Letter Formation	Emphasis placed in the following order: • Shape • Proportion • Size • Rhythm/fluency • Slant
Sequence	• Lower case letters first; Capitals as needed beginning with first letters of student name • Manuscript – group by stroke formation • Cursive – group by beginning approach stroke • Letters • Syllables • Words • Phrases • Sentences • Paragraphs

Spelling

Handwriting supports spelling, a complex process of translating a phoneme (spoken sound) to the corresponding grapheme (orthographic representation) in order to generate written text to express an idea. Orthography is the written spelling patterns and rules in a given language. Students must be taught the regularity and irregularity of the orthographic patterns of a language in an explicit and systematic manner. The instruction should be integrated with phonology and sound-symbol knowledge. Because spelling is meaning driven and draws upon the phonological, orthographic, and morphological aspects of words, students will benefit from systematic, explicit instruction based on the following guiding principles:

- Phoneme-grapheme correspondence
- Letter order and sequence patterns, or orthographic conventions:
    - syllable types
    - orthographic rules
    - irregular words
- Position of a phoneme or grapheme in a word
- Meaning (morphology) and part of speech
- Language of origin (Moats, 2005)

Writing

A potential secondary consequence of dysgraphia is difficulty with students expressing themselves in written text. This difficulty may be attributed to deficits in handwriting, spelling, language processing, or the integration of each of those skills. In Chapter IV of this handbook, Moats and Dakin (2008) are quoted as stating:

> *The ability to compose and transcribe conventional English with accuracy, fluency, and clarity of expression is known as basic writing skills. Writing is dependent on many language skills and processes and is often even more problematic for children than reading. Writing is a language discipline with many component skills that must be directly taught. Because writing demands using different skills at the same time, such as generating language, spelling, handwriting, and using capitalization and punctuation, it puts a significant demand on working memory and attention. Thus, a student may demonstrate mastery of these individual skills, but when asked to integrate them all at once, mastery of an individual skill, such as handwriting, often deteriorates. To write on demand, a student has to have mastered, to the point of being automatic, each skill involved* (p. 55).

Students with written expression difficulties because of dysgraphia would benefit from being taught explicit strategies for composing including planning, generating, reviewing/evaluating, and revising different genre including narrative, informational, compare and contrast, and persuasive compositions (IDA, 2012).

Delivery of Intervention

The way the content is delivered should be consistent with the principles of effective intervention for students with dysgraphia including the following:

- **Simultaneous, multisensory (VAKT)** — "Teaching is done using all learning pathways in the brain (visual, auditory, kinesthetic-tactile) simultaneously in order to enhance memory and learning" (Birsh, 2018, p. 19). "Children are actively engaged in learning language concepts and other information, often by using their hands, arms, mouths, eyes, and whole bodies while learning" (Moats & Dakin, 2008, p. 58).
- **Systematic and cumulative** — "Multisensory language instruction requires that the organization of material follow order of the language. The sequence must begin with the easiest concepts and most basic elements and progress methodically to more difficult material. Each step must also be based on [elements] already learned. Concepts taught must be systematically reviewed to strengthen memory" (Birsh, 2018, p. 19)**.**

- **Explicit instruction** — "Explicit instruction is explained and demonstrated by the teacher one language and print concept at a time, rather than left to discovery through incidental encounters with information. Poor readers do not learn that print represents speech simply from exposure to books or print" (Moats & Dakin, 2008, p. 58). Explicit Instruction is "an approach that involves direct instruction: The teacher demonstrates the task and provides guided practice with immediate corrective feedback before the student attempts the task independently" (Mather & Wendling, 2012, p. 326).
- **Diagnostic teaching to automaticity** — "The teacher must be adept at prescriptive or individualized teaching. The teaching plan is based on careful and [continual] assessment of the individual's needs. The content presented must be mastered to the degree of automaticity" (Birsh, 2018, p. 27). "This teacher knowledge is essential for guiding the content and emphasis of instruction for the individual student" (Moats & Dakin, 2008, p. 58). "When a reading skill becomes automatic (direct access without conscious awareness), it is performed quickly in an efficient manner" (Berninger & Wolf, 2009, p. 70).

