THE DYSLEXIA GUIDE

A HANDBOOK FOR PARENTS, EDUCATORS, AND STUDENTS



ILLINOIS STATE BOARD OF EDUCATION DEPARTMENTS OF SPECIAL EDUCATION 2023

Purpose and Use

Purpose

The purpose of this handbook is to provide information and guidance for educational professionals, school leaders, families, guardians, and students themselves on the subject of dyslexia. According to 105 ILCS 5/2-3.161 the handbook shall include, but is not limited to:

- (1) guidelines for teachers and parents or guardians on how to identify signs of dyslexia;
- (2) a description of educational strategies that have been shown to improve the academic performance of pupils with dyslexia; and
- (3) a description of resources and services available to pupils with dyslexia, parents or guardians of pupils.

Furthermore, it is hoped that this handbook will be utilized by schools to design or revise their professional learning, instructional practices, and processes related to effectively serving students with dyslexia and other related disorders. In addition, this handbook addresses the social emotional needs of children and adolescents with dyslexia and those who struggle to learn to read. By educating and empowering all stakeholders with information and resources, the overall intent is to explain dyslexia, strengthen service provision, and increase the likelihood of positive outcomes.

Handbook Use and Connection to the Dyslexia Toolkit

This handbook is an informational document. Other than where statutory requirements are clearly stated, the handbook shares information and resources rather than mandating action. The handbook contains six chapters which can be read chronologically or can be used individually to access specific information for various stakeholder groups (e.g. schools, families, etc.). Each chapter is divided by headings and contains vocabulary which is defined at the end of the handbook in a glossary. Each chapter is also followed by an *Expanded Exploration* section which contains integral links to additional resources/citations that support the content within the chapter and provide more in-depth information on the topic. Additionally, the chapters conclude with a *Bridge to Practice* section which seeks to connect the research discussed throughout the chapters to practical applications in the classroom.

Handbook users may consider utilizing this handbook alone or in conjunction with the <u>Dyslexia Toolkit</u>, which is an ever-evolving collection of additional resources that can be accessed via the www.sldsupports.org website. Within the Toolkit, one can find websites, books, videos, and other resources, such as podcasts, that supplement the Illinois Dyslexia Handbook. School-based teams or parent groups may use the handbook and the accompanying toolkit to guide discussions about students with dyslexia and related conditions with the intent of better understanding their challenges and needs as well as the rights to which they are entitled.

Following is the revised edition of *The Dyslexia Handbook* (2023) created by the SLD Supports Project on behalf of ISBE, pursuant to Public Act 100-0617. Eastern Illinois Area of Special Education (EIASE) and Eastern Illinois University (EIU) Department of Special Education serve as grant partners and are contracted by ISBE to complete this work which was funded by the federal IDEA Part B grant.

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CHAPTER 1: BACKGROUND

Introduction

The vision of the Illinois State Board of Education (ISBE) focuses on the importance of all children and adolescents being equipped to make meaningful contributions to society and live life to its fullest potential. Furthermore, ISBE's mission is to provide all children and adolescents with safe and healthy learning conditions, great educators, and equitable opportunities by practicing data-informed stewardship of resources and policy development, all done in partnership with educators, families, and stakeholders.

Current State of Reading in Illinois

The National Assessment of Educational Progress (NAEP) has frequently been called "The Nation's Report Card." It is the only national assessment of what America's students know and can do in various subject areas. NAEP is useful because it provides a snapshot of how Illinois students compare to students in other states. In 2022, 62% of fourth-grade students scored at or above the Basic Level on this assessment. These results were aligned with longitudinal outcomes in Illinois across the past twenty years. Moreover, they were not significantly different from outcomes for public schools nationwide. In terms of Illinois 8th graders, 71% scored at or above the Basic Level which indicates a decrease in performance since 2003 (77%). These results are similar to the results for 8th graders across the nation.

While these data points indicate a concern related to the number of students who are not reading at a

In 2022, only <u>27.4%</u> of all thirdgrade students in Illinois met or exceeded the English Language Arts (ELA) Standards. basic level, they are not the only data points to do so. When looking at data from the Illinois Assessment of Readiness (IAR) as a metric, one can see that in 2022 on the most recent administration of the test, only 27.4% of all third-grade students in the state met or exceeded the English Language Arts (ELA) standards. This is especially troubling when considering that the state's Every Student

Succeeds Act (ESSA) Plan clearly identifies a critical long-term academic achievement goal directly tied to this outcome: *Ninety percent or more of third-grade students are reading at or above grade level*. Given the gap between where our state's students are currently performing and the benchmark set as a part of the Illinois ESSA plan, we must examine potential causes, inherent barriers, and effective practices that will aid us in ensuring all students learn to read and write. This information, coupled with the state's literacy plan which is required as a result of SB2243, can serve as a resource for parents, schools, and others who seek information about effective reading instruction for all children and adolescents, including those with dyslexia and other reading difficulties.

State Literacy Plan

Required by state law (Public Act 103-0402), the Illinois State Literacy Plan² is a comprehensive document that is designed in order to provide guidance on literacy instruction across the state in an attempt to help educators improve literacy outcomes for individuals of all ages and backgrounds. The document outlines a framework for effective evidence-based instruction, education professional

¹ NAEP Reading Report for Illinois, 2022

² Illinois State Literacy Plan, n.d.

learning and development, a framework for effective leadership, systems of support, and implementation considerations, as well as tools and resources for educators. More information regarding the State Literacy Plan can be found on the <u>ISBE website</u>.

Legal Parameters Related to Dyslexia

Federal Overview and Guidance

Four federal laws have applicability to students identified with dyslexia³:

ADA

The <u>Americans with Disabilities Act</u>, first enacted in 1990 and then updated in 2008, prohibits unjustified discrimination based on disability. It is meant to level the playing field for people with disabilities, including those who are dyslexic.

IDEA

The <u>Individuals with Disabilities Education Act</u>, enacted in 1975 under a different name and then updated as IDEA in 1990 and updated most recently in 2015, is designed to ensure that students with a disability are provided a "Free Appropriate Public Education" tailored to their individual needs. One of the law's pillars is that students with a disability are entitled to an Individualized Education Program, or IEP, that clearly delineates the services to be provided. The law defines 13 different categories used to identify students with a disability who should be guaranteed a free and appropriate public education. One of those 13 is the category of "Specific Learning Disability," within which dyslexia is cited as an example. Additionally, in 2015, The Office of Special Education Programs (OSEP) released a memo that provided policy guidance on IDEA/IEP terms to clarify that there is nothing in the IDEA that would prohibit the use of the terms dyslexia, dyscalculia, and dysgraphia in IDEA evaluation, eligibility determinations, or IEP documents⁴.

Under IDEA (and reiterated in Illinois State Law) "Each school district shall be responsible for actively seeking out and identifying all children from birth through age 21 within the district (and those parentally-placed private school children for whom the district is responsible under 34 C.F.R. 300.131) who may be eligible for special education and related services..."⁵

Thus, since dyslexia may be considered a specific learning disability according to school-based federal and state disability criteria and since districts are required to seek/identify children and adolescents who may have disabilities, schools should carefully consider whether or not a child with dyslexia meets the criteria for special education eligibility and therefore may be entitled to services.

Section 504 of the Rehabilitation Act of 1973

<u>Section 504</u> covers qualified students with disabilities who attend schools receiving federal financial assistance. To be protected under Section 504, a student must be determined to: (1) have a physical or mental impairment that substantially limits one or more major life activities; or (2) have a record of such an impairment; or (3) be regarded as having such an impairment.

³ Understanding the Law: ADA, IDEA, and Section 504

⁴ Yudin, 2015, Dear Colleague Letter

⁵ Child Find Responsibility, 226.100, 2023

Section 504 requires that school districts provide FAPE to qualified students in their jurisdictions who have a physical or mental impairment that substantially limits one or more major life activities. Major life activities, as defined in the Section 504 regulations at 34 C.F.R. 104.3(j)(2)(ii), include functions such as caring for oneself, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning, and working. While this list is not exhaustive, reading and/or writing could fall under the function of "learning" and, thus, students struggling in those areas would be protected if their challenges substantially limit major life activities.

Every Student Succeeds Act

Enacted in December of 2015, the *Every Student Succeeds Act* (ESSA) aims to "provide all children and adolescents significant opportunity to receive a fair, equitable, and high-quality education" as well as to "close educational achievement gaps." The legislation requires that each state create a plan for its schools to ensure an equitable education for all students, especially students in poverty, students of color, students who receive special education services, and students with limited English language proficiency. Schools must account for academic standards, annual testing, school accountability, goals in academic achievement, plans for supporting and improving struggling schools, and state and local report cards in their plans. In this law, ESSA includes provisions that are meant to help students with disabilities, including students with dyslexia, receive a more impactful education. Included are provisions specifically designed to improve literacy instruction including requiring evidence-based strategies to effectively teach reading and writing to students with learning disabilities, including dyslexia, and resources to identify and intervene when students are struggling in reading.

State Specific Guidance

In July 2014, Public Act 98-0705 was signed into law in the state of Illinois. This law specified that the

"State Board of Education shall adopt rules that incorporate an international definition of dyslexia" into the School Code. Effective January 2016, Illinois adopted the definition of dyslexia provided by the International Dyslexia Association in 23 Illinois Administrative Code Part 226.125 - Specific Learning Disability: Dyslexia. Illinois legislators also advanced another bill to ensure greater awareness about dyslexia. On July 20, 2018, House Bill 4369 was signed into law as Public Act 100-0617, requiring that ISBE develop, review every four years to update, and maintain a handbook that is made available on its internet website to provide guidelines, educational strategies, and

The increase in the legislation reflects the growing recognition of the need for better understanding dyslexia, its manifestations, and appropriate interventions and supports for students for students displaying dyslexia-related characteristics.

a description of resources and services for pupils, parents/guardians, and teachers on the subject of dyslexia.

While Illinois was among the first states to introduce dyslexia legislation, in recent years nearly all states across the country have enacted legislation related to dyslexia. This surge in legislation represents the widespread sentiment that there must be an appropriate understanding of what dyslexia is and how it manifests, along with the types of interventions and supports that can be provided to students exhibiting characteristics indicative of dyslexia.

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⁶ Public Act 98-0750, 2014

Bridge to Practice

A new student just transferred to the school where you work and was put into your class. From day one, you can tell that she is an exceptionally hard worker, but you also notice that she has been struggling to keep up with the rest of the class, especially in reading. When you check in on her, she tells you that she has dyslexia. You look in her file and see nothing documented regarding a dyslexia diagnosis, so you call her parents to try and figure out what is going on. They tell you that she does have a dyslexia diagnosis and that they have paperwork. The next morning, they bring the paperwork into school and ask if there is anything that can be done to help their daughter. What is your response?

Click for Answer

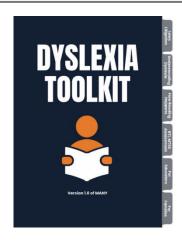
Key Terms

- Americans with <u>Disabilities Act</u>
- Every Student
 Succeeds Act

- Illinois Assessment of Readiness
- <u>Individuals with</u>
 <u>Disabilities Education</u>
 Act
- Section 504 of the Rehabilitation Act of 1973

Expanded Exploration: Linked Resources

- Read: Dyslexia Laws in the USA by the International Dyslexia
 Association
- Explore: Understanding the Law by The Yale Center for Dyslexia & Creativity
- <u>Learn: State Dyslexia Laws by the Davis Dyslexia Association</u> International



CHAPTER 2: UNDERSTANDING DYSLEXIA

What is Dyslexia?

Dyslexia is defined by Illinois state law as a

"Specific learning disability that is neurobiological in origin. Dyslexia 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."

The aforementioned definition was adopted by the International Dyslexia Association in 2002 and is now used by many states, including Illinois.⁷

Dyslexia is a language-based <u>learning disorder</u> which refers to a cluster of symptoms that result in people having difficulties with specific aspects of language, particularly <u>phonological processing</u> and/or <u>orthographic processing</u> in the area of reading. Students with dyslexia often experience difficulties with other language-based skills such as spelling, writing, and subtle difficulties in word pronunciation. Dyslexia affects individuals throughout their lives; however, the impact can change at different stages in

a person's life. Dyslexia is sometimes referred to as a learning disability because dyslexia can make it very difficult for a student to succeed academically in the typical instructional environment, and in its more severe forms, dyslexia may result in a student qualifying for extra support services, school accommodations, or special education services.⁸

Dyslexia is a language-based learning disability that is neurobiological in origin.

Prevalence

The most recent data (from 2020-21), indicate that approximately 7.2 million students (15% of all children and adolescents) in America's schools receive special education. Among those receiving services, 33% of them are served under the disability category of *Specific Learning Disability* (SLD) with the overwhelming majority experiencing a language-based disability. Nevertheless, many more people— perhaps as many as 15–20% of the population as a whole—experience some of the symptoms of dyslexia, including slow or inaccurate reading, poor spelling, poor writing, or mixing up similar words. Not all these students will qualify for special education, but they are likely to struggle with many aspects of academic learning and are likely to benefit from systematic, explicit instruction in reading, writing, and language¹⁰.

Additionally, dyslexia can have a genetic basis, meaning it can be inherited from parents. Close family members often share this condition, with multiple siblings potentially being affected. Older relatives who struggled in school or left early for work or military service might have had undiagnosed dyslexia.

⁷ Public Act 100-0617, 2018

⁸ International Dyslexia Association, 2020, Dyslexia Basics

⁹ National Center for Education Statistics, 2023, Students with Disabilities

¹⁰ National Center for Education Statistics, 2023, Students with Disabilities

Early intervention is crucial as inadequate support can lead to persistent reading difficulties in adulthood. Proper instruction, especially during early education, enhances the likelihood of minimizing long-term challenges for individuals with dyslexia.

Characteristics of Dyslexia

It is important to note that dyslexia occurs in people of all backgrounds and intellectual levels. People with dyslexia can be very bright, and they are often capable or even gifted in areas such as art, computer science, design, drama, electronics, math, mechanics, music, physics, sales, or sports. On the other hand, it is also possible for people with dyslexia to experience significant struggles that require interventions and support.

There are several characteristics that individuals with dyslexia often exhibit, though they do not all

exhibit these characteristics or struggle in the same way. Dyslexia exists on a continuum from mild to severe. The variability can manifest differently for different students, with some only struggling with

Dyslexia exists on a continuum from mild to severe.

occasional reading challenges, while others may require more intensive support to overcome significant barriers to skilled reading. Moreover, with dyslexia, there are three primary types of deficits¹¹:

- Phonological Core Deficit
 - A deficit in the phonological system in language which is the ability to process and manipulate phonemes (sounds).
- Naming Speed Deficit
 - A deficit in naming and processing speed which allows us to focus on the automaticity of retrieval.
- <u>Double Deficit¹²</u>
 - O Both a deficit in phonological awareness and naming speed.

Furthermore, dyslexia can also look different as children get older. The following list includes common characteristics across ages and grades:

Preschool

- Delay in learning to talk,
- Difficulty with sensitivity to rhyming,
- Difficulty pronouncing words (e.g., "pusgetti" for "spaghetti," "mawn lower" for "lawnmower"),
- Poor auditory memory for nursery rhymes and chants,
- Difficulty learning the alphabet,
- Difficulty adding new vocabulary words,
- Inability to recall the correct 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), and
- Disinterest in books.

¹¹ Norton, 2020, What Educators Need to Know About Rapid Automatized Naming (RAN)

¹² Bowers & Wolf, 1993, Theoretical Links Among Naming Speed, Precise Timing Mechanisms, and Orthographic Skill in Dyslexia

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 individual sounds in syllables (e.g., "man" sounded out as /m//ă//n/),
- Difficulty learning letter names,
- Difficulty learning letter sounds,
- Difficulty decoding single words (reading single words in isolation),
- Choppy, inaccurate decoding,
- Difficulty spelling words the way they sound (phonetically) or remembering letter sequences in very common words seen often in print (e.g., "rob" for "rope"),
- Challenges memorizing high frequency words,
- Odd letter formation, and
- Trouble with recall of dates, names, numbers.

Second Grade and Third Grade

Many of the previously described behaviors remain problematic in addition to the following:

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

- · Reading may be accurate but slow,
- Difficulty reading fluently (e.g., reading is slow, inaccurate, and/or without expression),
- Poor spelling,
- Difficulty reading out loud, but may have strong comprehension,
- Better comprehension in context than in isolation,
- Guessing when decoding, based on the initial letter of the word (e.g., reading "singing" as "swimming"),
- Frequent substitution and omission errors,
- Difficulty with the volume of reading and written work,
- Frustration with the amount of time required and energy expended for reading,
- Difficulty decoding unfamiliar words in sentences using knowledge of phonics,
- Inconsistencies when reading and spelling (i.e. reads/spells a word correctly once and then incorrectly three different ways later in the passage),
- Difficulty with comprehension of text due to vocabulary and contextual clues,
- Difficulty finishing timed tests,
- Difficulty with written assignments,
- Tendency to avoid reading (particularly for pleasure), and
- Difficulty learning a foreign language.

Other subjects may also be significantly impacted such as:

Mathematics

- Inability to read (or correctly read) textbook, notes, worksheet directions, word problems,
- · Poor math fact fluency, and
- Reversals or transposing of numbers.

Content Areas

- Difficulty with note taking,
- Struggling to learn from assigned readings,
- Listening comprehension may be much stronger than reading comprehension, and
- Extended written responses may not convey full extent of subject area knowledge.

Postsecondary

Some students will not be identified as having dyslexia prior to entering college. The early years of reading difficulties can 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 of 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 note taking,
- Difficulty with written production, and
- Difficulty remembering sequences (e.g., mathematical and/or scientific formulas).

Overall, research has shown that the following are key predictors of subsequent problems with learning to read: phonological/phonemic awareness, pseudoword repetition, rapid automatized naming, expressive/receptive vocabulary, oral listening comprehension, and letter-sound knowledge.¹³

Causes of Dyslexia

Dyslexia is a learning disorder that arises from variations in processing related to language and reading. Developmental dyslexia is caused by congenital and developmental factors, so there may be a hereditary/genetic component that may predispose some people for dyslexia over others. Research has yet to explore all possible causes; however, studies have found neurological differences in the brain which are believed to be at the root of dyslexia. It can also vary in its impact or severity for each family member.

Effects of Dyslexia

Dyslexia occurs on a continuum from mild to severe. Because of this, it affects people in different ways and may present barriers to learning, many of which can be overcome with proper interventions. Many people with dyslexia can become good readers while others may read slowly and inaccurately. While the most common and persistent issues are with reading and spelling, dyslexia is not simply an issue with written words. Some people with dyslexia may have difficulty recalling specific names or dates when pressured by time, remembering a list or sequence of spoken words such as a telephone number, following a conversation, following instructions, and/or expressing a point of view.¹⁴

The Impact of Dyslexia

Dyslexia primarily impacts reading and spelling but can also affect other areas of learning. Other learning problems may arise in areas secondary to reading and spelling, including vocabulary, grammar, reading comprehension, writing, and math. Moreover, dyslexia does not just impact academics. Approximately 40-60% of young people with dyslexia have some type of psychological difficulties including anxiety, depression, and/or attention difficulties.¹⁵

¹³ Dyslexia Symptoms in Children and Adults, n.d.

¹⁴ Dyslexia Myths and Facts, 2023, The Regents of the University of Michigan

¹⁵ Deighton, et al., 2020, Dyslexia and Allied Reading Difficulties

Comorbid Conditions That Can Impact Learning

Since dyslexia has been linked to the brain processing information in an atypical manner, it is often associated with other conditions or disorders that occur in a similar way. It is not uncommon for students with dyslexia to have *comorbid conditions*, also known as cooccurring disorders; studies have shown that as many as 50% of individuals diagnosed with a

It is not uncommon for students with dyslexia to have comorbid conditions, also known as co-occuring disorders such as: ADHD, DLD, Dysgraphia, and Dyscalculia to name a few.

neurodevelopmental disorder are diagnosed with more than one.¹⁶ That being said, it is also entirely possible to have dyslexia without having any other related disorder(s). Nevertheless, some of the most common co-occurring conditions/comorbid disorders include:

ADHD

Attention Deficit Hyperactivity Disorder (ADHD) is the most common type of neurodevelopmental disorder in children and adolescents. ADHD is when a person exhibits a pattern of inattention and/or impulsivity. Oftentimes people with ADHD display characteristics including being unable to sit still, fidgeting, lack of focus, excessive talking or moving, and being impulsive.

Central Auditory Processing Disorder

Individuals with Central Auditory Processing Disorder (CAPD) have deficits in skills related to auditory attention, discrimination, analysis, synthesis, association, and organization. Oftentimes, this disorder manifests in several ways, including difficulty understanding in noisy environments, trouble hearing in groups, difficulty following directions or needing frequent repetition, seeming to hear but not understanding, history of ear infections, distractibility, speech and language problems, poor localization skills, and problems in phonics, reading, spelling, and written language.¹⁷

<u>Developmental Language Disorder</u>

Developmental Language Disorder (DLD) is a communication disorder that interferes with learning. The prevalence rate of DLD is approximately 7.5%. These language difficulties are not explained by other conditions, such as hearing loss or autism, or by extenuating circumstances, such as lack of exposure to language. DLD can affect a child's speaking, listening, reading, and writing. DLD has also been called specific language impairment, language delay, or developmental dysphasia.

Dyscalculia

Dyscalculia is a learning disorder where people have difficulty in the area of mathematics. If someone were to have dyscalculia, they may have difficulty counting and reading numbers, memorizing and applying basic math facts, estimating speed, distance, or time, and counting money.

¹⁶ Habib, 2021, The Neurological Basis of Developmental Dyslexia and Related Disorders

¹⁷ Ferre, n.d., A Brief Guide to Central Auditory Processing Disorders

Dysgraphia

Dysgraphia refers to unusual difficulty with handwriting, which sometimes affects students' spelling, but not their word reading, decoding, and spelling unless they have co-occurring dyslexia. Oftentimes, people with dysgraphia struggle to form letters correctly or have handwriting that is illegible. They may also find it difficult to copy information.

Dyspraxia

Dyspraxia is a learning disorder where a person has difficulties with motor skills and coordination. Dyspraxia is shown in both physical movement and forming sounds. People with dyspraxia may find it difficult to play at recess when trying to run, jump, hop, or kick a ball. They also may find it difficult using facial muscles to form certain sounds or words.¹⁹

Executive Functioning Impairments

Executive functioning encompasses seven larger skills: adaptable thinking, planning, self-monitoring, flexibility in tasks, working memory, time management, and organization. If a person has challenges with executive functioning, they may experience difficulties in one or more of these areas. It may look like someone losing their papers frequently, struggling to plan out a larger project, or having a messy desk. There is a direct correlation between executive functioning and reading comprehension. Executive functions support students to process, coordinate, and integrate text information at the word, sentence, and passage levels.²⁰ If a student struggles with executive functioning, in reading this may present as lacking the ability to focus on multiple aspects of a text while reading or not understanding that they should approach a text with the intention of making meaning. Oftentimes, students who are successful "word callers" or decoders, but lack success with reading comprehension, will have executive functioning deficits.

The Social-Emotional Impact of Dyslexia

Having dyslexia can result in one experiencing a sense of chronic inadequacy, contributing to anxiety, anger, poor self-image, and even depression. Individuals with dyslexia often grapple with frustration due to their persistent struggles despite earnest efforts. ²¹ This can lead to misinterpretations of carelessness by caregivers and teachers, causing a cycle of misunderstandings. Anxiety is prevalent, driven by the fear of failure in tasks involving reading and spelling. Anger, arising from frustration, might be directed at schools, teachers, or caregivers. Poor self-esteem can stem from repeated failures, while depression may emerge as low self-esteem and negative thoughts intensify. Identifying these emotional challenges is crucial, as children and adolescents with dyslexia may require specialized support to prevent long-term psychological consequences like self-doubt and even suicidal thoughts. ²² Knowing this, it is imperative that students with dyslexia receive support at school and at home to minimize emotional struggles that often coincide with a dyslexia diagnosis. In addition, this information should stress the importance of early identification and intervention; the sooner the problem is acknowledged, the sooner students can receive the support that they need.

¹⁸ Berninger, Richards, & Abbott, 2015, Differential Diagnosis of Dysgraphia, Dyslexia, and OWL

¹⁹ National Institute on Deafness and Other Communication Disorders, 2023, Developmental Language Disorder

²⁰ Nguyen, et al., 2020, Executive Functions and Components of Oral Reading Fluency

²¹ Toth, 2020, Children with Dyslexia Show Stronger Emotional Responses

²² Alexander, Flipse, Hirschmann, Farris, & Odegard, 2023, Understanding Dyslexia: A Guide for Tennessee Families

Neurodiversity and Dyslexia

Students with dyslexia play a significant role in the rich tapestry of neurodiversity and are an invaluable part of our classrooms and society. It is imperative that we recognize and celebrate their worth, never diminishing their value as individuals solely based on their reading and writing abilities. In doing so, we

Students with dyslexia play a significant role in the rich tapestry of neurodiversity and are an invaluable part of our classrooms and society.

contribute to the vibrant spectrum of neurodiversity, embracing the beautiful diversity that exists in this world. Just like any other group of individuals, those with dyslexia have their own unique talents, strengths, and challenges. It is essential to refrain from generalizing and instead, take the time to acknowledge and appreciate the distinct qualities and abilities of each learner. Moreover, limitations in reading and writing skills do not equate to limitations in overall potential. A myriad

of accomplished individuals with dyslexia have broken barriers and reached the pinnacle of success in various fields. Consider the illustrious career of Steven Spielberg, whose masterful storytelling on screen has captured the hearts of audiences worldwide, or Octavia Spencer, whose exceptional acting talents have earned her accolades and admiration. Henry Winkler is celebrated for his iconic roles in television, and Richard Branson is a trailblazing entrepreneur. Even in the realm of science, figures such as Maggie Aderin-Pocock, a distinguished space scientist, have risen above challenges related to dyslexia to make groundbreaking contributions.

By recognizing and supporting the unique abilities of those with dyslexia, we not only empower these students, but also enrich our collective understanding of the vast spectrum of human capability. In doing so, we foster a more inclusive and equitable society where the worth of every individual is celebrated, regardless of their reading and writing skills.

Common Misconceptions about Dyslexia

Despite the prevalence of dyslexia, there are numerous misconceptions that can hinder understanding and support for those who have it. It is important to shed light on the true nature of dyslexia while aiming to promote greater awareness, empathy, and effective strategies to support students with dyslexia. Below, you will see each misconception in a box with the factual explanation underneath; the following have been adapted from a collection of resources.²³ ²⁴ ²⁵ ²⁶ ²⁷ ²⁸

Dyslexia does not exist.

We now have over 30 years of documented scientific evidence and research proving the existence of dyslexia. It is one of the most common learning disorders to affect children and adolescents.

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²³ Dyslexia Myths and Facts, 2023, The Regents of the University of Michigan

²⁴ Dyslexia: Myths and Facts, n.d., University of Florida Literacy Institute

²⁵ National Center on Improving Literacy, 2020, Understanding Dyslexia: Myth vs. Facts

²⁶ 2.2 Common Myths About Dyslexia, 2020, Colorado Department of Education

²⁷ Decoding Dyslexia, n.d., Dyslexia – Know the Facts

²⁸ Dyslexia Myths, n.d., Gaab Lab

Dyslexia is rare.

Dyslexia affects approximately 1 in 5 people, according to 25+ years of research by the National Institutes of Health and studies at Yale University. The American Academy of Pediatrics states that dyslexia is the most common learning disorder, accounting for 80% of all learning disabilities.

Smart people cannot be dyslexic or have a learning disability.

Dyslexia and intelligence are NOT connected. Many dyslexic individuals are very bright and creative and have accomplished amazing things as adults.

Dyslexia can be outgrown.

Dyslexia is a lifelong issue; yearly monitoring of phonological skill development from first through twelfth grade shows that the disability persists into adulthood. Although many students with dyslexia learn to read accurately, they may continue to read slowly and not automatically. And while dyslexia is considered a lifelong learning disorder, early, intensive, and systematic intervention can help a student acquire and maintain essential reading skills. Early intervention can also minimize the negative effects dyslexia can have, such as low self-esteem and poor self-concept as a learner. Conversely, without intervention, children and adolescents who are poor readers at the end of first grade almost never acquire average-level reading skills by the end of elementary school.^{29 30 31 32 33}

Any child who reverses letters or numbers has dyslexia.

Backwards writing and reversals of letters and words are common in the early stages of writing development among all children. Because many people erroneously believe that letter reversals define dyslexia, the children who do not make letter reversals, yet display other risk factors of dyslexia, often go undiagnosed. Quality early screening measures can help identify children in need of intervention and ensure they receive supports early.

Every child who struggles with reading is dyslexic.

Dyslexia is the most common cause of difficulty with reading, but it is by no means the only cause. Children and adolescents who struggle understanding spoken language also have problems with reading comprehension since oral language undergirds learning to read, spell, and write. Dyslexia does not only cause difficulties in reading, but may also be manifested in challenges in spelling, verbal expression, speech, writing, and memorization along with difficulties in other subjects such as math. In short, if a child is dyslexic, they most likely will show other warning signs besides having difficulty with reading.

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²⁹ Francis, et al., 1996, Developmental Lag Versus Deficit Models of Reading Disability

³⁰ Juel, 1988, Learning to Read and Write

³¹ Shaywitz, et al., 1999, Persistence of Dyslexia

³² Torgesen & Burgess, 1998, Consistency of Reading-Related Phonological Processes

³³ Gaab, n.d., Dyslexia Myths

Children and adolescents can "catch up" given enough time.

First graders who are poor readers seldom acquire adequate reading skills by the end of elementary school without intervention. In fact, 70% of below average readers in 1st grade remain below average readers in 8th grade. It is imperative that students who struggle with reading are identified early and receive proper instruction and intervention, because while students with dyslexia may learn to read accurately, their dyslexia will likely still hinder their ability to read through their entire life.

Children and adolescents with dyslexia are lazy or unmotivated.

People who are dyslexic show an irregular pattern of brain function when reading: underactivity in some regions, overactivity in others which, according to research, accounts for the difficulty they have in extracting meaning from the printed word. The findings provide evidence that people with dyslexia are not lazy, or stupid, but have a functional brain difference that has nothing to do with intelligence. If students with dyslexia do not receive the right type of intervention and/or classroom accommodations, they often struggle in school -- despite being bright, motivated, and spending hours on homework assignments.

Dyslexia only affects people who speak English.

Dyslexia is a neurobiological, brain-based disorder that affects individuals of all ages across different languages.³⁴ It occurs in all countries in the world who use a written language including both alphabetic and logographic language systems.

Dyslexic children and adolescents will never read well, so it is best to teach them to compensate.

Individuals with dyslexia can become successful readers with the appropriate intervention (i.e., systematic, explicit, and research-based). It is important to screen a child early in his/her school career in order to identify any problems so the appropriate interventions can be put in place. It is also important to note however, that even with high quality, intensive intervention, students with dyslexia may continue to struggle, albeit less than they would without intervention.

All students with dyslexia demonstrate the same problems with reading.

While dyslexia refers to reading challenges associated with a specific collection of processing deficits in the areas of phonological processing and/or orthographic processing, dyslexia exists on a continuum. Students with dyslexia demonstrate different levels of difficulty learning to read.

Schools and school districts cannot use the term "dyslexia".

According to a <u>Dear Colleague Letter</u> from the US Department of Education written on October 23, 2015, the term dyslexia can be used by schools to further describe a child's learning needs and characteristics during the process of evaluation, eligibility determination, and in devising Individualized Education Programs (IEPs). In fact, the letter goes on to discuss that there could be situations where the

³⁴ Youman & Mather, 2012, Dyslexia Laws in the USA

child's parents and the team of qualified professionals responsible for determining whether the child has a specific learning disability would find it helpful to include information about the specific condition (e.g., dyslexia, dyscalculia, or dysgraphia) in documenting how that condition relates to the child's eligibility determination.

Schools are not responsible for identifying children and adolescents with dyslexia.

Within a school's RtI, MTSS, and Special Education framework, schools do have a responsibility for identifying reading characteristics that indicate a risk of dyslexia. Furthermore, as described in the <u>Illinois Administrative Code Section 226.125 Part C</u>, each child suspected of having dyslexia or identified as dyslexic shall be referred for an [a special education] evaluation in accordance with the <u>requirements</u> of IDEA.

All children and adolescents identified with dyslexia will qualify for special education.

While dyslexia is considered a type of learning disorder, the educational impact of the disorder will determine eligibility for school-based services. Because the impact of dyslexia ranges from mild to severe, some students with dyslexia will qualify for special education services, some will need a 504 plan with appropriate accommodations, and others may only receive interventions through tiered supports. In short, not all students with dyslexia will require the same levels of support and not all students who qualify for special education under the category of Specific Learning Disability will be diagnosed with dyslexia.

Dyslexia is an eye problem.

Dyslexia is NOT a vision problem; it is a language-based learning disorder which refers to a cluster of symptoms that result in people having difficulties with specific aspects of language, particularly phonological processing and/or orthographic processing in the area of reading. There is no evidence that suggests that visual problems cause or are associated with dyslexia in any way.

Bridge to Practice

A coworker comes to you upset because she is stressed about her teenage son. He has been struggling in school for years with how much time he has to spend on reading assignments, spelling, and reading out loud, among other things. She always thought that he was just being lazy and didn't enjoy reading, but then at the recommendation of the school problem-solving team, she had him evaluated to determine the need for special education services. The school psychologist did a comprehensive assessment and data showed that her son exhibits characteristics consistent with dyslexia. She shares with you that she is afraid of what will happen to her son in the future because she has been told so many things about dyslexia. When you prompt her for more information, she tells you that she has heard that only people who have low intelligence have dyslexia, that it is a super rare condition, and that he will never be successful in life since he can't read. How can you help her?

Click for Answer

Key Terms

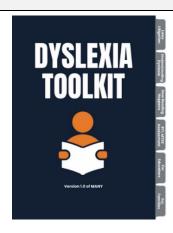
- Attention Deficit
 Hyperactivity
 Disorder (ADHD)
- <u>Central Auditory</u>
 <u>Processing Disorder</u>
- Comorbid Conditions
- <u>Developmental</u>
 <u>Language Disorder</u>
 (<u>DLD</u>)

- <u>Double Deficit</u>
- Dyscalculia
- Dysgraphia
- Dyslexia
- Dyspraxia
- <u>Executive</u> Functioning
- <u>Learning Disorder</u>

- Naming Speed
 Deficit
- <u>Phonological Core</u>
 <u>Deficit</u>
- Specific Learning
 Disability (SLD)

Expanded Exploration: Linked Resources

- Explore: Dyslexia Basics with the International Dyslexia
 Association
- Read: The Signs of Dyslexia at Different Ages from Yale University
- Watch: Dyslexia 101 from the International Dyslexia Association



CHAPTER 3: HOW READING HAPPENS

Did You Know?

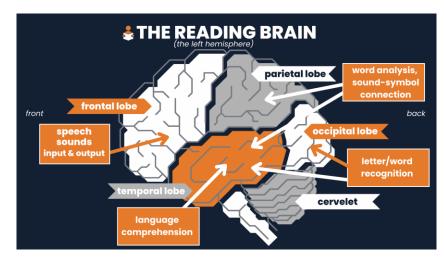
Reading is **not** a natural process like speaking. We create new neural networks in our brains when a child is taught to read. Because dyslexia is neurobiological in origin, these students must work extra hard in activating the brain regions to create these neural networks.

How the Brain Learns to Read

Learning to read does not occur naturally (like speaking) because the human brain is not "hardwired" to read.³⁵ Unlike speaking, reading is a relatively recent invention, as our written system emerged within the last 5,000 years. This means that learning to read is an unnatural process and it requires specific instruction and support. However, before delving into instructional methods, it is crucial to grasp how the brain learns to read.

Reading doesn't rely on a single brain area but involves various processes connecting into different regions. Proficient readers use and synchronize several left hemisphere regions, including the following:³⁶

- <u>Temporal Lobe</u>: This part deciphers sounds and fosters phonological awareness, dissecting syllables, phonemes, and words. Specific regions within the temporal lobe include:
 - Parietal-Temporal Region: Breaking down written words into sounds (word analysis).
 - Occipital-Temporal
 Region: Strong word
 appearances and
 meanings (letter-word
 recognition,
 automaticity &
 comprehension), vital
 for quick and fluent
 reading.
- Angular and Supramarginal
 Gyrus: These integrate
 multiple brain parts,
 connecting letters to form
 words for reading aloud.



• **Frontal Lobe:** Responsible for generating speech sounds, aiding in pronouncing written words. It manages various speech functions such as reading **fluency**, understanding and applying **grammar**, and producing speech.

Furthermore, our brain undergoes changes as we become better readers. Initially, one part is more active, helping us understand words. As proficiency grows, another part takes over for quicker <u>word</u> <u>recognition</u>. Recognizing these brain regions involved in the complex process of reading coupled with

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³⁵ Seidenberg, 2020, The Role of Orthographic Mapping in Learning to Read

³⁶ Sedita, 2020a, How the Brain Learns to Read

the brain's adaptability with practice is essential for those teaching reading and especially for those providing intervention and remediation for students with dyslexia.

The Key to Reading

The key concept in teaching a child to become a skilled reader is orthographic mapping. Orthographic

Orthographic mapping is the process readers use to store written words for immediate, effortless retrieval which allow readers to turn unfamiliar words into instantaneously accessible sight words.

<u>mapping</u> is the process by which successful readers become fluent readers.³⁷ With students with dyslexia, the goal is for them to be able to orthographically map words so that they can achieve automatic word recognition that leads to skilled, fluent reading. This process involves students using the part of their brain responsible for processing oral language to connect the sounds of words

(<u>phonemes</u>) they know to the letters in those words (spellings or <u>graphemes</u>). These connected sounds and letters, along with their meanings, are then permanently stored in the brain as instantly recognizable words, often referred to as "sight vocabulary" or "<u>sight words</u>."

Orthographic mapping is not about memorizing how words look. Research indicates that when we read, we actually examine each letter in every word. Our brains combine our knowledge of letter-sound relationships with our awareness of speech sounds to link letter patterns and words together as meaningful units. These units are stored in long-term memory for automatic retrieval.

Having a substantial number of stored sight words is what enables fluency in reading. Fluency means being able to read at an appropriate rate with accuracy, allowing the reader to focus on understanding

the text. As Ehri explains, to establish these word connections and retain them in memory, readers need certain skills.³⁸ They must have **phonemic awareness**, particularly in segmenting and blending sounds. They also need to know the letter-sound correspondences of the writing system. Additionally, they should be able to read unfamiliar words by applying **decoding** strategies. Doing so activates orthographic mapping, helping to

A sight word is a word that is instantly recognized because it has been orthographically mapped in the brain.

remember the words' spellings, pronunciations, and meanings in memory.

What Brain Imaging Reveals about Students with Dyslexia

Researchers and neuroscientists have found that struggling readers, including students with dyslexia, exhibit distinct brain activity patterns. In individuals facing reading difficulties, the pathways responsible for language and cognition are less efficient and less established, making the act of reading more challenging despite their sincere efforts. Brain imaging studies have revealed that dyslexia is rooted in neurological differences. Readers with dyslexia display reduced activation in areas where they are weaker and increased activation in other areas as a compensatory mechanism. Instead of relying on the left hemisphere of the brain, which is specialized for language processing, individuals with dyslexia who struggle with reading engage different parts of the right hemisphere, which is less efficient. Moreover,

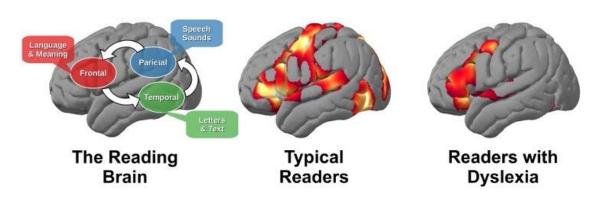
 ³⁷ Kilpatrick, 2015, Essentials of Assessing, Preventing, and Overcoming Reading Difficulties
 ³⁸ Ehri, 2014, Orthographic Mapping in the Acquisition of Sight Word Reading, Spelling Memory, and Vocabulary Learning

this is why understanding how the brain learns to read is imperative in understanding how to teach and support students with dyslexia.

Because of this, it is important that when children and adolescents first start school, all receive direct, explicit instruction to build the reading neural network, connecting sounds to letters and meaning so that they may receive a strong literacy foundation. Because of what we know about the brain, we know that some will build that network more easily than others. Those who struggle will need additional time and intensity of instruction in order to become a skilled reader. See Chapter 6 for more information on instruction.

How Instructional Practices Impact Reading Development

It is crucial to distinguish between students who face reading difficulties due to dyslexia and those who struggle primarily because of the instructional methods employed. When children are taught to read by diverting their attention away from letters and relying on alternative cues in the text, guessing words from context, or memorizing whole words without understanding their structural components, they are essentially being trained in strategies commonly associated with weak readers. These methods have been pervasive in reading instruction across Illinois and our country for many years, and students subjected to them are more likely to encounter reading challenges to varying degrees. Some may even exhibit signs of dyslexia, although their struggles may not be rooted in this neurological condition. Importantly, such practices hinder the development of a robust neural network for reading, writing, and spelling, further emphasizing the need for a shift in instructional practices³⁹.



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³⁹ Eden, 2016, Dyslexia and the Brain

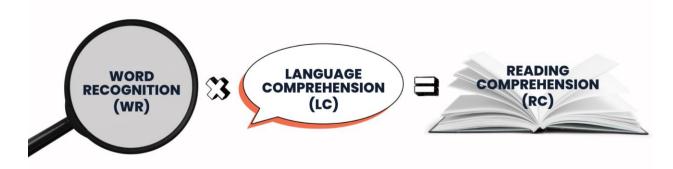
Reading Development Informed by Science

The Simple View of Reading (SVR) is a model that can help educators understand how students learn to read. 40 Not only is it helpful in understanding reading, but the research support is substantial and holds true for all students. The SVR says that two things are essential for reading: knowing how to recognize words and understanding language. 41 Research supports this idea, showing that good reading involves both word recognition and understanding language. It is important to note that the Simple View of Reading isn't simple itself. Both word recognition and language understanding have many parts that work together, and they rely on each other. It's not as simple as just teaching one or the other; however, when students struggle with reading, especially if they have dyslexia, teaching methods based on The Simple View of Reading are essential.