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Instructional Accommodations for the Student with Dysgraphia

By receiving instruction based on the elements described in this chapter, a student with dysgraphia is better equipped to meet the demands of grade-level or course instruction. In addition to targeted instruction, accommodations provide the student with dysgraphia effective and equitable access to grade-level or course instruction in the general education classroom. **Accommodations are not a one size fits all; rather, the impact of dysgraphia on each individual student determines the accommodation.** When considering accommodations for the student with dysgraphia, consider the following:

- The rate of producing written work
- The volume of the work to be produced
- The complexity of the writing task
- The tools used to produce the written product
- The format of the product (Texas Scottish Rite Hospital for Children, 2018, p. 5).

Listed below are **examples** of reasonable classroom accommodations for a student with dysgraphia based on the above considerations:

- Allow more time for written tasks including note taking, copying, and tests
- Reduce the length requirements of written assignments
- Provide copies of notes or assign a note taking buddy to assist with filling in missing information
- Allow the student to audio record important assignments and/or take oral tests
- Assist student with developing logical steps to complete a writing assignment instead of all at once
- Allow the use of technology (e.g., speech to text software, etc.)
- Allow the student to use cursive or manuscript, whichever is most legible and efficient
- Allow the student to use graph paper for math, or to turn lined paper sideways, to help with lining up columns of numbers
- Offer an alternative to a written project such as an oral report, dramatic presentation, or visual media project

Accommodations are changes to materials, actions, or techniques, including the use of technology, that enable students with disabilities to participate meaningfully in grade-level or course instruction. The use of accommodations occurs primarily during classroom instruction as educators use various instructional strategies to meet the needs of each student. A student may need an accommodation only temporarily

while learning a new skill, or a student might require the accommodation throughout the school year or over several years including beyond graduation.

Decisions about which accommodations to use are very individualized and should be made for each student by that student's ARD or Section 504 committee, as appropriate. Students can, and should, play a significant role in choosing and using accommodations. Students need to know what accommodations are possible, and then, based on knowledge of their personal strengths and limitations, they select and try accommodations that might be useful for them. The more input students have in their own accommodation choices, the more likely it is that they will use and benefit from the accommodations.

When making decisions about accommodations, instruction is always the foremost priority. Not all accommodations used in the classroom are allowed during a state assessment. However, an educator's ability to meet the individual needs of a student with dysgraphia or provide support for the use of an accommodation should not be limited by whether an accommodation is allowable on a state assessment.

In order to make accommodation decisions for students, educators should have knowledge of the Texas Essential Knowledge and Skills (TEKS) and how a student performs in relation to them. Educators should also collect and analyze data pertaining to the use and effectiveness of accommodations (e.g., assignment/test scores with and without the accommodation, observational reports from parents and teachers) so that informed educational decisions can be made for each student. By analyzing data, an educator can determine if the accommodation becomes inappropriate or unnecessary over time due to the student's changing needs. Likewise, data can confirm for the educator that the student still struggles in certain areas and should continue to use the accommodation.

For more information about accommodations, see At a Glance: Classroom Accommodations for Dysgraphia, available at https://www.understood.org/en/school-learning/partnering-with-childs-school/instructional- strategies/at-a-glance-classroom-accommodations-for-dysgraphia

Technology Tools

There are many technology resources to assist a student with dysgraphia. The *Technology Integration for Students with Dyslexia* online tool (TEC §38.0031) is a resource developed to support school districts and charter schools in making instructional decisions regarding technology that benefit students with dyslexia and related disorders. For more information and to view this source, visit https://www.region10.org/programs/dyslexia/techplan/.