Figure 1: Adapted from the Simple View of Reading⁴²

THE SIMPLE VIEW OF READING

Gough & Tunmer, 1986



To further understand the reading process, we can examine Scarborough's Reading Rope.⁴³ Imagine reading as a rope with two parts: one part is about recognizing words (through **phonological awareness**, decoding, and sight recognition of familiar words) and the other part is about understanding language (like knowing words and how they fit together). These two parts work together as a student becomes better at reading through **explicit instruction** and practice.

At the same time, different aspects of understanding language, like knowing many words, understanding how language works, and having background knowledge, also help each other. Eventually, these language skills combine with word recognition skills to make someone a good reader. However, becoming a good reader does not happen quickly for most. For many students, including those with dyslexia, learning to read can be a challenge. The Reading Rope helps us see how reading is complex and the many components that are required in order to become a skilled reader.

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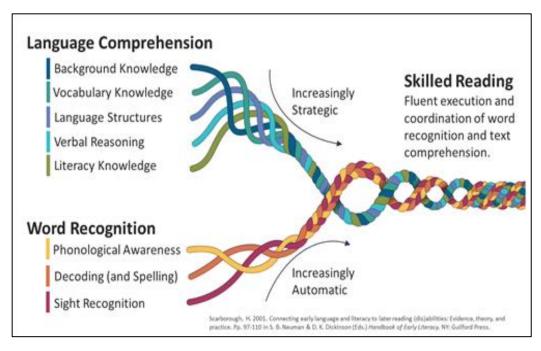
⁴⁰ Hoover & Gough, 1990, The Simple View of Reading

⁴¹ Gough & Tunmer,1986, Decoding, Reading, and Reading Disability

⁴² Hoover & Gough, 1990, The Simple View of Reading

⁴³ Scarborough, 2001, The Reading Rope

Figure 2: Scarborough's Reading Rope⁴⁴



How does this Relate to Dyslexia?

In order to fully understand the complexity of dyslexia, it is imperative to understand how the brain learns to read and the physical brain differences in a student with dyslexia. Through examining the

Reading Rope, we are able to better understand all the skills necessary to become an effective and efficient reader. The Reading Rope and the SVR can also help pinpoint which parts of reading skill acquisition are causing students the most difficulty. For students with dyslexia, ensuring skill development across all areas will require specific instructional components and considerations which are further discussed in Chapter

For students with dyslexia, ensuring skill development across all areas will require specific instructional components and considerations.

<u>6</u>. Due to the specific deficits in the <u>phonological component</u> that hinder reading and spelling abilities in students with dyslexia, it is crucial to prioritize word recognition instruction as it directly addresses the underlying difficulties. However, it is equally vital to acknowledge the significance of language comprehension in overall reading achievement. It is also important to note that if a student has dyslexia with a coexisting condition such as DLD, <u>language comprehension</u> might be more of a focus in regard to instruction depending on the severity of word recognition deficit.

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⁴⁴ Scarborough, 2001, The Reading Rope

Bridge to Practice

There has been some recent debate at a problem-solving team meeting that you are on regarding a middle-school student's reading deficit area. Most of the team think that the student has a deficit with decoding texts because they spend so much time trying to read individual words that by the time they finish a passage, they have forgotten what they just read. In addition, when the student reads out loud, there is an apparent disconnect between what the student says compared to the actual words on the page. One person on the team thinks that it is just a reading comprehension problem because "the student should have learned to read by now; they are in middle school." How can you help the team work through this disagreement?

Click for Answer

Key Terms

- Angular Gyrus and Supramarginal Gyrus
- Automaticity
- Comprehension
- Decoding
- Explicit Instruction
- Fluency
- Frontal Lobe
- Grammar

- Grapheme
- <u>Language</u>
 <u>Comprehension</u>
- Occipital Temporal Region
- Orthographic Mapping
- <u>Parietal-Temporal</u>
 Region

- Phoneme
- Phonemic Awareness
- <u>Phonological</u>
 Awareness
- <u>Phonological</u>
 Component
- Sight Word
- Temporal Lobe
- Word Recognition

Expanded Exploration: Linked Resources

- **Explore:** The Reading Rockets Website
- Read: Teaching Reading is Rocket Science: What Expert Teachers of Reading Should Know and Be Able to Do by Louisa Moats
- **Watch:** Dr. Nadine Gaab from Harvard University



CHAPTER 4: SCHOOL-BASED IDENTIFICATION AND SYSTEMS OF SERVICE PROVISION FOR STUDENTS WITH DYSLEXIA

"A multi-tiered system of supports (MTSS) is a proactive and preventative framework that integrates data and instruction to maximize student achievement and support students' social, emotional, and behavior needs from a strengths-based perspective." 45

The Role of RtI and MTSS

Response to Intervention (RtI) and Multi-Tiered Systems of Support (MTSS) are terms often used interchangeably to describe methods of responding to student needs to reduce both academic and behavioral difficulties before they become a barrier to student success. Though RtI is a part of MTSS, it focuses more on individual student progress and is required for SLD eligibility in the state of Illinois; so

long as RtI is being implemented with fidelity, it is encapsulated under the larger MTSS umbrella. MTSS has a broader scope, with academics being only one strand. In addition to academics, an MTSS framework also addresses student behavior, professional development for teachers, school climate, family and community involvement, and system needs to ensure that a district is functioning at a high standard. An MTSS framework empowers educators to use scheduled assessments to monitor student

So long as RtI is being implemented with fidelity, it is encapsulated under the larger MTSS umbrella.

progress, and the data from these assessments can be used to inform whole-class instruction as well as provide insight to where individual students or small groups need more targeted instruction. Ongoing data review ensures school professionals are able to effectively monitor growth and helps staff to know if there is a need to select another, more intensive support, without waiting until students fall further behind.

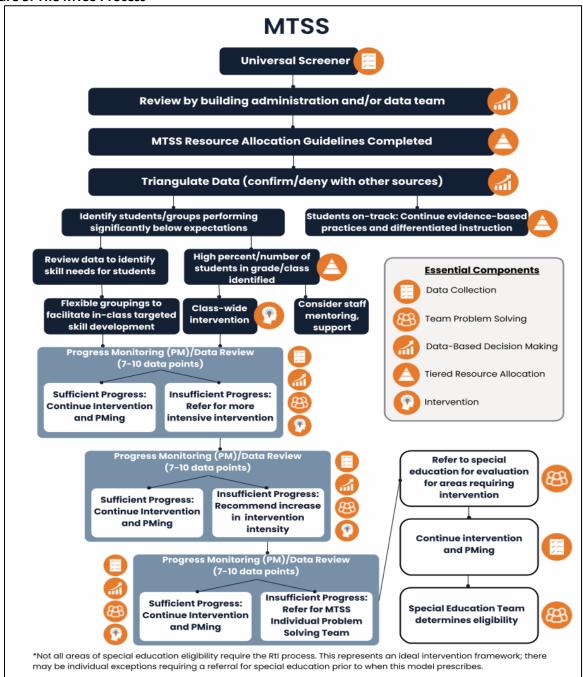
In practice, an MTSS framework for schools helps to identify students who need support and match those supports to appropriate interventions that will meet student needs. Thus, it is necessary to embed early literacy screening and intervention into the MTSS process to detect early signs of reading problems such as dyslexia. By using a model that includes early literacy screening, research shows a decrease in the likelihood of students falling behind. The public-school setting is often the only place where students are assessed to identify risk of learning disorders, such as dyslexia, as well as where evidence-based reading instruction can take place without cost to families.

Though it was mentioned previously that MTSS is designed to address both academic and behavioral needs, for the sake of this handbook, the focus will be solely on the academic side of MTSS and its impact on dyslexia. There are several components that are essential to successfully implementing an MTSS framework (see figure 3 for a flowchart that depicts the process), including:

- Universal Screening
- 2. Data Based Decision Making
- 3. Tiered Resource Allocation
- 4. Team Problem Solving
- 5. Evidence-Based Intervention

⁴⁵ American Institutes for Research, 2022, Essential Components of MTSS

Figure 3: The MTSS Process



Assessment

Assessment plays a vital role in identifying students who may be struggling with reading. It is crucial that school districts have a comprehensive assessment plan that will empower educators to pinpoint areas of difficulty so that they can tailor instruction accordingly. Through the use of a comprehensive assessment plan, educators can uncover potential learning disabilities such as dyslexia, comprehension issues, and/or gaps in foundational skills that may hinder a student's overall reading achievement. Early identification through the use of assessments allows for timely early intervention, specifically designed instruction (when needed), and the development of targeted support to help struggling readers build

the essential literacy skills they need for success in both academic and life pursuits; in fact there is research that supports the idea that when students are identified and interventions are implemented in early elementary school, they are significantly more likely to reach an average range in reading ability. ⁴⁶ Ultimately, assessment serves as a critical step in ensuring that no student is left behind in their journey to becoming a proficient and confident reader. Various types of assessment and the purposes for which they are used are described below.

Table 1: Types of Assessments

Type of Assessment	Description	Purpose	Targeted Participants	Example(s)
Universal Early Literacy Screener	Brief, less than 15 minutes, assessing foundational literacy skills such as phonological awareness, lettersound knowledge, etc.	Identify which students and systems are at risk	All students	Acadience, FastBridge, AimsWeb
Diagnostic Literacy Assessment(s)	Identify a student's specific strengths and weaknesses in reading, for example, phonics or vocabulary skills. Diagnostic tests provide a detailed profile of the student's needs to guide intervention.	Determine specific skill deficits and what to teach next	Students who were indicated as "at-risk" on the early literacy screener	Phonics Survey, PAST
Progress Monitoring	To determine if a student who is receiving instruction is making progress, informs decisions about when to exit a skill and which skill to address next	Determine if instruction/ intervention is working	Students who are receiving intervention	Letter Sound Fluency, Word Identification Fluency, Oral Reading Fluency (ORF)

⁴⁶ Gaab, n.d., Dyslexia Myths

Outcome Measure	State-mandated assessment to tell if students are reaching sufficient levels of	Determining if instruction was sufficient	All students within a specific grade level as defined by state guidance	Illinois Assessment of Readiness (IAR)
	achievement			

Universal Early Literacy Screening

The initial phase of the broader multi-tiered support system (MTSS) for addressing and preventing reading difficulties begins with screening for the risk of dyslexia and other reading challenges. This process entails assessing academic performance of all students in early literacy and reading skill development to guide decisions regarding overall instruction and intervention. The primary purpose of using a screener is not to pinpoint students with dyslexia or disabilities, but rather to identify those at risk and determine who requires further assessment and support. As Susan Hall explains, "A universal screener informs you about students who are not meeting the expected standard." Universal early literacy screeners encompass brief assessments administered to all students, gauging fundamental literacy abilities like phonological awareness, letter recognition, and letter-sound knowledge. These assessments help identify students meeting benchmark levels by evaluating indicators that predict future reading success.

Once a screener has been administered, an education team can then use that data to match students with identified skill deficits, identify who needs further diagnostic assessments, and also use the data holistically to examine proficiency across grade levels, school buildings, and the district. A screener is **not** a diagnostic test and will **not** result in a

Results from a universal early literacy screener will answer the questions,
"Who is at risk for reading failure?"
and
"Who needs additional support?"

child being diagnosed with dyslexia or any other learning disorder.⁴⁸ Ideally, screening results answer the question, "Who is at risk for reading difficulty?" and "Who needs additional support?"⁴⁹

Consider the screening assessment process using a funnel analogy. Initially, all students go through the school's universal early literacy screener, which represents the wider opening of the funnel. The primary purpose of the assessment is to identify students who are not performing at benchmark levels and to gain initial insights into which specific areas require further examination, such as phonological awareness, phonics, fluency, vocabulary, or comprehension. For those students who do not meet the benchmark as they progress through the initial screening, the subsequent step involves pinpointing the exact deficit areas and determining an appropriate treatment plan. In order to do this effectively, educators need access to robust diagnostic assessment data that will help identify precisely where the student began encountering difficulties and which specific skill represents the lowest point in their progression from simpler to more complex skills.⁵⁰ If a universal screener can "catch" students at risk of

⁴⁷ Hall, 2018, 10 Successful Factors for Literacy Intervention

⁴⁸ Albers & Hall, 2023, Best Practices for Universal Screening in Schools

⁴⁹ Brehmer, et al., 2022, Michigan Dyslexia Handbook: A Guide to Accelerating Learner Outcomes in Literacy

⁵⁰ Hall, 2018, 10 Successful Factors for Literacy Intervention

dyslexia and other reading difficulties early in their school careers, early literacy intervention can be provided to help mediate the effects that dyslexia may have on a student otherwise.

Many districts already use universal screeners that follow recommendations for assessing for dyslexia and other learning difficulties; refer to table 2 for a list of skills recommended for inclusion in early literacy screening. Not only have these areas been identified through research as holding validity as a predictor for future reading achievement, they are also able to be assessed briefly, and are areas for which interventions can be prescribed based on the results. When an appropriate universal screener is selected, there is no need to add an additional screener that is specific to dyslexia. However, if a screener does not measure these specified skills, schools will need to utilize different or additional tools to find out who is at risk for reading difficulties and dyslexia.

Table 2: Screening Measures by Grade Level

Grades	Screening Measures		
Pre-Kindergarten	Oral language and vocabulary		
	 Phonological awareness 		
	Alphabet knowledge		
Kindergarten	 Oral language and vocabulary 		
	Letter knowledge		
	 Phonological (phonemic) awareness 		
	 Letter-sound associations 		
	 Phonological processing task (Rapid Automized Naming 		
	assessment measure)		
	Spelling (end of kindergarten)		
First Grade	 Phonemic awareness segmentation task 		
	 Phonological processing task (Rapid Automized Naming 		
	assessment measure)		
	 Non-word reading fluency 		
	Word-reading fluency		
	Oral reading fluency		
	Spelling		
Second Grade	 Word-reading tasks 		
	Oral reading fluency		
	Spelling		
Third Grade	Oral reading fluency		
	Spelling		

It is important to note that though students may be flagged by an early literacy screener as meeting the criteria for "at-risk for dyslexia" or "at-risk for a learning disability", this does not mean they will qualify for special education services. In fact, early literacy screening results alone do not provide enough information that the team should automatically "suspect" dyslexia. The screener is simply the first step in identifying students who need additional reading intervention as well as those who need more indepth skill evaluation in a broader MTSS framework.

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⁵¹ Massachusetts Dyslexia Guidelines, 2021, Massachusetts Department of Elementary and Secondary Education

There are several screeners available for district use that may help in identifying students who are at risk of poor academic outcomes, including those who may potentially have dyslexia. A list of popular screeners can be found at The National Center for Intensive Intervention. Furthermore, additional screeners, as well as other resources, can be found in the Dyslexia Toolkit.

Screening for Older Students

Identifying reading difficulties among older students (those in 4th grade and beyond) requires different approaches than those used in early elementary years. It is crucial for districts and schools to establish a comprehensive assessment plan aimed at identifying individuals who struggle with reading or may exhibit signs of dyslexia, especially if they were not identified during their earlier years.

Oral Reading Fluency (ORF) assessments serve as an initial step in identifying older students who require additional diagnostic assessments to determine an appropriate intervention.

Some districts employ benchmark assessments such as

FastBridge Reading or NWEA MAP, and if available, it is advisable to leverage the data from these assessments to determine the need for further assessment (refer to <u>Chapter 6</u> for visual representation). In cases where benchmark assessments are not in place, a practical starting point is to administer an <u>Oral Reading Fluency</u> (ORF) assessment, including a comprehension component, two to three times a year. This approach helps educational teams identify students reading below their grade level and ascertain whether fluency issues are contributing to their reading comprehension challenges. Oral Reading Fluency assessments serve as an initial step in identifying students who require additional diagnostic assessments to determine appropriate intervention.

Diagnostic Literacy Assessments

Once an early literacy universal screener is complete, that data will give the education team information regarding who is at risk and who needs further diagnostic assessments to pinpoint specific skill deficits. <u>Diagnostic literacy assessments</u> are utilized to provide a snapshot of one specific skill area such as phonological awareness. "The diagnostic tells you why a student isn't reading at benchmark and what to do about it."⁵⁴

Diagnostic assessments are only given to some students. Teams can identify students needing further

"It is ineffective practice to go straight from a universal screener to determining intervention instruction without a good diagnostic evaluation in between."

Susan Hall, 10 Successful Factors for Literacy
Intervention

assessments based on the universal literacy screener. These assessments, for the most part, are not timed; however, they are fairly quick to administer as they are set up from simple to complex when it comes to skill progression. When a student cannot pass a skill, "that becomes the starting point for intervention instruction." Moreover, it is essential for the intervention provider to match the skill deficit to an evidence-based

⁵² National Center on Intensive Intervention, 2021, Academic Screening Tools Chart

⁵³ Petscher, et al., 2020, How the Science of Reading Informs 21st-Century Education

⁵⁴ Hall, 2018, 10 Successful Factors for Literacy Intervention

⁵⁵ Hall, 2018, 10 Successful Factors for Literacy Intervention

intervention. For example, if a student has a deficit in word recognition, a provider will NOT begin with a comprehension intervention. More effectively, if a student had a word recognition deficit, a provider would begin with an intervention in word recognition that is systematic, explicit, and cumulative. Refer to the Dyslexia Toolkit for intervention ideas.

Assessment to Intervention

Once an early literacy screener and diagnostic assessments have taken place, the data collected from these assessments should be used to form specific skill intervention groups. There are several common

grouping practices that are ineffective and will not provide the best outcome for students in regard to literacy skill development. Teams should NOT simply group by benchmark score/level or quadrants. These common grouping practices will lead to a mixture of needs in the same group, lack of clarity about what skills have been mastered and which are

Teams should form intervention groups based on skill deficits rather than relying solely on a single score from a benchmark assessment.

deficient, unclear goals, and overall lack of overall direction for the teacher or interventionist providing the instruction.⁵⁶ Instead, teams should form intervention groups based on skill deficit. In this way, the teacher or interventionist has a clear picture of what to teach and how to measure progress. For more information on skills to be focused on during intervention, see Chapter 6.

Progress Monitoring

Students receiving intervention should be progress monitored frequently to ensure academic progress. Progress monitoring allows the team to frequently and continuously evaluate student learning, monitoring the effectiveness of instruction in intervention, and make instructional changes to improve student performance.⁵⁷ Additionally, progress monitoring is a key component in the RTI/MTSS process. The data that is collected from progress monitoring is an objective way for the team to determine if students are responding to the intervention provided and next steps. Moreover, progress monitoring is a critical component in data-based individualization (DBI) which is a research-based process that guides educators on making instructional decisions for students who struggle⁵⁸.

Progress monitoring is a crucial tool that enables immediate data collection and formative feedback for interventionists and teachers that may be used in the case of a special education evaluation. Progress monitoring data eliminates the need to wait for larger scale evaluation or assessment results. Typically, 7-10 data points are gathered, offering educators enough information to spot trends and make informed decisions about a student's response to intervention. If a student is not responding adequately, adjustments in the intervention's intensity or type can be promptly implemented, see The National Center on Intensive Intervention's (NCII) <u>Taxonomy of Intervention Intensity</u>. See Continual data monitoring is essential during this process to gauge a student's response effectively. In cases of inadequate response, the team can convene and employ Data Based Individualization (DBI) to enhance the intervention's effectiveness, potentially altering its frequency, duration, or intensity as needed. For more information on analyzing progress monitoring to help inform instruction, see The <u>Iris Center Progress Monitoring Module</u> and the <u>NCII Reading Progress Monitoring Module</u>.

⁵⁶ Hall, 2018, 10 Successful Factors for Literacy Intervention

⁵⁷ IRIS Center, n.d., Progress Monitoring

⁵⁸ National Center on Intensive Intervention, 2013, Data-Based Individualization

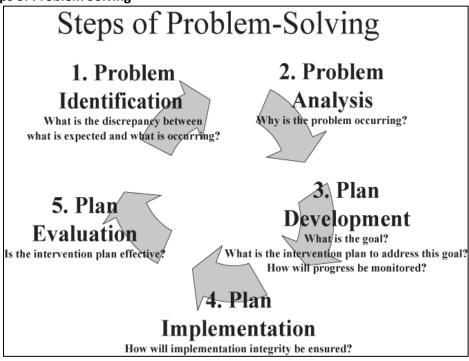
⁵⁹ Fuchs, Fuchs, & Malone, 2017, The Taxonomy of Intervention Intensity

Problem-Solving Model

The MTSS framework is built on a foundation of problem solving. Educators ask questions about increasing literacy, try interventions, and check the results. With numerous evidence-based practices, reasons for achievement gaps, and individual needs, a large number of variables exist when seeking to align interventions and selecting instructional strategies. Questions and concerns can be overwhelming for a team charged with decision making, so remembering that the problem-solving process is fluid and ongoing is essential (see Figure 4).⁶⁰

Paired with <u>data-based decision making</u>, this model of problem solving can continually ground educators in the essential questions that guide improved student learning outcomes; a list of these essential questions can be found in the dyslexia toolkit.

Figure 4: Steps of Problem Solving



Individual Problem Solving

Most steps within an MTSS model are in place to support services for the majority of students. Just like tiered intervention aims to support the majority of students with needs, the process reflects decision making for groups of students, rather than individuals, for most steps of the process. Individual problem solving typically only occurs following the implementation of at least two implementation cycles of evidence-based interventions. For students who demonstrate reading skill gaps when compared to peers, this ensures instruction can occur immediately following assessment data indicating a need. Individual problem solving should come after targeted interventions have been put into place; not only will the student already be receiving instruction in the skill area(s) identified, the team will have more information on what works (or does not work) for a student. When analyzing progress monitoring data

⁶⁰ Gibbons & Coulter, 2015, Making Response to Intervention Stick

from a tiered literacy intervention and observing insufficient progress towards the goal, a team may engage in individual problem solving for a child.⁶¹

Compared to team meetings that focus on a multitude of students, there are a few changes that characterize individual problem-solving team meetings.

- 1. Individual student data is included to reflect the whole child. Data regarding all academics, behavior, social-emotional functioning, and independence in age-appropriate skills should be available for all team members to review.
- 2. The team members should include professionals from multiple disciplines across the school setting, such as the classroom teacher, interventionists, student service personnel (social worker, school psychologists, school counselors) and an administrator. A school's problem-solving team must include families as part of the IEP team, but also throughout the RtI/MTSS problem-solving process.⁶² Per <u>ISBE's Form 34-54</u>, Instructions For Individualized Education Program Forms indicate teams must:
 - Provide documentation of the parent/guardian or student involvement as part of the problem/decision-making team;
 - The parent or guardian of a child shall be provided with written notice of the school district's use of scientific, research-based intervention or a multi-tiered system of support for the child and may be part of the collaborative team approach at the discretion of the school district; and
 - The parent or guardian shall be provided with all data collected and reviewed by the school district with regard to the child in the scientific, research-based intervention or multi-tiered system of support process.
- 3. A problem-solving framework should be used, with clearly documented discrepancy statements based in data. Goals specific to the discrepancy should be determined, and dates for follow-up meetings should be scheduled following literacy intervention implementation.

The ultimate goal of problem solving, whether it be for a group of students, or an individual student, is to ensure that every child is receiving literacy interventions that are appropriate and beneficial to their educational progress. Not all students will receive the same intervention with the same level of intensity or even for the same amount of time; students should receive what they need in order to be successful, ultimately ensuring that they become skilled readers.

The ultimate goal of problemsolving is to ensure that every child is receiving literacy interventions that are appropriate and beneficial to their educational progress.

Tiered Resource Allocation

Another key component of MTSS is the <u>multi-tiered service delivery model</u>. All students need foundational reading skills, reading fluency, and language comprehension development in order to be successful in the classroom and beyond. Additionally, within the MTSS model, all students should have access to high-quality, evidence-based literacy instruction – regardless of the tier. The universal tier (tier 1) represents the initial intervention for all students and presents the prime opportunity to make the

⁶¹ National Center on Intensive Intervention, n.d., What is Data Based Individualization

⁶² Public Act 101-0515, 2019

most significant difference in student achievement. It involves establishing a durable and robust educational groundwork that can serve as the basis for providing enriching assistance to those who require it; however, when student needs exceed what is provided in the classroom during tier 1 instruction, individualized, evidence-based interventions need to be implemented. The creation and organization of students into tiered levels of support is done so that all students can be provided with instruction that meets their level and type of need.

The classic view of tiered interventions is that the supports become additive in nature. Tiered instruction indicates a progression of intensity that is appropriate for the needs of the individual student. With the exception of higher-risk schools requiring more supports for all students, many districts can consider the following as typical definitions for the three tiers:

Table 3: Tiers of Instruction

Tier	Description	Provider	Audience
Tier 1: Core Instruction	Evidence-based, grade- level instruction in a general education setting	Classroom Teacher	All students
Tier 2: Targeted Interventions	In addition to Tier 1 core instruction – Different or additional support based on literacy needs	Teacher or Reading Interventionist	Small (8-10) groups of students
Tier 3: Intensive Individualized Intervention	In addition to Tier 1 core instruction – Increased intensity and explicitness with more instructional time and more focus on teaching specific skills	Reading Interventionist, Dyslexia Therapist, or Specialist	Small (no more than 4) groups of students

Because individuals with dyslexia represent such a diverse population, students who have been identified as having characteristics of the disorder might fall into any of the three tiers of instruction. Regardless of how much targeted intervention a student needs, it is essential to ensure that the instruction is explicit, comprehensive, and differentiated to ensure that the needs of all students are being addressed. ⁶³

Interventions to Support Students with the Characteristics of Dyslexia

As mentioned previously, screening and assessment data in a school setting does not diagnose a student who has dyslexia; however, there are many interventions that can be implemented in a tiered system through MTSS that may prove to be beneficial to students who are exhibiting characteristics of dyslexia.

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⁶³ Fletcher, 2023, Systems, Assessment, and Reading Difficulties

Intervention can be implemented in either tier 2 or tier 3 settings, tailored to the required level of intensity, and can be effective in addressing students' specific needs.

Elementary Reading Instruction Across Tiers

Effective elementary reading instruction across tiers is a crucial foundation for successful reading. At the universal tier (Tier 1), educators must utilize evidence-based practices to provide all students with a strong foundation in <u>phonemic awareness</u>, phonics, fluency, vocabulary, and comprehension skills (see figure 5 below). Differentiated instruction and scaffolding ensure that each child receives targeted support based on their unique needs. Moving into the targeted and intensive tiers (Tiers 2 and 3), intervention strategies become more personalized, addressing specific challenges that may impede a student's progress. Additionally, a collaborative approach involving teachers, parents, and specialists enhances the effectiveness of the instruction, ensuring that every child has the opportunity to become a proficient reader.

Figure 5: Foundational Reading Skills by Grade Level

Component	К		st	2 nd	3 rd	4 th	5 th and
·							beyond
Phonemic Awareness	Blend & Segment Pho		Phon	oneme Analysis: Addition, Deletion, & Substitution; Spelling Dictation			
Phonics		Sounds/Basic Advar		dvanced Phonics & Multisyllabic		Multisyllabic & Word Study	
Fluency	Sounds a Words		Advanced Phonics & Multisyllabic		Connected Text		
Vocabulary	Speaking and Listening			Reading, &	Reading & Writing		
Comprehensi on	Speaking and Listening		_	Reading, &	Reading	& Writing	

Effective Elementary Intervention

For struggling readers, such as students with dyslexia, it is important to know that a structured literacy approach to reading instruction in all tiers of instruction is imperative to learn to read, especially in early elementary years. In fact, research shows that interventions implemented after 2nd grade become 50% less effective. ⁶⁴ Popular reading approaches such as Guided Reading and Balanced Literacy are not effective for these students. ⁶⁵ Moreover, depending on the severity of a child's dyslexia, it is possible that the student may need an intervention outside of tier 1 instruction. The instructional focus should include: phonemic awareness, sound-symbol association, syllable structure, morphology, syntax, and

⁶⁴ Fletcher, 2023, Systems, Assessment, and Reading Difficulties

⁶⁵ International Dyslexia Association, 2016, Effective Reading Instruction

<u>semantics</u>. For instance, if a student in 3rd grade is still struggling with sounds/basic phonics, it will be apparent that the student will need intervention (see figure 5). See <u>Chapter 6</u> for more information.

Secondary Reading Instruction Across Tiers

Effective secondary reading instruction across tiers is designed to meet the diverse needs of students as they progress through school. In the universal tier (Tier 1), educators continue to reinforce and expand upon vocabulary and comprehension within every content-area class. In fact, content-area instruction has been found effective in improving content knowledge outcomes among secondary students. During the transition to more focused instruction within Tiers 2 and 3 intervention, the methods become increasingly customized, tackling precise deficits that might hinder a student's overall reading achievement. Furthermore, it is crucial to adopt a collaborative approach that includes teachers from all subject areas, special instructors like those in art or music, parents, and specialists. This collaboration is essential to optimize the effectiveness of instruction, ensuring that each student is provided with the opportunity to become a proficient reader.

Effective Secondary Intervention

In a secondary educational setting, it is essential to possess knowledge about the previous interventions a student has undergone, if any at all. If a student in a secondary environment still requires support in word recognition and fluency, it becomes critical that the intervention incorporates explicit, systematic, and diagnostic instruction in word recognition. This instruction should encompass a focus on various aspects, including phonological awareness, sound-symbol association, syllable structure, morphology, syntax, and semantics. Importantly, the intervention(s) should be conducted outside of the content area classroom. It is worth emphasizing that it is never too late for a student to acquire foundational literacy skills, ultimately enabling them to become proficient readers. For more information, refer to Chapter 6.

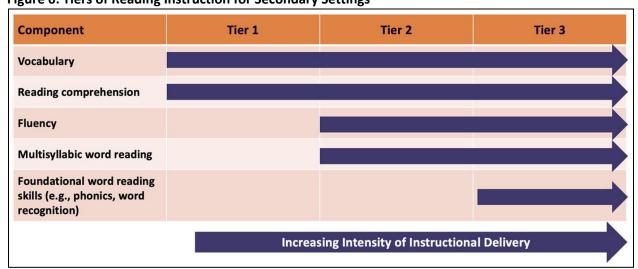


Figure 6: Tiers of Reading Instruction for Secondary Settings⁶⁷

Dyslexia and Special Education Eligibility

Not all students who are diagnosed with dyslexia will qualify for special education services; however, it is possible that after employing the process to determine how a child responds to scientific, research-

⁶⁶ Swanson, et. al., 2015, Improving Reading Comprehension and Social Studies Knowledge

⁶⁷ Capin, et. al., 2022, Evidence-Based Reading Instruction for Secondary Students

based interventions, the problem-solving team (which includes a student's family) may request an evaluation to see whether or not a student qualifies for an Individualized Education Program due to a lack of progress in reading. When they do qualify, students with dyslexia most often meet criteria for special education under the label of Specific Learning Disability for basic reading, reading fluency, and/or reading comprehension.

In addition, a referral for special education evaluation can be made at any time by any member of the student's problem-solving team (including parents/guardians). It should be noted that a referral is not a means to bypass RtI in order to receive services. Even though following the response-to-intervention process is not a valid reason to delay an evaluation, the use of RtI for eligibility in Illinois is required for SLD eligibility (23 IAC 226.130). Even if a student has a current diagnosis of dyslexia or another learning disorder, they are not automatically entitled to special education services, as the criteria for eligibility differs between a medical/clinical diagnosis and an educational one in Illinois public schools; however, according to administrative code, any child suspected of having dyslexia or those with an outside diagnosis of dyslexia must be evaluated for special education eligibility.

Following a referral for special education, the IEP team will consider the need for an evaluation, which is a lengthier and more complex process used to determine whether a child qualifies for special education, based on existing information known about the child in comparison to peers. If an evaluation is warranted, a multidisciplinary team will review what areas currently impact the student's education, share what additional information is needed to make the eligibility determination, and request consent from the parent/guardian to collect that information. A meeting, often called a Review of Existing Information or Domain(s)) meeting, will be held including all IEP team members to discuss which assessments are related to areas requiring intervention.

Once this Review of Existing Information meeting is held, and consent obtained, intervention and progress monitoring will continue. The school members of the IEP team will collect the additional required information within 60 school days from the date of consent, by which time the Special Education Team will determine eligibility. (Note: many districts have different names and acronyms for these processes and meetings. Please read more about this process in Chapter 6.)

Eligibility Determination

Special education eligibility includes criteria to help guide decision making, ensuring that these important decisions are made with consistency across schools statewide. Criteria includes both descriptions of what a student's information must indicate to qualify, as well as factors that would exclude a student from meeting criteria for special education under a specific category such as Specific Learning Disability.

Eligibility Determination, II. Specific Learning Disability

The eligibility determination must be made by the IEP team. Based upon an analysis of information from a variety of sources, (e.g., academic achievement tests, functional performance, parent input, teacher recommendations, observation, physical condition, social or cultural background, and adaptive behavior) the IEP team will determine if:

• The student is progressing at a significantly slower rate than is expected in any area(s) of concern;

- The student's performance is significantly below performance of peers or expected standards in any area(s) of concern; and
- The student's needs in any area(s) of concern are significantly different from the needs of typical peers and of an intensity that exceeds general education resources.

After completing the process that determines how a child responds to scientific, research-based interventions, the IEP team MAY also consider if a severe discrepancy exists between achievement and ability that is not correctable without special education and related services. Based upon the determinations noted above, the IEP team would conclude whether or not the child has a Specific Learning Disability (SLD) that adversely affects educational performance and requires special education.

IEP teams undertaking an evaluation for special education consider a wide range of assessments addressing multiple areas of a student's proficiency. Academic achievement is often the most heavily weighted area for students who have dyslexia; however, this testing should be considered in combination with all other data from other relevant areas. Further, an IEP team considering one or more of the other thirteen areas of eligibility under IDEA may consider different assessments related to the suspected area of eligibility.

During the time an evaluation is being completed, IEP teams will continue to progress monitor to assess the effectiveness of interventions being implemented. In addition, the consent obtained allows team members to collect more in-depth information about a child's needs. School psychologists and other educational professionals can select broad standardized achievement tests to assess several areas of academics, and/or in-depth assessments that target specific reading and writing skills. A balance of these assessments helps to 1) identify how the student achieves compared to a sample of their peers' achievement, and 2) identify specific skill gaps and patterns in which intervention may be needed. Within a public-school setting, these subject-specific tests are considered diagnostic assessments, not because they provide a diagnosis, but because they can pinpoint specific areas of skill deficit. For a student with dyslexia, one can expect the same areas assessed briefly with a screener to be included, but with more time and attention in order to see which basic reading, reading fluency, reading comprehension, written expression and/or spelling skills are impacted.

As part of the evaluation process, the team will also collect information across many areas of a child's development. Educators know that each student is more than a diagnosis, test score, or grades, and the evaluation helps to reflect all factors that interact to affect a student's overall functioning at school. In addition to the criteria listed above, the following exclusionary criteria help the IEP team to recognize what other influences may be impacting a child's school performance:

a) a visual, hearing, or motor disability; b) intellectual disability; c) emotional disability; d) cultural factors; or e) environmental or economic disadvantage. Attach evidence to support the team's decision. If the information is already addressed in another area, the team may indicate such. If any box is checked "Yes," the student cannot have a primary eligibility of specific learning disability and the team must complete the Eligibility Determination section accordingly.

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⁶⁸ Illinois State Board of Education, 2021b, Instructions for Individualized Education Program Forms

Additional factors that may also affect eligibility for SLD include lack of appropriate instruction or limited English proficiency. The IEP team must consider if the main reason for a significant discrepancy in reading achievement is determined to be a result of lack of appropriate instruction which may include a student's lack of attendance. Students who do not attend school regularly do not receive the tier 1 instruction that is essential for any student to succeed. Districts may weigh the exposure students have to core and intensive interventions in addition to judgments regarding the integrity of the interventions. In addition, the IEP team must also consider limited English proficiency. Limited English proficiency in itself is not enough to qualify a student under SLD. It is essential to consider the whole student before determining eligibility for SLD.

It is clear here that evidence-based practices as part of an MTSS model are essential for eligibility. In

Evidence-based practices as part of an MTSS model are essential for eligibility.

order to properly identify and serve students, districts must provide the curriculum and instructional strategies that are the most impactful. It is often the case that best practices for students with dyslexia and other reading challenges will benefit all learners.

Bridge to Practice

During the first few weeks of school, you give all of the students in your 1st grade classroom a universal screener to determine if there are any students who have gaps in achievement. When looking at the results, you notice that the majority of students are exactly where you expect them to be, but that there are 3 students who are performing below the benchmark in one or more areas. You dig further into the results and notice that one student in particular is demonstrating deficits in non-word reading fluency, phonological processing, and spelling. Can you logically conclude that this student has dyslexia?

Click for Answer

Key Terms

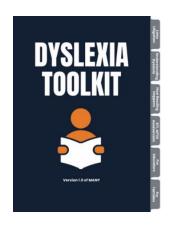
- <u>Case Study</u>
 Evaluation
- <u>Data-Based Decision</u>
 Making
- <u>Diagnostic Literacy</u>
 Assessment
- Domain
- Individualized
 Education Program
 (IEP)

- Morphology
- Multi-Tier Systems of Support (MTSS)
- Oral Reading Fluency Assessment (ORF)
- Outcome Measure
- Phonemic Awareness
- Progress Monitoring
- Response to
 Intervention (RtI)

- <u>Semantics</u>
- Specific Learning
 Disability (SLD)
- Syllable Structure
- Syntax
- Tier 1
- Tier 2
- <u>Tier 3</u>
- <u>Universal Early</u>
 Literacy Screener

Expanded Exploration: Linked Resources

- Read: Dyslexia Testing and Evaluation with the International Dyslexia Association
- **Explore:** Progress Monitoring with The Iris Center
- Watch: Dr. Matt Burns discuss what to do when intervention isn't working with PATTAN



CHAPTER 5: FOR CAREGIVERS - SUPPORTING CHILDREN AND ADOLESCENTS WITH DYSLEXIA

Understanding Dyslexia

A child will likely look to the parent for information about dyslexia, and it is important that the parents have answers. While a parent does not need to know everything, it is vital to be able to explain what the child may experience or different things that may be helpful to them when they are struggling.

Awareness of Early Signs

Intervening early can have a significant impact on student growth and development. If delays in development are noticed, a parent or caregiver should voice their concerns so that the child can get the attention they need, and interventions can be implemented. Signs to be aware of may include the following⁶⁹:

- Family medical history as dyslexia often runs in families,
- Evidence that your child is not speaking or naming letters,
- Problems rhyming words or learning simple nursery rhymes,
- Being unable to recognize the letters in their name, and
- Frequent "baby talk" and the use of nonsense words in speaking.

Refer to Chapter 2 for a more detailed list of common characteristics of dyslexia by age/grade.

Developing a Good Foundation for Reading

Children absorb information like sponges, so the earlier parents establish a positive relationship around reading, the better off a child will be. Below are some strategies that can be used at home to help a child develop a good foundation for reading⁷⁰:

- Talk to and with your child often to help develop strong oral language skills which are the foundation for reading and writing,
- Point out print and talk about its purpose,
- Read high interest books with your child every single day,
- When reading with your child, exaggerate sounds in words and have your child repeat them with you,
- Practice saying full sentences with your child,
- Emphasize sounds in words,
- Play rhyming games to help your child find patterns in words,
- Use a diverse vocabulary to help your child learn new words, and
- Work with your child to stretch apart and connect sounds to sound out words.

It is important to keep in mind that even if a parent or caregiver does establish a print-rich environment and they read to a child often, dyslexia can still exist and require intervention.

⁶⁹ The Yale Center for Dyslexia and Creativity, 2022, Signs of Dyslexia

⁷⁰ Shaywitz, 2022, Developing a Foundation for Reading

Table 4: Sample Reading Conversation⁷¹

Parent	How does this word start?
Child	/mmm/
Parent	What is the next sound?
Child	/aaa/
Parent	What sound comes next?
Child	/nnn/
Parent	What happens when you put them together?
Child	/mmmaaannn/
Parent	What is the word?
Child	Man!

Supporting a Child's Emotional Needs

It is not uncommon for children and adolescents who are diagnosed with dyslexia to also struggle with mental health challenges. Children and adolescents with dyslexia are at higher risk of depression, anxiety, fear of failure, low self-esteem, feelings of being "dumb", or behavior challenges. It is essential to support a child through these struggles. There are several ways parents can help:

- Learn about dyslexia so that you are prepared to talk to your child about it.
- Partner with your child's school to learn how they are supporting learning.
- Focus on your child's strengths.
- Celebrate even the smallest success.
- Be an advocate for your child.
- Help your child understand that they are capable of greatness.
- Provide your child with emotional support services, if needed.

Empowering a Child with Dyslexia

A child's dyslexia is not going to go away, therefore it is important to develop a toolbox of ways to empower the child. Parents and teachers should teach children and adolescents with dyslexia the tools to advocate for themselves and to identify strategies that either work or do not work for them. Additionally, the child should be allowed space for struggle and success; without both, they are not going to obtain the problem-solving strategies that they will need later in life. Helping a child understand their needs and find their own voice early on will help them take control of their challenges and manage more effectively well into their adult years.

⁷¹ National Center for Improving Literacy, 2019

Books About Dyslexia

Picture Books

How Your Brain Learns to Read by Denise Eide Xtraordinary People Made by Dyslexia by Kate Griggs A Walk in the Words by Hudson Talbott Aaron Slater, Illustrator by Andrea Beaty Just Ask by Sonya Sotomayor It's Called Dyslexia by Jennifer Moore-Mallionois The Brain Building Book by Liz Angoff Dr. Dyslexia Dude by Dr. Shawn Robinson

Middle Grade Books

Fish in a Tree by Lynda Mullaly Hunt
Close to Famous by Joan Bauer
Eleven by Patricia Reilly Giff
Hank Zipper Series by Henry Winkler & Lin Oliver
My Name is Brain Brian by Jeanne Betancourt
Percy Jackson Series by Rick Riordon

Books for Parents

The Dyslexic Advantage: Unlocking the Hidden Potential of the Dyslexic Brain by Eide & Eide Dyslexia Empowerment Plan by Ben Foss
Overcoming Dyslexia by Sally Shaywitz
Smart Kids with Learning Difficulties by Weinfield, Barnes-Robinson, Jeweler, & Roffman

Transition: Moving Beyond High School

After leaving high school, the services that may have been provided to students with dyslexia will likely end. Students who had either an IEP or a school-based 504 plan will no longer have those plans to support them as they move into the next stage of life. As adults, they will be protected from discrimination under Section 504 of the Rehabilitation Act and Title II of the Americans with Disabilities Act (ADA).

If a student receives services through an IEP in high school, then there will be a formal written plan for the transition from high school to the next phase of their life, whether that includes employment, post-secondary education, or military service; this plan is required by the age of 14 and a half in Illinois. For students receiving services through a 504 plan, parents can talk with the team developing and reviewing the 504 plan to determine if transition planning and services are necessary for the student to be successful after high school. In addition, the high school student with dyslexia should apply for and secure appropriate accommodations for high-stakes testing. Documentation should include a description of the student's reading and writing skills and accommodations that the student uses for academic support.

If an individual is planning to move to a post-secondary educational setting (college, university, or trade school), they may be able to access some accommodations through the institution's disability services office. Although their IEP or 504 plan does not follow a student into the new institution, these plans can be used to document the disability and need for services and to discuss which accommodations may be suitable in a higher education setting. Not all accommodations that were provided in high school may be suitable for post-secondary education and these institutions are only required to provide services which are deemed necessary to ensure the student is not discriminated against because of their disability. Additionally, considerations must be made to ensure accommodations do not compromise the overall quality and rigor of the post-secondary education program.

Another difference between services in high school and post-secondary education is that the individual must be willing to advocate for themselves and reach out to disability services directly. In higher education, this process must be initiated by the individual seeking services, and they must be willing to regularly communicate with and reach out to the disability service providers to ensure their needs are being met. Therefore, it is important students understand their reading and writing skills and needs so they are able to work with their instructors and employers to problem solve the use of appropriate supports and accommodations needed for success.

After high school, individuals are not required to disclose that they have a disability or that they received services under an IEP or 504 plan. This information will not be reported to colleges, universities, or employers by the district though it is often beneficial for these organizations to be informed by the individual so they can better understand and support them in the workplace or educational setting.

Where to Start

Having a child who has dyslexia can be confusing, frustrating, and even scary, which is why it is essential that parents and caregivers are actively involved in their child's education. Parents and caregivers are a child's greatest advocates and often may notice signs of dyslexia before a school does. If this is the case, it is essential for families and schools to work together in a partnership to ensure that a child is getting the best services possible.

If, as a parent or caregiver, there are concerns regarding a child's reading, comprehension, spelling,

writing, learning, or any other sign of dyslexia found in <u>Chapter 2</u>, they should absolutely be brought up and discussed in the educational setting. It is important for parents and caregivers to write down their concerns and observations that they may have regarding their child and make an appointment to discuss these concerns with their child's teacher.

Parents and caregivers are a child's greatest advocate.

Talking with a Child's Teacher about Concerns Related to Dyslexia

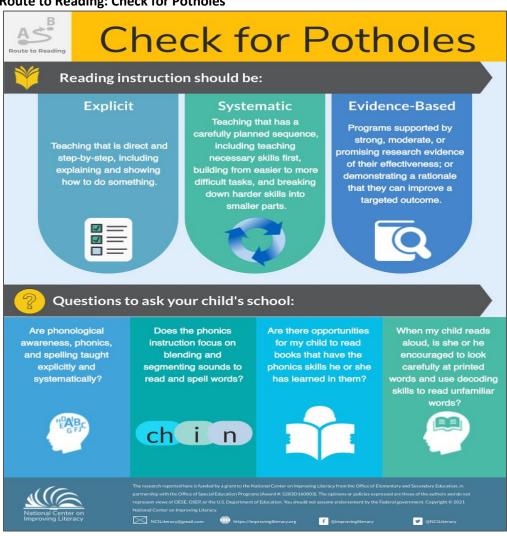
Parents and guardians can start by advocating for their child. Initially, consider sharing concerns and observations and then discussing the following issues with the child's teacher:

- 1. How much progress the child has made since the beginning of the school year and how that progress is being measured.
- 2. If there is a history of dyslexia, reading difficulty, or any other neurobiological disorders in the family.

- 3. The parent's learning expectations for his/her child and what is being done to ensure that the child makes adequate reading progress.
- 4. Where the child is in relation to grade level standards and peers.
- 5. How much time the child is spending on homework, especially if it seems excessive.
- 6. How much time is being spent on reading instruction, what types (if any) of support the child is receiving, and what curriculum is being utilized.
- 7. What can be done at home to help and support the child's reading and writing skills.
- 8. Suggestions from both the parent and educator regarding what may help the child in school based on strengths and weaknesses.

Additionally, parents and caregivers should inquire about the reading instruction at the school/district. All students, including those with dyslexia, should receive explicit, systematic, and evidence-based reading instruction. See figure 7 for more information.⁷²

Figure 7: Route to Reading: Check for Potholes



⁷² National Center on Improving Learning, 2020a, Route to Reading: Check for Potholes

Finally, consistent follow-up with the child's teacher is important. This will allow for an ongoing discussion of progress as well as opportunities to discuss successes and new concerns.

Screening, Assessment, and Evaluation

<u>Universal screening</u> is a systematic process for the assessment of all students on critical academic skills within a given grade, school building, or school district. Universal screening yields data to make decisions about needed enhancements in the core curriculum, instruction and/or educational environment, and about which students may need additional screening or assessment and/or supplemental or intensive intervention and instruction beyond what is provided through core programming. Though the majority of schools do utilize some type of screener, there are schools who opt to collect data in other ways.

Screening refers to the administration of a brief, informal test(s) used to provide a quick way to determine whether further, more in-depth assessment (testing) is needed. An evaluation is a lengthier and more complex process used to determine whether a child qualifies for special education. The evaluation for special education may include data from various sources (i.e., progress-monitoring data, achievement tests, rating scales, etc.) as well as teacher observations and work samples. In Illinois, districts are required to use a process that determines how a child responds to scientific, research-based interventions as part of the evaluation procedures if the child is suspected of having a Specific Learning Disability (SLD). Moreover, an evaluation involves numerous educational professionals, usually takes several hours, and requires that any test be administered by an appropriately qualified professional in the child's home language. If a student is suspected of having a Specific Learning Disability due to dyslexia, the evaluation may include background information, intellectual functioning, oral-language skills, word recognition, decoding, spelling, phonological processing, automaticity/fluency skills, reading comprehension, vocabulary knowledge, etc. Information and data gathered through the evaluation process will help the team (of which parents are members) decide if your child is in need of and eligible to receive special education services.

Asking for School-based Support

If a student is having consistent and/or ongoing difficulties with reading, a caregiver, teacher, or other education professional may request an evaluation for special education and related services. It is suggested that this request for an evaluation be submitted in writing.

Within 14 calendar days after receiving a request for an evaluation, the district will decide whether to conduct an evaluation. If the district determines an evaluation is warranted because the student is suspected of having a Specific Learning Disability such as dyslexia, then the district must give the parent the paperwork to provide formal written consent for the evaluation to proceed. At this time, the team will convene and identify what specific data are needed to determine whether a child is eligible for, in need of, and entitled to special education services. If the district determines that the evaluation is not warranted, it must notify the parent(s) in writing of the decision not to evaluate and the reasons for the decision.

If a student is having consistent and/or ongoing difficulties with reading, a parent may request an evaluation for special education and related services.

For more information and directions for requesting a special education evaluation, parents can visit the ISBE website and review the parent guide, *Educational Rights and Responsibilities: Understanding*

Special Education in Illinois—The Parent Guide. This guide explains special education procedures and processes, shows the required timeline of events, and provides families with sample letters and a blank letter template for their use. In addition, there is a companion book: The Illinois Student Record Keeper: For Parents of Students who Receive Special Education that can be used for documentation and record keeping.

If parents or caregivers need additional information or assistance regarding their child's educational rights and live in Cook, DuPage, Grundy, Kane, Kendall, Lake, McHenry or Will County, the following agency may be contacted:

Family Resource Center on Disabilities
11 E. Adams St., Suite 1002
Chicago, IL 60603
312-939-3513 voice / 312-939-3519 TTY & TDY
312-939-7297 FAX
800-952-4199 IL only

Email: info@frcd.org Website: www.frcd.org

If parent(s) reside in any other county within the state of Illinois and need information or assistance, they should contact:

Family Matters Parent Training and Information Center 1901 S. 4th Street, Suite 209 Effingham, IL 62401 217-347-5428 voice 217-318-3516 FAX 866-436-7842 Toll-Free

Email: info@fmptic.org Website: www.fmptic.org

Qualifying for Special Education and/or Related Services

Upon completion of data gathering and the administration of assessments and other evaluation measures, a group of qualified professionals and the parent/guardian of the child will form the **Individualized Education Program (IEP)** team and will determine whether the child meets the criteria for eligibility for special education. In order to qualify as a "student with a disability" under the federal Individuals with Disabilities Education Act (IDEA), the student must meet the criteria of at least one of the thirteen identified disabilities.

Specific Learning Disability (SLD) is defined by federal law as "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." It "does not include the learning problems that are primarily the result of visual, hearing, or motor disabilities, of intellectual disability, of emotional disturbance, or of environmental, cultural, or economic disadvantage."

In order to meet the criteria for SLD in Illinois schools, a student must⁷³:

- a. Demonstrate performance that is significantly below the performance of peers or expected standards (Discrepancy);
- b. Exhibit significant deficiencies in his or her rate of learning based on progress monitoring data (Educational Progress); and
- c. Demonstrate that his or her needs in the area of curriculum, instruction, and/or environmental conditions are significantly different than that of his or her general education peers (Instructional Need), and in order to make educational progress, the student requires interventions of an intensity or type that exceed general education resources.

While Specific Learning Disability (SLD) is the federally and state-recognized educational disability category, the term "dyslexia" and the Illinois definition of dyslexia CAN be used to further describe the student's learning difficulties. However, if the student qualifies for special education services and thus an IEP, they will need to be identified with one of the 13 eligibility labels, such as SLD or Other Health Impairment (OHI).

To conclude that the student qualifies for special education, the IEP team must determine that (1) the disability adversely affects the student's educational performance and (2) the student requires specially designed instruction in order to access the general education curriculum as a result of such disability. **Special education** means specially designed instruction, at no cost to parents, to meet the unique needs of a child with a disability. **Specially designed instruction** (SDI) refers to adapting, as appropriate to the needs of an eligible child, the content, methodology, or delivery of instruction to address the unique needs of the child that result from the child's disability and to ensure access of the child to the general curriculum in order to make meaningful academic progress in goal areas.

This eligibility determination must occur by the end of the 60th school day after parental consent for evaluation is obtained. If the child is eligible to receive special education supports and services, an IEP team must then meet with the parent/guardian to develop the IEP for the student within 30 days, but no later than the 60th school day after consent for evaluation was obtained. Before the special education services can begin, the parent/guardian must provide written informed consent to allow the district to proceed with the services and placement. Services may begin no earlier than 10 school days unless the team agrees that it is feasible for them to start sooner.

Not all students evaluated for a Specific Learning Disability will be identified with dyslexia. In addition, because dyslexia varies in its severity, not all children and adolescents who demonstrate characteristics of dyslexia or struggle with reading will qualify for special education. In fact, even an outside diagnosis of dyslexia (or other related condition) does not automatically result in a student being eligible for and entitled to special education services. Criteria used for diagnosing a reading disorder such as dyslexia during an outside evaluation do not necessarily correspond with educational disability eligibility criteria (such as criteria for specific learning disability or other health impairment). Therefore, a student may be diagnosed with dyslexia, but may or may not be determined to be eligible for services under IDEA (special education law). Children and adolescents who do not qualify for special education services may be eligible for a 504 plan or may receive supplemental support through tiered interventions.

However, if your child meets the eligibility criteria for one of the legally defined disability categories, an IEP will be developed and parental consent for placement will be required before services can be

⁷³ Illinois State Board of Education, 2021b, Instructions for Individualized Education Program Forms

initiated. Once an IEP is in place and services have begun, annual meetings will be held to review a child's progress towards his or her IEP goals at which time a new plan will be written.

If the consensus at the eligibility determination conference is that the student does not qualify for special education services and a parent does not agree, it is suggested that the parent refer to the parent guide, <u>Educational Rights and Responsibilities: Understanding Special Education in Illinois</u> and the <u>Notice of Procedural Safeguards</u> document for further information and potential next steps.

What Parents and Caregivers Can Do at Home to Help

Having a child with dyslexia may seem overwhelming, and it is common to ask questions such as: What do I do? How do I help? How do I "fix" it? While there is no cure for dyslexia, it is important to understand that people who are diagnosed with dyslexia can be successful in school and in life. There are several things that parents or guardians can do at home to help a child cope with the struggles of being dyslexic.⁷⁴

- Listen to audiobooks together or read out loud to your child to increase knowledge and vocabulary.
- Recognize your child's effort and cheer for their perseverance and hard work, even if there are some errors.
- Support them in recognizing & acknowledging their strengths and things that they are passionate about.
- Address negative self-talk. If your child begins expressing thoughts like, "I'm not smart," don't dismiss it.
- Teach your child how to self-advocate so that they can feel success regardless of the situation.

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⁷⁴ Martinelli & Cruger, n.d., Understanding Dyslexia

Bridge to Practice

When your child was in first grade, the school contacted you concerned that your child was demonstrating characteristics of dyslexia. Initially, you were nervous, but you worked with them to go through the steps of problem solving and educate yourself as much as possible about the learning disorder. The team agreed to implement interventions as well as give additional time for direct instruction; they even intensified interventions when they were not working, but nothing seemed to stick. Ultimately, after interventions were implemented and data was collected, your child was evaluated for special education services and was found eligible under the category of Specific Learning Disability in basic reading and reading comprehension. Your child was provided with specialized instruction in reading, and things really seemed to be going well. Fast forward to 5th grade. You have noticed lately that your child has been struggling with friends and self-worth; they report that they feel dumb, and they do not want to go to school anymore. How can you help them?

Click for Answer

Key Terms

- Evaluation
- High-Stakes Testing
- Individualized
 Education Program
 (IEP)
- Screening

- Special Education
- Specially Designed
 Instruction (SDI)
- Universal Screening

Expanded Exploration: Linked Resources

- Explore: The Yale Center for Dyslexia and Creativity portal for parents
- Watch: Dr. Sally Shaywitz give Dyslexia Advice for Parents
- <u>Utilize: Literacy Dialogue Tool for parents and caregivers from</u> the Colorado Department of Education



Chapter 6: FOR EDUCATORS, ADMINISTRATORS, and OTHER SCHOOL PERSONNEL SUPPORTING STUDENTS WITH DYSLEXIA

Components of Effective Literacy Instruction

More than twenty years ago, the <u>National Reading Panel</u> (2000) identified the following as essential components of high-quality reading instruction:

- Explicit instruction in <u>phonemic</u> awareness,
- Systematic phonics instruction,
- Methods to improve **fluency**, and
- Ways to enhance <u>vocabulary</u> and <u>comprehension.</u>

Experts have come to realize that the above components provide a solid foundation for quality reading instruction; however, one must consider both the "what" and the "how" when focusing on the effective implementation of literacy instruction for students with dyslexia and other reading challenges. Related to the "how", explicit and systematic instruction is

What is the National Reading Panel?

The National Reading Panel (NRP) was convened by Congress in 1997 to determine the effectiveness of different approaches used to teach children to read. The panel was made up of 14 people including scientists in reading research, college representatives, educators, educational administrators and parents.

imperative for students who struggle to learn, including those with dyslexia. Explicit instruction refers to a direct approach that is unambiguous and includes both design and delivery procedures. Modeling, scaffolding, ample opportunities to respond, and the provision of quality feedback are hallmarks of explicit instruction.

In addition to the instruction being explicit, it should also be systematic and **cumulative**. Systematic and cumulative instruction refers to teaching that has a carefully planned sequence which builds from easier to more difficult tasks breaking down those more complex skills into smaller parts. Scope and sequence play an important role in systematic, cumulative instruction as it is integral that prerequisite skills be taught first and then subsequent skills build upon those earlier, foundational skills. Reviewing previously learned skills is also a way to ensure that instruction is systematic and cumulative. Moreover, <u>diagnostic teaching</u> allows the teacher to know where to begin, when to proceed, and what needs to be retaught. Through frequent assessment and monitoring of progress, one can pinpoint student strengths and needs and thus best utilize instructional time.

Rather than having a separate spelling book or lesson, spelling should be interwoven with reading, writing, and word study. This will aid students in making important connections and will reinforce reciprocal and related skill acquisition.

Students with dyslexia often require instruction which not only targets the skills and employs the procedures described above, but they also often need instruction which is more intensive than other students. Skill deficits and **working memory** challenges mean they may need additional time, repeated exposures, and significant amounts of practice. Small-group or individual delivery provides increased numbers of opportunities to respond and

allows the student to receive more individualized and more frequent feedback from the teacher. Furthermore, students with dyslexia or other reading challenges perform better when instruction integrates all areas of literacy and provides multimodal practice opportunities. For example, rather than having a separate spelling book or lesson, spelling should be interwoven with reading, writing, and word study. This will aid students in making important connections and will reinforce reciprocal and related skill acquisition. Finally, by utilizing varied modalities for practice, it is more likely that students will be engaged in the lesson and that they will be able to better remember and apply the skills they are learning. An additional consideration in the implementation of effective instruction for students with dyslexia is the fact that these students require highly skilled teachers who understand the student's individual needs as well as the process through which reading occurs.

Basics of Effective Structured Literacy Instruction

Systematic - planned sequence of instruction, with prerequisite skills taught prior to more advanced skills

Cumulative - each step is based on concepts previously learned

Explicit - direct teaching of concepts

Diagnostic - ability to individualize instruction based on continuous assessment

Multimodal - Simultaneous association of visual, auditory, and kinesthetic-motor modalities

Intensive - interventions should be appropriately intensive

Interwoven - students are provided many opportunities to respond and practice what they learn regarding foundational reading skills

Structured Literacy Approach

Research has shown that <u>Structured Literacy Instruction</u> (SL) is the most effective approach to learning to read and write, yet critical for those who have difficulties with reading and writing. Because dyslexia and most reading disorders originate with language processing issues, it is important that the content of instruction is the analysis and production of language at all levels: sounds, spellings for sounds and syllables, patterns and conventions of the writing system, meaningful parts of words, sentences, paragraphs, and <u>discourse</u> within longer texts. In addition, SL involves hands-on, engaging practice that is <u>multimodal</u> (e.g. manipulating letter tiles, using gestures, writing, saying, color-coding, etc.) and it is diagnostic and responsive. In short, Structured Literacy instruction is characterized by the provision of systematic, explicit instruction that integrates listening, speaking, reading, and writing through a variety of activities and that the teacher uses student response patterns to adjust to student need.

According to the International Dyslexia Association, Structured Literacy should include the following⁷⁵:

Phoneme awareness. Becoming consciously aware of the individual speech sounds (<u>phonemes</u>) that make up words is a critical foundation for learning to read and spell. A phoneme is the smallest unit of speech that can change the meaning of a word. For example, the different vowel phonemes in *mist*, *mast*, *must*, and *most* create different words. Although linguists do not agree on the list of phonemes within the language, English has approximately 44 phonemes—26 consonants and 18 vowel sounds.

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⁷⁵ International Dyslexia Association, 2019b, Structured Literacy

In preschool and early kindergarten, children typically learn the underpinnings for phoneme awareness, including rhyming, counting spoken syllables, and reciting phrases beginning with the same sound. By the end of kindergarten, children should identify each speech sound by ear and be able to take apart and say the separate sounds of simple words with two and three sounds. More advanced phoneme awareness skills, especially important for spelling and reading fluency, include rapidly and accurately taking apart the sounds in spoken words (segmentation), putting together (blending) speech sound sequences, and leaving out (deleting) or substituting one sound for another to make a new word. A large proportion of individuals with dyslexia have difficulty with this level of language analysis and need prolonged practice to grasp it.

Table 5: Phonemic Awareness Activities

Phonemic Awareness Activity	Example
Isolation/Identification	What is the final sound in cat? /t/ What is the medial sound in pig?/i/
Blending	What word is /c//a//t/? What word is /sh//o//p/?
Segmentation	How many sounds are in clock ? What sounds are in last ?
Deletion/Addition	Change the /f/ in flip to /s/. What is cat without the /c/? Add /b/ to the beginning of the word at.

Phoneme awareness is an essential foundation for reading and writing with an alphabet. In an alphabetic writing system like English, letters and letter combinations represent phonemes.

<u>Decoding</u> (and <u>encoding</u>) print is possible only if the reader can map print to speech and speech to print efficiently; therefore, the elements of speech must be clearly and consciously identified in the reader's mind.

Sound-Symbol (phoneme-grapheme) correspondences. An alphabetic writing system like English represents phonemes with graphemes. <u>Graphemes</u> are letters (a, s, t, etc.) and letter

combinations (th, ng, oa, ew, igh, etc.) that represent phonemes in print. The basic code for written words is the system of correspondences between phonemes and graphemes. This system is often referred to as the alphabetic principle.

The alphabetic principle is the concept that letters and letter patterns represent the sounds of spoken language.

The correspondences between letters and speech sounds in English are more complex and variable than some languages such as Spanish or Italian. Nevertheless, the sound-symbol correspondences can be explained and taught through systematic, explicit, cumulative instruction that may take several years to complete.

When explicitly teaching phoneme-grapheme correspondences, it is important to provide decodable text as a scaffold for student learning. Decodable text consists of phonics that students have learned. In this way, students can explicitly practice and utilize their knowledge in regard to the learned phoneme-grapheme correspondences in text. Decodable text can be in the form of words, phrases, sentences, passages, or even books. Decodable text differs from leveled or predictable text in that it primarily relies on phonics to help emergent readers decode words, whereas leveled or predictable text often contains repetitive patterns or no patterns at all.

Patterns and conventions of print (orthography). Through explicit instruction and practice, students with dyslexia can be taught to understand and remember patterns of letter use in the writing system through encoding or spelling. The paired association between letters and sounds is called phonics. Examples of phonics concepts include spellings for consonant sounds, such as –ck, –tch, and –dge, which are used only after short vowels. Some letters, like v and j, cannot be used at the ends of words. Only some letters are doubled. Some letters work to signal the sounds of other letters. These conventions can all be taught as part of the print system, or orthography.

As we teach these conventions of print, we are wiring student brains to orthographically map words. As previously mentioned, orthographic mapping is turning unfamiliar words into instantly accessible words to recognize on sight.⁷⁶ In this way, students who are able to orthographically map words will increase automaticity when reading instead of having to rely on laborious decoding.

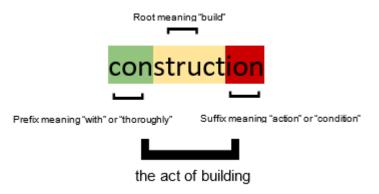
Print patterns and conventions exist as well for representing the vowel sounds in written syllables. It is a convention that almost every written syllable in English has a vowel grapheme. Structured Literacy programs usually teach six basic types of written syllables: closed (com, mand), open (me, no), vowel-consonant-e (take, plete), vowel team (vow, mean), vowel-r combinations (car, port), and the final consonant-le pattern (lit-tle, hum-ble). Recognizing written syllable patterns helps a reader divide longer words into readable chunks and helps in understanding spelling conventions such as doubling of consonant letters (little vs. title). Two examples are listed below. First, the word cat is mapped in Elkonin (also referred to as sound) boxes. Each box represents one sound. In the word cat, there are three sounds: /c/ /a/ /t/. Each grapheme, or letter, is written in one sound box. Below, the word chair is mapped as if a student knows and understands that the grapheme, or letter(s), ch represents the /ch/ sound, the ai grapheme represents the /A/ sound, and the grapheme r represents the /r/ sound. Note that while ch is two letters, the grapheme represents one sound, so it is placed in one sound box. The same is true for ai – because ai represents one sound, it is placed in one sound box.



⁷⁶ Kilpatrick, 2015, Essentials of Assessing, Precenting, and Overcoming Reading Difficulties

Morphology. A morpheme is the smallest unit of meaning in a language. Morphemes include prefixes, roots, base words, and suffixes. Often, prefixes and suffixes are referred to as affixes because they attach to a base or root to modify the meaning. These meaningful units are often spelled consistently even though pronunciation changes as they are combined into words (define, definition; nation, national; restore, restoration). Recognizing morphemes helps students figure out and remember the meanings of new words. In addition, knowledge of morphology is an aid for remembering spellings such as at-tract-ive and ex-press-ion. In Structured Literacy programs, morphology is included not only to help build vocabulary, but to support the transition from decoding single syllable words to multisyllabic words (see figure 8).

Figure 8: Building a Word



Syntax. Syntax is the system for ordering words in sentences so that meaning can be communicated. The study of syntax includes understanding parts of speech and conventions of grammar and word use in sentences. Lessons include interpretation and formulation of simple, compound, and complex sentences, and work with both phrases and clauses in sentence construction.

<u>Semantics</u>. Semantics is the aspect of language concerned with meaning. Meaning is conveyed both by single words and by phrases and sentences. Comprehension of both oral and written language is developed by teaching word meanings (vocabulary), interpretation of phrases and sentences, and understanding of text organization.

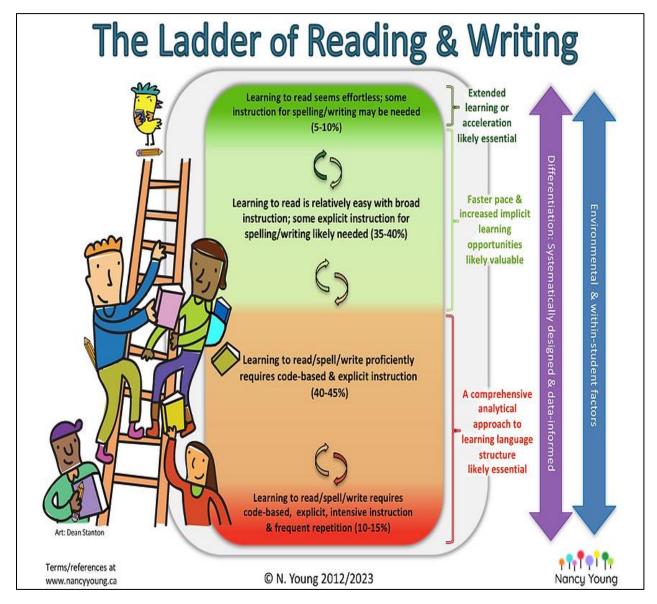
Reading comprehension is a product of both word recognition and language comprehension. Throughout SL instruction, students should be supported as they work with many kinds of texts—stories, informational text, poetry, drama, and so forth, even if that text is read aloud to students who cannot yet read it independently. Reading worthwhile texts that stimulate deep thinking is a critical component of Structured Literacy.⁷⁷

When utilized with students who have dyslexia, instruction that is designed using the tenets of Structured Literacy (i.e. addresses all components and is systematic, cumulative, explicit, and diagnostic) results in greater skill acquisition, improved retention, and the ability for students to not only maintain, but transfer or generalize skills as they build on their prior knowledge and their skill repertoire. Furthermore, while the use of a SL approach is essential to the 60% of

⁷⁷ International Dyslexia Association, 2019b, Structured Literacy: Effective Instruction for Students with Dyslexia and Related Reading Difficulties

students who struggle to learn to read, it is beneficial for all students. Figure 9 depicts the appropriateness and value of SL for all developing readers.⁷⁸

Figure 9: The Ladder of Reading and Writing



This graphic was used with Nancy Young's permission. See Young's website for more information.

Structured Literacy Instruction in comparison to the literacy practices that have been in widespread use in schools across the past few decades shows a significant difference. Table 6 compares the SL approach and "typical" literacy practices so one can better understand how the instructional approaches differ.

⁷⁸ Young, 2023, Nancy Young – The Ladder of Reading and Writing

Table 6: Structured Literacy Comparison Chart

	Structured Literacy	More "Typical" Literacy	
		Practices	
Initial Phonics	Emphasizes phoneme-grapheme	Often emphasizes larger -unit	
Approach	level approach	approach such as the use of word	
		families	
Attention to Phonemic	Phonemic awareness such as	Little attention on phonemic	
Awareness	blending, and segmentation are	awareness activities	
	explicitly taught		
Connection Between	Beginners work on similar	Often not well-coordinated;	
Spelling and Decoding	patterns (e.g. CVC words) in	focus may be on memorizing	
Instruction	decoding and spelling	whole words rather than	
		applying phonics skills	
Instructional Delivery	Prioritizes teacher-led, explicit	Teacher-led, explicit instruction is	
	systematic instruction	often not a priority	
Types of Texts	Texts used for instruction are	Leveled or predictable texts are	
	coordinated with phonics	typically used; these contain	
	program so that most words in	many words that inexperienced	
	them are decodable by children	readers cannot decode	
	(often referred to as		
	"decodables").		
Teacher Feedback to	Prompt feedback that	Teacher feedback may be limited	
Shape Oral Reading	encourages close attention to	and focus on guessing or the use	
	print and application of decoding	of context to determine words	
	skills		

As one can see, the approaches differ in numerous ways. Moreover, the research is clear that SL is an approach that provides what students with dyslexia and other reading challenges need to optimize their likelihood of reading success.

A structured literacy approach is necessary for some, but beneficial for all.

Interventions and Programs

Several national organizations curate public directories containing qualified professionals specializing in offering Structured Literacy intervention, a crucial support for students exhibiting traits of dyslexia. This intervention method is alternatively recognized as Orton-Gillingham based instruction or multisensory structured language instruction.

- The Center for Effective Reading Instruction (CERI),
- Academic Language Therapy Association (ALTA),
- Academy of Orton-Gillingham Practitioners and Educators (AOG), and
- Wilson Language Training.

These training programs ensure that educators meet the International Dyslexia Association Knowledge & Practice Standards for Teachers of Reading. A list of accredited courses and training to become a qualified dyslexia practitioner can be found at the International Multisensory Structured Language Education Council (IMSLEC), the Academic Therapy Association (ALTA) and the International Dyslexia Association.

While a trained educator, specialist, or therapist in every school is ideal, it is equally critical to implement an <u>evidence-based</u> intervention curriculum to support the needs of students who are struggling to read. Some examples of intervention curriculum include the following:

- Lindamood-Bell,
- Wilson Language System, and
- Spell-Links.

Using the Evidence

Programs that are considered evidence-based are those supported by strong, moderate, or promising research evidence of their effectiveness; or demonstrating a rationale that they can improve a targeted outcome.⁷⁹

To make wise curricular decisions and determine which practices and approaches to use for students with dyslexia and other reading challenges, it is important that educators and schools rely on the research to guide their practice as well as program adoption.

The Individuals with Disabilities Education Act (IDEA) and Elementary and Secondary Education Act (ESEA) expect that schools employ programs, curricula, and practices based on "scientifically-based research" "to the extent practicable." This means that whenever possible, the educational interventions and programs being used must be strongly supported by evidence from well-conducted research studies. Educational research may be said to be scientific when:

- It uses sound research design,
- It is based on high quality data collection and analysis,
- It involves other experts in critically reviewing the study's design and results. The study should be peer-reviewed and reported in a journal, or some type of white paper or report so other researchers can review the methods used and replicate the research in other settings,
- It can be replicated; the more studies or research that support a program or practice, the stronger the evidence, and
- Additionally, whereas experimental designs with a control group (students who do not receive the "treatment" or intervention) are considered as those capable of producing the strongest evidence, other designs can also indicate positive (and promising) outcomes.

When a practice or program is developed based on research and has been "tested" yielding positive outcomes, it is considered "evidence-based" which is a more rigorous metric.

⁷⁹ National Center on Improving Literacy, 2020a, Route to Reading, Check for Potholes

Under IDEA, instruction must be individualized based on the student's needs. That is why it is especially important that the knowledge and experience of professionals and caregivers are considered when deciding how to teach a student with disabilities. Professionals (and caregivers) should know about instructional practices and interventions that have been shown by research to be most effective. These research-based or evidence-based practices should then be matched with a student's unique needs and skills when developing a student's Individualized Education Program (IEP). It is important to record what works so that evidence can emerge over time that offers new insights into teaching and learning for students with disabilities including those with dyslexia.

After evaluating research quality, one can utilize the FAIR TEST to determine whether a practice or program is a good fit for the students with whom it is intended to be used. The FAIR Test addresses the following concepts:

- Feasibility: is it possible to implement the intervention as designed (with fidelity)?
- Acceptability: what do students, families, and professionals think about the intervention?
- Impact: is there evidence of positive results from implementation of the intervention?
- Relevance: was the intervention used with students who have similar characteristics to those with whom you work?

If the intervention does not meet the FAIR criteria, then decision makers should look for new evidence that does, or consider whether a different practice, strategy, or program would be a better fit.⁸⁰

Teachers and other school personnel must understand what constitutes quality research as well as where to find guidance related to which practices or programs have the greatest prospect of being effective and with which students. To this end, there are various places one can access information that analyzes the research base. Places to look for evidence include:

- Evidence for ESSA,
- What Works Clearinghouse Practice Guides,
- What Works Clearinghouse Resources for Educators,
- National Center on Intensive Intervention Tools Charts,
- 10 Keys Lists,
- FCRR Reading Repository,
- Toolkit for Families,
- <u>Literacy Dialog Tool,</u>
- The Reading League Curriculum Evaluation Tool (K-5), and
- Planning and Evaluation Tool for Effective Schoolwide Reading Programs Revised (PET-R).

Cautions Related to the Evidence

When attempting to determine the appropriateness of an intervention or program for students with dyslexia or those who struggle with reading, there are several cautions to consider. If the research was completed by the same person or group who is selling the product, this could be a key concern as the results from independent evaluations are more reliable. In addition, one must consider the demographics of the participants in any study. Do they match the student population with whom you intend to use the practice or program-in terms of disability, age, functioning, race, gender, geographic location, SES, etc.? Finally, how big is the body of evidence that supports the practice or program? If there are a limited number of studies or the studies all involved a small number of participants, one

⁸⁰ National Center for Systemic Improvement, n.d., Guiding Questions: The FAIR Test

should be more cautious than if there were many large studies completed on the program or practice across time⁸¹.

Dyslexia Treatments and Other Approaches NOT Supported by Research

Not only does science tell us what works for students with dyslexia and other reading challenges, we also know that there are some commonly advertised "treatments" which have not been proven effective. Ineffective treatments or practices include the following:

- Colored overlays,⁸²
- Specialized fonts designed for those with dyslexia,⁸³
- Vision therapy,⁸⁴
- Specific Working Memory Training Programs,⁸⁵
- Three-cueing systems (i.e. skip the word and come back to it, look at the picture, try a word that makes sense) which are sometimes referred to as MSV (Meaning, Structure, Visual), 86
- Memorizing lists of sight words by whole word or word shape, 87 and
- Learning spelling words by rote memorization for weekly spelling tests.⁸⁸

Accommodations

Many students with dyslexia or other learning disabilities require <u>accommodations</u> to access the content being taught. Accommodations are changes to how content is delivered to a student, or the materials

that are used during instruction. They do not change the standard; rather accommodations "level the playing field" for students with dyslexia or other learning needs. If a student has an Individualized Education Program (IEP) or a 504 plan, accommodations are required to be clearly described in that document. Regardless, all accommodations should be designed to meet individual student needs and should be revisited regularly to discuss necessity and benefit. Further, the student who is using accommodations should still be expected to

Accommodations should <u>not</u> be put in place of an intervention.

Students with dyslexia should receive both appropriate intervention <u>and</u> accommodations.

participate in the classroom discussion (as appropriate). It is imperative that accommodations are not put in place of an intervention. Students with dyslexia should receive both appropriate intervention **and** accommodations. When planning accommodations for students with dyslexia, there are a number of things that should be considered:

 Just because a student needs an accommodation, the educator should NOT reduce learning expectations,

⁸¹ REL Midwest, 2019, ESSA Tiers of Evidence

⁸² Griffiths, et al., 2016, The Effect of Coloured Overlays and Lenses on Reading

⁸³ Kuster, et al., 2017, Dyslexia Font Does Not Benefit Reading In Children With or Without Dyslexia

⁸⁴ Handler & Fierson, 2011, Learning Disabilities, Dyslexia, and Vision

⁸⁵ Melby-Lervag, Redick, & Hulma, 2016, Working Memory Training Does Not Improve Performance on measure of Intelligence or Other Measures of Far Transfer

⁸⁶ Kilpatrick, 2015, Essentials of Assessing, Precenting, and Overcoming Reading Difficulties

⁸⁷ Kilpatrick, 2019, Reading Development and Difficulties

⁸⁸ Carreker & Birsh, 2019, Multisensory Teaching of Basic Language Skills

- Accommodations do NOT eliminate the effects of a student's disability, and
- Accommodations should allow students to access grade level curriculum and to demonstrate learned knowledge despite their disability.

While considering accommodations for students who have dyslexia, it is important to only provide accommodations within deficit areas. For example, if data shows that a student demonstrates a need in text reading, but not in writing, then accommodations should only be provided in the area of text reading. Following is a list of possible accommodations to consider when planning for a student with dyslexia:

Presentation Accommodations

- Provide audiobooks for students to use to support reading printed texts,
- Provide text-to-speech technology to allow student to hear digital text,
- Clarify or simplify written directions,
- Utilize spelling words that assess specific linguistic elements (such as CVC or CVCe) rather than
 general vocabulary topics, and whenever feasible, select words from the student's phonicsbased intervention program for their spelling list,
- Provide a copy of notes and reduce copying by including information on handouts or worksheets,
- Provide step-by-step instructions (oral and written),
- Repeat directions then check to ensure student understanding,
- Provide graphic organizers for extended reading and writing tasks,
- Pre-teach new and important concepts,
- Employ multimodal techniques for new skill acquisition (e.g. reading, writing, saying, moving manipulatives, etc.),
- Pair visuals with printed text for directions and schedules,
- Use large-print fonts for worksheets if preferred by the student,
- Provide bookmarks or another tool to follow along when reading,
- Allow access to spellcheck, speech-to-text, or predictive text,
- Provide alphabet strips for student reference for efficiency and to provide a correct model,
- Provide sentence starters that show how to begin a written response,
- Show examples of written work that is correct to serve as models for students, and
- Arrange questions or problems on worksheets from least to most difficult.

Response Accommodations

- Oral testing or prompting when allowable,
- Assignments and tests should be evaluated primarily for content; however, attention should be
 paid to identifying issues like letter reversals, spelling errors, and punctuation mistakes, which
 will be acknowledged but not used to lower the grade,
- Allow student to type their writing assignments via computer,
- Allow oral reports or small-group presentations in lieu of written reports,
- Only ask the student to read aloud if he volunteers (when in group/in front of peers),
- Offer alternative response options (oral answers rather than written, matching or circling rather than filling in the blank, etc.),

- Allow lectures to be recorded.
- Allow the use of a scribe so students can dictate responses to test questions or for writing tasks,
- Allow grammar check or a "proofreader" to identify written errors, and
- Utilize collaborative or cooperative learning where each student has a specific role or part of the task.

Setting Accommodations

- Allow student to test in a quiet location, and
- Allow student to have assessment read out loud in an alternate location.

Timing Accommodations

- Provide extra time for reading and writing, and
- Provide a timeline for extended reading and writing assignments.

Modifications

For some students, accommodations alone will not be enough for them to adequately access the general education curriculum. In these cases, students may require <u>modifications</u> to the curriculum. Unlike accommodations, modifications **do**, in fact, change what a student is taught or expected to learn as well as the standard the student is expected to meet. Since modifications change the expectations and tasks that a student is required to master, they are only appropriate in situations where a student qualifies for an IEP and should not be utilized for students with 504 plans or as part of MTSS. In addition, it is imperative that accommodations and modifications are paired with interventions rather than used in isolation. Students with dyslexia should receive both appropriate interventions **and** accommodations and/or modifications, if needed.

Examples of Possible Modifications

- Books or articles written at a lower reading level,
- Shorten an essay to a single paragraph,
- Complete a worksheet on a similar topic rather than an extended project,
- Learning concepts which are significantly different than peers (for example, peers are learning how to structure a paragraph while a student is learning to write a sentence), and
- Outlining a chapter rather than summarizing a chapter of reading.

Teaching Strategies to Support Students with Dyslexia

There is not a one-size-fits-all approach to providing accommodations and modifications to students with Specific Learning Disabilities, and in the classroom, ensuring the needs of all students are met can be difficult. There are several strategies that can be implemented within the classroom to benefit all students, especially those with dyslexia and/or SLD:⁸⁹

- Use explicit teaching procedures,
- Clarify both written and spoken directions, even if you think that they are simple,

⁸⁹ International Dyslexia Association, 2017, Dyslexia in the Classroom: What Every Teacher Needs to Know

- Present work in small chunks,
- When presenting a lot of information at once, highlight what is essential,
- Provide ample opportunities for practice,
- Use graphic organizers whenever possible,
- Combine verbal and visual information,
- Entwine mnemonic devices into instruction,
- Review the previous day's content every day, and
- Have clear and consistent procedures and expectations.

Assistive Technology

The Individuals with Disabilities Education Act (IDEA) requires that the IEP team consider <u>Assistive Technology</u> (AT) needs in the development of an IEP (IDEA, Section 1414(d)(3)(B)(v)). Assistive Technology should also be considered for students with a 504 plan. The use of appropriate AT devices and services can allow students with disabilities to participate in, benefit from, and maximize accessibility to the general education curriculum and ensuring FAPE. In fact, AT can be utilized for any student who struggles, including those with dyslexia. Examples of AT which might benefit struggling readers and writers range from low-tech to high tech options and should be considered on an individual basis. Various technology options are available for students of different ages and skill ranges with numerous programs and extensions now including built-in features that incorporate principles of <u>Universal Design for Learning (UDL)</u>. Just a few examples of AT that may be beneficial for students with dyslexia include:

- Tracking Aids,
- Expanded spacing between words,
- Spell check,
- Word prediction software,
- Speech-to-text software, and
- Text-to-speech software.

When working to determine whether a student will benefit from AT, there is a four-step process that can be used⁹⁰.

- **Consideration:** The IEP Team determines whether or not a student needs AT in order to receive a FAPE.
- Provision: The team determines how the AT will be acquired and be provided to the student.
- **Implementation:** The team identifies who needs to be trained in order for the AT to be used effectively and a contingency plan should be developed in case the AT becomes damaged or unavailable for student use.
- **Progress Monitoring:** The team collects data to demonstrate that the student's performance continues to be impacted by their use of the AT; if the student's performance is not impacted by the AT, the team should return to the consideration process of the cycle.

⁹⁰ Illinois Assistive Technology Support, 2021, Infinitec

Keep in mind that any decision regarding AT should be made by a team rather than an individual. Additionally, the team should consist of not only educators and caregivers, but also the student who will be using the AT.

The ultimate goal of using AT is to increase accessibility for students with disabilities; when properly implemented, AT increases student independence and access to content. More information regarding accessibility can be found at The National Center on Accessible Educational Materials. Additionally, as with many other tools, matching the AT to student need and preference is integral to its successful use. For more information on AT selection and use, see the Illinois AT Guidance Manual, or visit the Illinois At Ellinois At Ellinois

Multilingual Learners and Dyslexia

<u>Multilingual Learners</u> (MLLs), previously referred to as English Learners (ELs) or English Language Learners (ELLs), are individuals who are learning an additional language or languages. In Illinois, students who speak a primary language at home other than English are identified as MLLs. As of 2022, 13.7% of students in Illinois are classified as MLLs with this number steadily increasing since 2017.⁹²

Multilingual Learners and Dyslexia

Dyslexia is a neurobiological, brain-based disorder that affects individuals of all ages across different languages. ⁹³ Dyslexia is found in all languages, including Asian languages with logographic orthographies, such as Chinese and Japanese. ⁹⁴ While dyslexia is present across all languages, it can manifest differently throughout various written systems.

Assessment of Multilingual Learners

Due to a risk of a "false positive" result, dyslexia indicators in multilingual students are often ignored. Educational specialists may also have the view that multilingual learners possess processing difficulties due to poor language proficiency, instead of a learning difficulty such as dyslexia. When considering assessment measures for multilingual students, it is important to understand the structure of the languages, in addition to determining whether the student has a dominant language. Because language preference can be unconsciously determined by a student's individual pattern of learning instead of social or family conventions, assessment of multilingual learners must consider the individual student's strengths and challenges in relation to the languages of different orthography. Teachers should consider home language, the opportunities the student has to interact with two (or more) languages, and how often the student communicates in each language. This offers a picture of the student's verbal ability and guidance for which assessments might be offered.

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⁹¹ Illinois Assistive Technology Support, 2021, Infinitec

⁹² Illinois State Board of Education, 2020a, English Learners in Illinois

⁹³ Peer & Reid, 2014, Multilingualism, Literacy and Dyslexia

⁹⁴ Peer & Reid, 2014, Multilingualism, Literacy and Dyslexia

⁹⁵ Peer & Reed, 2014, Multilingualism, Literacy and Dyslexia

⁹⁶ Dal, 2008, Dyslexia and Foreign Language Learning

⁹⁷ Firman, 2000, The Bilingual Dyslexia Child

It is useful to examine the correct identification of dyslexia in multilingual students through two approaches. One approach considers language-dependent tasks which connect to a student's language processing abilities. These abilities include phonological awareness and non-word repetition. Phonological skills have been shown to be the main predictor of a child's literacy learning in multiple languages, irrespective of the other orthographic transparency. Consequently, the assessment of phonological skills is a helpful tool for identifying dyslexia in language/literacy contexts. Another approach considers language independent tasks that connect to a student's non-linguistic cognitive skills. Examples of these skills can include naming speed, rhythmic timing and inhibitory control (which show some correlation with reading development). Since language proficiency does not appear to largely affect either of these approaches, they are suitable for assessing multilingual learners.

Additionally, multilingual students benefit from assessment in the home language and partner language in the areas of phoneme discrimination, blending skills, segmentation skills, and spelling. Spelling can help determine whether there is interference between one language and another (e.g. "ship" written as "xip"). Taking multiple approaches into account offers a more appropriate method for identifying dyslexia in linguistically diverse learners.

Identification of Dyslexia in Multilingual Learners

When attempting to determine if a multilingual learner shows characteristics of dyslexia, there are four things to consider before screening: proficiency in home language, developmental history, educational background, and English language proficiency. Additionally, keep in mind that students reading in a language different from their home language will, for some period of second language learning, show evidence of "poor" reading skills. ¹⁰³ It is essential to consider the whole student and their entire background before screening for dyslexia. Ideally, when assessing, students should be assessed in their native language; however, when their language is difficult to assess, there is value in assessing in English, especially for certain measures (Phonemic Awareness & Rapid Automatized Naming) because there are **phonology networks** that overlap between first and second languages. ¹⁰⁴

After all pertinent information is considered and it has been determined that a student has more than just language needs, further information should be collected. Like the process for identifying dyslexia in English speakers, assessments may be done regarding foundational reading skills such as phonological awareness, phonics, fluency, vocabulary, and comprehension.

Universal Characteristics of Dyslexia Across Languages

• Slower than average reading speed,

⁹⁸ Everatt, et. al., 2013, Assessment Approaches for Multilingual Learners with Dyslexia

⁹⁹ Firman, 1999, The Bilingual Dyslexia Child

¹⁰⁰ Taha, et, al., 2022, Identifying the Risk of Dyslexia in Bilingual Children

¹⁰¹ Taha, et, al., 2022, Identifying the Risk of Dyslexia in Bilingual Children

¹⁰² Firman, 1999, The Bilingual Dyslexia Child

¹⁰³ Everatt, et al., 2002, Dyslexia Assessment of the Biscriptal Reader

¹⁰⁴ Pugh, et al., 2023, The Neuroscience of Language and Literacy

- Slower performance on measures of <u>Rapid Automatized Naming (RAN)</u>,
- Deficiencies in phonemic awareness prior to reading instruction,
- Less accurate detection and production of rhymes,
- Initial difficulty with phonological processing,
- Inaccurate spelling, and
- Poor verbal memory.¹⁰⁵

How Districts can Support MLLs with Dyslexia

"Oral language proficiency data, in the native [home] language and English, are essential for planning instruction for ELs... Without language data, instruction and intervention may treat the symptom (i.e., reading difficulties), but not the root cause of the problem (i.e., deficits in oral language skills)" (Cavazos & Ortiz, 2020). 106

Multilingual learners are not a homogenous group; therefore, it is important to differentiate both linguistic and academic scaffolds to address student-specific needs.

If there is a student in the classroom who is a multilingual learner and has dyslexia, there are several things that can be done to support their education:

- Leverage the student's home language, background knowledge, and cultural background as much as possible. These are assets, not deficits.
- Support <u>oral language development</u> as it is essential and must be included for instruction and intervention in both home language and in English.
- Foundational literacy skills should be taught explicitly and systematically.
- Establish predictable routines.
- When possible, provide support in the student's home language.
- Use direct, clear, and consistent language.
- Provide extra time for processing, writing, and responding.
- Provide visual and verbal supports and other linguistic accommodations to make content comprehensible.
- Build on and incorporate information with which the student is already familiar.
- Make purposeful connections between reading, writing, speaking, and listening.
- Utilize differentiated (e.g., for language and reading) small-group instruction to support literacy development.
- Explicitly teach home and English language development.
- Explicitly teach morphological awareness in home language and English.
- Capitalize on cross-linguistic connections and explicitly teach <u>metalanguage awareness</u>.
- Create conditions for daily, ample language use related to text and content being learned.
- Work collaboratively with the MLL department if present in your school.

¹⁰⁵ Peer & Reid, 2014, Multilingualism, Literacy and Dyslexia

¹⁰⁶ Cavazos & Ortiz, 2020, Incorporating Oral Language Assessment into MTSS/Rtl Frameworks

¹⁰⁷ Martinez, et. al., 2023, Fostering Cross linguistic Knowledge About Language

Bidialectal Speakers

All languages and dialects have value.

<u>Bidialectal</u> speakers are often referred to as those who speak a variety of dialects in addition to <u>General American English (GAE)</u>. Moreover, <u>dialect</u> refers to a version of a language spoken by a group of people distinguished by characteristics such as race, ethnicity, religion, and/or geographic region. When children start school, they come as experts in the language system of their home and community. It is important that educators are knowledgeable of the dialects, or language varieties, of the students in their class so that they can support their learning of General American English (GAE). Examples of varieties of English include <u>African-American English (AAE)</u>, <u>Mexican-American English (Chicano English)</u>, <u>Cajun English</u>, <u>Gullah</u>, <u>Southern English</u> and many more. "In fact, in the U.S., all English speakers speak a dialect of American English. Whether referring to a "Southern drawl" in the Southeast, "mountain speech" in the Appalachians, or a wicked Boston "r" in the Northeast, dialects are not "bad," "incorrect," or "broken" English. Rather, they are systematic, rule-governed variations of GAE, with different rules for expressing the same form, content, and use of a language. Often, these differences do not map well onto English orthography, making spoken dialect variation an important consideration for reading instruction".¹⁰⁹

How Districts Can Support Instruction for Bidialectal Students

Instead of viewing the language variety and variation as a deficit, it is important to acknowledge that "Bidialectalism (and bilingualism) is not a risk in need of being remedied."¹¹⁰ Each student has unique language experiences which allow them linguistic flexibility which may have different implications for literacy experiences. Furthermore, language variations of English must be recognized, respected, and affirmed in order to support students in bridging the two variations for development of strong literacy skills. These students are linguistically diverse, as they both understand and shift between their dialect and GAE when using **expressive language** (speaking and writing) or **receptive language** (listening and reading).¹¹¹

The extent to which a student's oral language variety differs from that of print, their "dialect density", will have implications for learning to read and write. These students will generally require more practice and exposure to integrate print and oral language to support reading and writing. Furthermore, "students need to have access to their full linguistic repertoire when learning a new language system," and the instructional support to do so.¹¹²

Moreover, teacher knowledge in regard to dialects is imperative as it directly impacts assessment and instruction. "Language varieties can impact all <u>language domains</u> (i.e., <u>morphology</u>, <u>syntax</u>, <u>semantics</u>, <u>phonology</u>, and <u>pragmatics</u>), meaning that speakers may have dialect-specific rules for how sentences

¹⁰⁸ Washington & Seidenberg, 2021, Teaching Reading to African American Children

¹⁰⁹ Johnson & Gatlin-Nash, 2020, Evidence-Based Reading Difficulties Among African American Learners

¹¹⁰ Terry, Gatlin, & Johnson, 2018, Same or Different

¹¹¹ Pittman, et al., 2023, The Importance of Phonemic Awareness Instruction for African American Students

¹¹² Washington, Lee-James, & Standford, 2023, Teaching Phonemic and Phonological Awareness to Children Who Speak African American English

are created and which phonological features are appropriate for use in a given word or context". Understanding linguistic differences is necessary in order to differentiate them from linguistic deficits. For example, a major phonological feature of AAE (African-American English) is final consonant <u>deletion</u>. Additional features are indicated in the chart below. Knowledge of these linguistic features is helpful for teachers with instruction in oral language and print.¹¹³

Table 7: Key Features of African-American English (AAE)

Verb Morphology	Description	Examples
Variable past tense	The -ed marker is variably attached to verb forms in past tense contexts	The cow jump_ over the moon. He fix_ the broken car.
Variable plural	The -s marker is variably attached to nouns	She saw three cat_ in the window. A girl puttin' some glass_ on the table to drink.
Variable third person -s	The -s marker is variably included on the verb in third-person singular contexts.	My friend want_ to buy some candy when we get to the store.
Variable possessive	The -s marker is variably included to mark possession, and possessive pronouns are variably marked.	I rode in my uncle_ car. They waitin' for they car.
Syntax		
Variable subject-verb agreement	Subject and verb do not agree in tense and number	My friends was runnin' fast to catch the bus.
Variable inclusion of to be in copula (linking) and auxiliary forms	Main and auxiliary forms of the verb <i>to be</i> are variably included.	This my red car. They watchin' the girls jump rope. *
Phonology		
Consonant cluster reduction	Consonant clusters in the final position of words are reduced to one final consonant.	col_/ cold fiel_/ field cas_/ cast

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¹¹³ Washington, Lee-James, & Standford, 2023, Teaching Phonemic and Phonological Awareness to Children Who Speak African American English

Dropped "g"	Variable inclusion of <i>g</i> in the final position of a word ending in <i>-ing</i> .	jumpin_ /jumping waitin_ /waiting goin_/ going
Intervocalic and postvocalic positions for specific sounds	Following a vowel, voiceless and voiced <i>th</i> sounds in medial and final positions of words are replaced by /f/, /t/, or /v/; Preceding a vowel, the voiced <i>th</i> sound in the initial position of words is replaced with /d/.	wif/with wit/with baye/bathe dis/this dem/them dat/that
Consonant cluster movement	The /sk/ consonant cluster is transposed, becoming /ks	aks/ask ekscape/escape

^{*}These examples were taken from the transcripts of African-American English. Some examples include another AAE feature being highlighted. In this sentence for example, the child deletes the auxiliary form *are* and also drops the final *g*. Production of multiple AAE features in a single sentence is common.

Recommendations for Teachers:¹¹⁴

In the U.S., African Americans account for about 13% of the population, approximately 80% of whom speak AAE. Supporting these students in the classroom requires being aware of and leveraging their home language, background knowledge and cultural assets, much the same as with multilingual learners. Below are some ways to support instruction of students who speak AAE: 116 117

- Support development of children's phonological awareness through word play activities such as rhyming using examples from the students' language variety. Rhymes may not be the same as in GAE due to differences in vowel system (thing/king or rang) or deletion of final consonants (cold/hole), so these activities may function somewhat differently than in GAE.
- Implement Elkonin boxes for phonological awareness exercises: These boxes offer valuable visual and auditory support to aid children and adolescents in mastering phonological differences between the two dialects.
- Incorporate letters with phonemic awareness exercises, bringing particular attention to the differences in how the spoken word is represented in print.
- Reading aloud is important to aid in developing fluency, but children and adolescents learning to
 navigate two dialects will slow down to pronounce words correctly and read them accurately.
 Comprehension can be impacted as a result. The appearance of lower proficiency can be deeply

¹¹⁴ Washington, Lee-James, & Standford, 2023, Teaching Phonemic and Phonological Awareness to Children Who Speak African American English

¹¹⁵ Pittman, et al., 2023, The Importance of Phonemic Awareness Instruction for African American Students

¹¹⁶ Washington & Seidenberg, 2021, Teaching Reading to African American Children

¹¹⁷ Johnson & Gatlin-Nash, 2020, Evidence-Based Reading Difficulties Among African American Learners

- embarrassing, so careful consideration should be given when using these activities in front of other students.
- Include books and other resources in the classroom that are culturally responsive.
- Provide, in writing, important information that has been presented orally, as well as visual supports whenever possible.
- Familiarize yourself with AAE, a sophisticated and intricate language variety. Expand the child's
 understanding of AAE to include the second dialect, GAE, which serves as the language used in
 hooks.
- Acquire knowledge about general oral language development and AAE.
- Support the development of vocabulary and language skills in students.
- Focus not only on decoding skills but also on fostering the development of larger text units, such as sentences and paragraphs.
- Encourage the development of deep reading skills by providing ample opportunities for students to read, particularly rich and culturally relatable books.
- Be sensitive to the time needed for children and adolescents to master new language skills, while remaining vigilant that students make adequate progress through the year.
- Explicitly infuse oral language skills in literacy instruction to boost reading performance.
- Take advantage of opportunities to learn about culturally appropriate teaching strategies (e.g., dialect-informed instruction and culturally responsive teaching) and utilize them in the classroom.

Screening and Assessment

As educators screen, assess and provide appropriate reading interventions for students, it is important to be able to identify the difference between a linguistic feature of a student's dialect and a potential sign of a reading difficulty so as not to over-identify students potentially needing intervention. For example, vowel sounds between dialects can differ, which would impact which words rhyme (phonological awareness). Another example is the ability to correctly identify if two words end in the same sound as final consonants are typically deleted, as in AAE (phonemic awareness). Similarly, it is important not to make assumptions about students based on their cultural or linguistic background as that may potentially lead to under-identification or over-identification of language difficulties.

Additional considerations for screening and assessment of language difficulties are as follows: 118

- Students may use their dialect or language variation during screening and assessment; therefore, the practitioner should learn about the characteristics of that dialect or language variation to determine language differences versus possible disorders.
- When available, use standardized assessments that accommodate language variation in their scoring.
- Consider the student's background knowledge when assessing vocabulary and reading comprehension skills and its impact on performance.

¹¹⁸ Johnson & Gatlin-Nash, 2020, Evidence-Based Reading Difficulties Among African American Learners

After all pertinent information is considered and it has been determined that a student has more than just language differences, further information should be collected. Like the process for identifying dyslexia in English speakers, evaluations may be done regarding foundational reading skills such as phonological awareness, phonics, fluency, vocabulary, and comprehension. The difference in these assessments is that whenever possible, they should be administered by someone who is fluent in the home language or language variation and given in the student's home language or language variation.

Research over many decades has determined that virtually all children and adolescents can be taught to read with direct, explicit, systematic instruction. This is true regardless of cultural background, linguistic background, race, or economic status. Educator knowledge in effective instructional techniques and in the cultural and linguistic backgrounds of their students is key to developing successful readers and writers.

Students who are Twice Exceptional (2e)

<u>Twice Exceptional</u> (2e) students are those who possess both a learning challenge such as dyslexia, dysgraphia, dyscalculia, ADHD, or autism spectrum disorder, and exceptional or gifted abilities in some area. According to the International Dyslexia Association, approximately 2-5% of school-age children and adolescents fall into this category, with some reports indicating even higher numbers.

These learners exhibit high levels of thinking, reasoning, and problem-solving abilities, yet also require special education support due to their learning challenges. It is common for 2e students to utilize their strengths in oral language and knowledge to compensate for weak decoding, encoding, and oracy skills, making it challenging to recognize dyslexia. Unfortunately, the interplay between their giftedness and special needs often leads to misconceptions and these students may be unfairly labeled as "lazy" or "unmotivated."

One of the complexities in supporting 2e students within the educational environment is that their high cognitive abilities can mask their deficits, and vice versa, making it difficult to identify and address their unique needs effectively. Consequently, they may struggle to have either of their exceptionalities fully recognized and supported, despite their remarkable compensatory skills.

Characteristics commonly observed in 2e individuals, as identified by the International Dyslexia Association, include:

- Superior oral vocabulary,
- Advanced ideas and opinions,
- High levels of creativity and problem-solving ability,
- Intense curiosity, imagination, and inquisitiveness,
- Discrepancy between verbal and performance skills,
- Clear peaks and valleys in cognitive test profiles,
- Diverse range of interests not necessarily related to school,
- Specific talents or a consuming interest in a particular area, and
- A sophisticated sense of humor.

Recognizing and supporting the unique strengths and challenges of 2e students is crucial to enabling them to learn and thrive according to their aptitudes as well as developing positive social and emotional health. Following are ways that teachers and administrators can support 2e students:

- Learn as much as possible about 2e students as well as those students with complex student profiles and don't just focus on one area only.
- Advocate for professional development and creating a school culture that is inclusive of all kids who identify as dyslexic on the whole spectrum of severity AND cognitive abilities.
- Realize that sometimes ADHD is confused with dyslexia: while they can co-occur, dyslexia is the
 difficulty with the basics of sounds of language; ADHD impacts attention, activity and executive
 functioning.
- Support differentiated direct, explicit instruction, intervention, and accommodations as needed for ALL students.
- Reinforce students' emotional needs.

Most of the accommodations that apply to and are discussed throughout this handbook for all students with dyslexia apply to twice exceptional students as well:

- Do not allow a child's high intelligence to delay or interfere with screening, diagnosis, intervention, or accommodations.
- Grade a student based on thinking not spelling or speed.
- Monitor the amount and length of time homework is taking the student and make adjustments as needed.
- Offer intervention in structured literacy AND challenge/accelerate a student where they need to be challenged.
- Allow assistive technology such as audible books.
- For older students, balance academic course load with study hall and courses that do not have large volumes of reading and writing.
- Support students in their executive function development.
- Remind all students that they are bright and reassure them privately that you are empathetic to their challenges.

Older Students with Reading Challenges

For students in the older grades to be successful readers, they must be able to adequately decode words, attend to vocabulary, draw on background knowledge, and comprehend various text structures. It an older student is struggling, it is imperative to identify the skill deficit in order to provide the correct intervention. An effective assessment plan is crucial in order to provide intervention for older students. While a benchmark assessment, typically given 3x a year, will allow educators to see if a student is struggling or not, it does not pinpoint the specific skill deficit. If a student seems to struggle according to state or district normed assessments (benchmark, ORF, etc.), then further assessment(s) should be conducted to determine if the student has a word-level recognition deficit. Note that instead of a "bottom up" approach where students focus on foundational literacy skills first, secondary students' comprehension and oral reading fluency can be assessed to determine if additional assessments are needed.

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¹¹⁹ Biancarosa & Snow, 2006, Reading Next

¹²⁰ Snow, 2006, Reading for Understanding Toward an R&D Program in Reading Comprehension

Figure 10: Benchmark or Screening Flowchart No intervention needed. Consider enrichment. Benchmark or Screening Assessment Consider support Grade Level Oral in language Reading Fluency comprehension Complete Word Consider fluency Recognition Diagnostic intervention progress closely to determine any needed changes to grouping or instructional focus. Word Recognition Intervention

Never Too Late

For students who struggle to read, both those with dyslexia and those with other reading challenges, in the older grades, it is vital that they have foundational literacy skills. It is never too late to remediate these skills or for older students to learn to read. It is important, however, to consider the whole child, their interests, understandings, and connections when intervening and remediating. While some materials may be geared toward elementary (juvenile pictures, stories, etc.), it is important that teachers use their discretion to determine if materials are age appropriate. In the Toolkit, one can find resources for teaching foundational skills to older students. Research indicates that secondary-level students who are performing substantially below grade level are not likely to meet grade level standards unless they have highly intensive intervention. 121

¹²¹ Honig, Diamond, & Gutlohn, 2013, Teaching Reading Sourcebook

When providing intensive intervention to middle and high school students, providers must reduce the group size to achieve greater intensity.

Scammacca, et. al., 2007

Additionally, it is important that students who are struggling with reading receive intensive intervention outside of content area classes, ideally with a highly trained professional. Intervention should be provided in addition to general education reading/writing instruction, not in place of, unless a student has an IEP and the team has made a different determination for service delivery.

Intervention can take place during a study hall or flex period or possibly tier one or two instruction if flexible grouping is utilized.

Educators and interventionists should utilize assessment data to plan for instruction. If a secondary student has a word-level deficit, then this constitutes an intensive need; thus, intervention groups should be small, no larger than four students, with the same focus in terms of skill development.

Reading Intervention Instructional Practices for Older Students

Regardless of age, proficiency in word reading lays the foundation for successful comprehension and fluency in reading. Below are some evidence-based strategies to use with older students in a reading intervention setting¹²².

- Teach Letter-Sound Correspondences
 - O Before you can effectively improve students' word-reading skills, it is crucial to identify their current level of proficiency. Administer a diagnostic assessment to pinpoint areas of weakness in sound-letter correspondence such as the <u>CORE Phonics Survey</u> or the <u>Quick Phonics Screener</u>. Tailor your instruction to meet individual student needs. For students struggling with specific sound-letter correspondences, provide targeted teaching and reteaching until the concept has been mastered.
- Decode Multisyllabic Words
 - O Multisyllabic words can be daunting. Teach students a systematic routine for decoding these words. Encourage students to identify prefixes, suffixes, and vowel combinations within multisyllabic words. This approach will empower them to break down complex words into manageable segments.
- Embed Spelling Instruction
 - O Integrate spelling instruction into reading intervention lessons. While teaching sound-letter correspondences, have students actively engage by encoding, or spelling words that utilize the specific sound-letter relationships that are being explicitly taught. This practice can encompass both monosyllabic and multisyllabic words, reinforcing their understanding and retention.
- Practice Reading with Accuracy and Automaticity
 - O Reading accuracy and automaticity are crucial for developing fluent readers. Dedicate ample time to activities that allow students to practice reading. Utilize a wide variety of engaging exercises such as partner reading, echo reading, choral reading, or maze reading. Gradually, this will build their accuracy, automaticity, and confidence.

¹²² National Center for Education Evaluation, 2022, Providing Reading Interventions for Students in Grades 4-9

- Implement Fluency-Building Activities
 - O Boosting reading fluency is a key component in becoming a skilled reader. Incorporate purposeful fluency-building activities into reading intervention lessons. This can include repeated readings of the same text or reader's theater. These exercises will support students in reading more smoothly, expressively, and with greater comprehension.
- Integrate Comprehension-Building Practices
 - Integrate comprehension-building practices to enable students to make sense of the text effectively. Emphasize the importance of vocabulary through explicit instruction & teaching morphology, background knowledge, asking & answering questions, and monitoring comprehension as students read.

Reader Behavior(s)

For students with dyslexia, motivation alone will not teach them to read. Older students are skilled at masking reading difficulties. Oftentimes, one might see these students carry around multiple books from the library or they might sit quietly and "read" during silent reading time. On the other hand, some older students who struggle with reading might exhibit unwanted behaviors out of frustration or avoidance. Consider the students who ask to go to the bathroom or joke and chat excessively with classmates or demonstrate generally distracting behaviors when it is time to read or write. When providing intervention and/or remediation for older students, it is important to consider the following:

Create Trust & Respect

Older struggling readers have experienced years of academic failure with the thought that they would have been taught to learn to read by this point in time. Creating trust can look as simple as providing explicit expectations for intervention, following through on what you ask and/or say you will do, and simply by being honest and transparent with your students. Build in time to get to know each of your students. Acknowledge their behavior, but avoid labeling it as "bad," "lazy," or "unmotivated."

Acknowledge Their Feelings & Provide Opportunities for Management

Older struggling readers are likely to have many feelings – feelings of distrust, frustration, sadness, and/or anger. It is important to validate their feelings but also to provide opportunities to talk about their feelings and reinforce your commitment to helping them. If students are feeling frustrated, allow them to get a drink of water, explicitly teach and practice deep breathing, squeezing all the muscles in their body, etc. Connect with other service providers in your building such as the social worker, counselor, and/or school psychologist to collaborate.

Goal Set

Work with students to set short-term goals with manageable steps. In this way, students are aware of their goals and can track their progress over time. Once they experience success through meeting a goal, regardless of how small, they will experience a sense of accomplishment which can help support their self-esteem and motivation.

Table 8: Checklist for Implementing Intensive Intervention

Checklist to Develop a Plan for Implementing Intensive Intervention (Adapted from Effective Instruction for Middle School Students with Reading Difficulties, 2012)

- Identify who will provide intensive intervention (reading teacher, special education teacher, other well-qualified teacher).
- Decide when, where, and how often the intensive intervention will be provided.
- Identify and secure an evidence-based, explicit, systematic program(s) to be used to provide intervention.
- Clarify the relationship of intensive intervention with Section 504 and special education services.
- Put in place a system for monitoring the progress of students in intensive intervention between two and four times a month to help guide instruction.
- Establish criteria for entry and exit from intensive intervention.
- Clarify how assessment data can be used to plan targeted instruction and make adaptations to ensure students meet grade-level benchmarks and/or objectives.
- Establish a space and a place for problem solving and decision making related to intensive intervention.
- Provide time for collaboration among intervention teachers.
- Ensure that intensive intervention teachers receive quality professional development emphasizing scientific evidence-based programs and practices in teaching students with reading difficulties.
- Provide ongoing support for intensive intervention teachers.

The Role of Related Service Professionals

Related service personnel should be aware of the risk profiles and the signs and symptoms of dyslexia in their various roles and responsibilities. Speech-Language Pathologists are often the first related service professionals to serve students at risk for dyslexia. It is reported that as many as 40-75% of children and adolescents with a specific language impairment will have problems in learning to read. As students move through school and reading/writing expectations increase, students with dyslexia struggle to meet curricular demands and are negatively impacted by poor and labored decoding skills for more dense and complex texts. Early and correct assessment and identification of students with dyslexia is crucial. Fletcher & Lyon found that 74% of children who perform poorly in reading in 3rd grade continue to do

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¹²³ Spear-Swerling, 2006, Specific Language Impairment

so in high school.¹²⁴ The struggle and confusion associated with an undiagnosed reading disability will often manifest in poor self-esteem and possibly behavior issues within the school setting. It is imperative that related service personnel review their individual professional areas of observation and evaluation to include the potential impact on a student's reading and writing skills.

The appropriate intervention through Rtl/MTSS tiers or in the IEP development process relies on assessment data. It is therefore necessary that those assessments are, among other things, valid, reliable, administered without discrimination, and in a language and form most likely to yield accurate information for that specific student. The Team's discussion and review should extend from assessment results to the impact dyslexia has on a student's daily experience at school. Collaboration is essential for effective IEP development especially since the purpose of related services is to build skills that will allow students with an IEP to access and benefit from their special education services. Rich input from families, related service providers, and general educators (including MLL teachers), on the individualized design of accommodations, modifications, supplementary aids and services, and annual IEP goals or 504 plans is important for supporting areas of disability-related needs within all environments.

Related service providers should use their professional assessment tools to fully understand a student's skills and the impact of processing on academic performance, specifically as they relate to reading, writing, and math. Curriculum-based measures do not always account for the impact of skills and processing; rather, they provide insight as to how a student is progressing in various academic areas. Specifically, for SLPs who often have extensive expertise in the language area, the following chart can provide assessment guidance¹²⁵:

Table 8: Areas of Assessment

Areas to Assess	Modalities involved
Phonological Awareness – an individual's awareness of and access to the sound structure of his/her oral language	 Auditory Auditory Discrimination Segmentation of sounds/phonemes Blending of sounds/phonemes
Phonological or Language-Based Memory – ability to recall sounds, syllables, words	AuditoryVisual-AuditoryAuditory Short-Term Memory
Rapid Automatic Naming – speed of naming objects, colors, digits, or letters	TimeEfficiency of recall

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¹²⁴ Fletcher & Lyon, 1998, Reading: A Research Based Approach

¹²⁵ Lowell, 2020, Dyslexia Assessment: What Is It and How Can It Help

Receptive Vocabulary – understanding of words heard	VocabularyListening/Language Comprehension
Phonics Skills – understanding of the symbol (letter) to the sound(s) relationship, either individually or in combination with other letters	Symbol RecognitionVisual-AuditoryMemory / Recall
Decoding – ability to use symbol-sound associations to identify (read – pronounce) words. Real Words Nonsense Words	 Symbol Recognition Symbol-Sound Recognition Word Identification Segmentation of Letter-sounds Blending of Letter-sounds
Oral Reading Fluency – ability to read accurately, at a story-telling pace – to facilitate/ support comprehension. Silent Reading Fluency - TSWRF Single Words Sentences and Paragraphs	 Decodable words Grade level words Following of sequence and directions Oral language Syntactical level
Spelling	 Segmentation of Sounds Orthographic Patterns Syllabication Morphology - including suffixing rules
Transcription Skills	 Handwriting - letter/number formation Copying Keyboarding Tracing
Writing - Sentence Level	 Sentence Construction Knowledge and Exposure Oral Language Syntactic Structure Listening/Comprehension Skills Executive Functioning
Writing - Paragraph Level	Oral LanguageReceptive LanguageSyntactic Structure

I ■ Executive Functioning	 Narrative Language Skills Memory Executive Functioning

In addition to Speech-Language Pathologists, there are other Related Service Professionals who may support students with dyslexia in the school setting—specifically those students with SLDs who qualify for an IEP. Social workers, Occupational Therapists, and other types of specialists or interventionists may provide consultation to teachers and/or direct services to students.

Addressing Social-Emotional Concerns

It is important that related service personnel document student behaviors observed during the administration of their assessments. The review of reading, writing, curricular samples, behaviors, and social-emotional actions and reactions should be included as part of the social emotional domain. The reading and writing demands and a student's response to the task demand(s) are an important indicator of the student's social-emotional state. The antecedent of the demands is critical in reviewing and assessment, especially when completing a Functional Assessment of Behavior. Students may act out, avoid, or display other various behaviors due to frustration, embarrassment, or as a response to negative self-image, due to possible years of struggle. The results of a student's anxiety may also include physical symptoms due to the student's internalization of their emotional state.

Each student's social and educational history should also include information from the parent and previous educational records regarding previous home and school social-emotional and behavioral responses. In addition, it is integral that all professionals communicate effectively and work collaboratively to address the needs of the whole child.

"Many of these children experience a destructive emotional cycle that begins with an awareness of disappointing adults. Simultaneously, the child is also frustrated with him or herself." ¹²⁶

Providing Transition Services for Students with Dyslexia

If a student with dyslexia receives services through an IEP in high school, then the school is required yearly to develop and evaluate a formal written plan for the transition from high school to the next phase of their life, whether that includes employment, post-secondary education, or military service, by the age of 14 and a half in Illinois. For students receiving services under a 504 plan, the multi-disciplinary team developing and reviewing the 504 plan should, in collaboration with the family and student, consider if transition planning and services are necessary for the student to be successful after high school. If it is determined they are necessary, then the team should include these services in the 504 plan. Regardless, the high school student with dyslexia should apply for and secure appropriate accommodations for "high stakes testing" such as the PSAT, SAT, ACT, etc. Documentation including a description of the student's disability, reading and writing skills, and the accommodations used by the student will be needed.

¹²⁶ Moats & Darkin, 2008, Basic Facts About Dyslexia and Other Reading Problems

If an individual is planning to move to a post-secondary educational setting, they may be able to access some accommodations through the institution's disability services program. Although their IEP or 504 plan does not follow a student into the new institution, these plans can be used to document the disability and need for services and to discuss which accommodations may be suitable in a higher education setting. Not all accommodations that were provided in high school may be suitable for post-secondary education, and these institutions are only required to provide services which are deemed necessary to ensure the student is not discriminated against based on their disability. Additionally, considerations must be made to ensure accommodations do not compromise the overall quality and rigor of the post-secondary education program. Secondary educators can support students and families in these transitions by facilitating an initial contact with that institution or providing families with the contact information and some simple steps for initiating the process.

Administrators, educators, and service professionals must prepare these students to advocate for themselves and reach out to disability services or other related agencies directly. It is important that students understand their reading and writing skills and challenges, so they are able to work with school professionals to determine appropriate accommodations. Specifically in higher education, this process must be initiated by the individual seeking services, and they must be willing to regularly communicate with and reach out to the disability service providers to ensure their needs are being met.

Also, it is important to inform students and families that after high school individuals are not required to disclose that they have a disability or that they received services under an IEP or 504 plan. Informing them that this information will not be reported to post-secondary institutions or employers by the district is essential, but also acknowledging that this information is often beneficial for these organizations to be informed by the individual so they can better understand and support them in the workplace or educational setting is important.

Bridge to Practice

As a 4th grade teacher, you've observed that several students are struggling in class. Upon reviewing their benchmark scores from the beginning-of-year assessment, you found that they ranked between the 10-20th percentile nationally. Recognizing the need for further evaluation, you conducted diagnostic assessments with these students. The results revealed a common issue: they all have deficits in word recognition, ranging from consonant-vowel-consonant (CVC) words, variant vowels, and multisyllabic words according to the survey. You have only ever taught 4th and 5th grade before, so are unsure of the instructional strategies to utilize with these students. You understand that these students require targeted support in this area; however, you are unsure of what steps to take next. What do you do?

Click for Answer

Key Terms

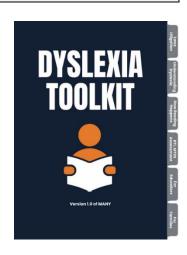
- Accommodation
- Affix
- African-American English (AAE)
- Assistive Technology (AT)
- Base Word
- Bidialectal
- Blending
- Cajun English
- Comprehension
- Consonants
- <u>Cumulative</u>
 Instruction
- Decodable Text
- Deletion
- <u>Diagnostic Teaching</u>
- Dialect
- Dialect Density
- <u>Discourse</u>
- Evidence-Based
- Explicit Instruction
- Expressive Language
- Fluency
- General American English (GAE)
- Grapheme
- Gullah

- Language Domains
- Metalanguage
 Awareness
- Mexican-American English (Chicano English)
- Modification
- Morpheme
- Morphology
- Multilingual Learners (MLLs)
- Multimodal
- National Reading Panel
- Oral Language
- Orthography
- Orton-Gillingham Approach (OGA)
- Phoneme
- Phonemic Awareness
- Phonics
- <u>Phonological</u>
 <u>Processing</u>
- Phonological/ Language Based Memory
- Phonology
- Phonology Networks

- Pragmatics
- Prefix
- Rapid Automatic
 Naming (RAN)
- Receptive Language
- Root
- Segmentation
- Semantics
- Southern English
- Structured Literacy (SL)
- Suffix
- Syllable Types
- Syllables
- Syntactical Level
- Syntax
- <u>Systematic</u> Instruction
- Transcription Skills
- <u>Twice Exceptional</u> (2e)
- <u>Universal Design for</u>
 <u>Learning (UDL)</u>
- Verbal Memory
- Vocabulary
- Vowels
- Working Memory

Expanded Exploration: Linked Resources

- Read: Structured-Literacy Instruction from the International Dyslexia Association
- <u>Listen: Research Education Advocacy (READ) Podcast with Winward Institute</u>
- **Explore:** The National Center on Improving Literacy website



Looking Forward

The information and guidance provided in this handbook is intended to enhance the knowledge of educational professionals, school leaders, families, guardians, and students on the subject of dyslexia. That being said, as a society, we are in an ongoing state of growth and learning. In the past decade, we have seen significant advances in our knowledge of dyslexia from the fields of science and education; a decade from now, we will know even more. In addition, our state has engaged in deep conversations about reading instruction and numerous bills have been proposed that address dyslexia. In order to ensure that this handbook continues to be a beneficial source of information, it will be under constant revision with updates being released periodically. Hopefully, by educating and empowering all who are impacted by dyslexia with the most up-to-date research, the uncertainty surrounding the disorder can be reduced and we can continue to make a difference in the lives of those diagnosed.

Bridge to Practice – Scenarios with Answers

Chapter 1: Background

Scenario: A new student just transferred to the school where you work and was put into your class. From day one, you can tell that she is an exceptionally hard worker, but you also notice that she has been struggling to keep up with the rest of the class, especially in reading. When you check in on her, she tells you that she has dyslexia. You look in her file and see nothing documented regarding a dyslexia diagnosis, so you call her parents to try and figure out what is going on. They tell you that she does have a dyslexia diagnosis and that they have paperwork. The next morning, they bring the paperwork into school and ask if there is anything that can be done to help their daughter. What is your response?

Possible Response: In this situation, you should explain to the parents that since dyslexia may be considered a specific learning disability according to school-based federal and state disability criteria, and since districts are required to seek/identify children and adolescents who may have disabilities, that there are several things that can be done for their daughter. The school should carefully consider whether or not this child with dyslexia meets the criteria for special education services by initiating the evaluation process; this process can be requested by the family or by school professionals. Once the evaluation is complete, a team should convene to discuss the data collected from the evaluation to determine if the student qualifies for an IEP under the category of Specific Learning Disability. Even if the student does not qualify for an IEP, her reading challenges result in "a physical or mental impairment that substantially limits her", so a 504-Plan should be implemented to ensure that she is provided with the reasonable accommodations that she needs. In addition to potential IEP and 504 services, the student should also have access to tiered services within the classroom setting to ensure that her needs are being met.

Chapter 2: Understanding Dyslexia

Scenario: A coworker comes to you upset because she is stressed about her teenage son. He has been struggling in school for years with how much time he has to spend on reading assignments, spelling, and reading out loud, among other things. She always thought that he was just being lazy and didn't enjoy reading, but then at the recommendation of the school problem-solving team, she had him evaluated to determine the need for special education services. The school psychologist did a comprehensive assessment and data showed that her son exhibits characteristics consistent with dyslexia. She shares with you that she is afraid of what will happen to her son in the future because she has been told so many things about dyslexia. When you prompt her for more information, she tells you that she has heard that only people who have low intelligence have dyslexia, that it is a super rare condition, and that he will never be successful in life since he can't read. How can you help her?

Possible Response: Keep in mind that the coworker who you are speaking with is not necessarily upset about her son showing signs of dyslexia, but rather how it is going to impact his future. The best course of action is to be honest with her and help her to distinguish fact from fiction. Explain to her that dyslexia is quite common. Also share with her that although her son has been struggling for years, there are still supports that can be put in place, even as a teenager, to help him cope with his

dyslexia and achieve academic success; dyslexia has nothing to do with intelligence and vice versa. You can also talk to her about how there are tons of people who have gone on to become successful in life despite their dyslexia diagnosis, and even point out that though her son struggles, he has made it this far and he has never given up. In addition, it would be beneficial to discuss ways that she can help her son advocate for himself. Since her son is already a teenager, he will be entering the "real world" soon, and his dyslexia is something that he is going to have to live with every day. By helping him to understand his dyslexia and advocate for himself, your coworker will be guiding him towards a more self-sufficient life.

Chapter 3: How Reading Happens

Scenario: There has been some recent debate at a problem-solving team meeting that you are on regarding a middle-school student's reading deficit area. Most of the team think that the student has a deficit with decoding texts because they spend so much time trying to read individual words that by the time they finish a passage, they have forgotten what they just read. In addition, when the student reads out loud, there is an apparent disconnect between what the student says compared to the actual words on the page. One person on the team thinks that it is just a reading comprehension problem because "the student should have learned to read by now; they are in middle school." How can you help the team work through this disagreement?

Possible Response: In this situation, it is important to acknowledge that there is likely a deficit in both. Based on the Simple View of Reading, reading comprehension is a product of decoding text and comprehension of language. In this case, the student has very low decoding abilities which is bound to directly impact their comprehension. Think of it mathematically. Ideally, we would like students to operate at a 10 out of 10 in both decoding and language comprehension, but if a student's decoding is only a 1 out of 10, then even with a score of 10 out of 10 on comprehension of language, the student's reading comprehension is only at a 10 out of 100. Moreover, it is important to examine the many skills that contribute to both word recognition and language comprehension as illustrated by Scarborough's Rope. Because the student has a primary deficit in word recognition, this means that he will likely need support in phonological awareness, word recognition, and sight recognition. Because this student has been unable to access the text, this leads to overall reduced reading experience, which leads to secondary consequences in reading comprehension. The student will also need scaffolded support in language comprehension as well. It is also important to ensure that everyone realizes that reading deficits can happen at any grade level and that it is important to not assume anyone's abilities.

<u>Chapter 4: School-Based Identification and Systems of Service Provision for</u> Students with Dyslexia

Scenario: During the first few weeks of school, you give all of the students in your 1st grade classroom a universal screener to determine if there are any students who have gaps in achievement. When looking at the results, you notice that the majority of students are exactly where you expect them to be, but that there are 3 students who are performing below the benchmark in one or more areas. You dig further into the results and notice that one student in particular is demonstrating deficits in non-word reading fluency, phonological processing, and spelling. Can you logically conclude that this student has dyslexia?

Possible Response: No. One assessment is not enough to determine whether or not a student has dyslexia. In this situation, more data should be collected on the student using additional assessments. If the student is truly behind where they should be, early intervention is key. They should go through a tiered system of support to determine the level of services required in order for them to be successful in the classroom. Ultimately, based on data and the student's response-to-intervention, they may need a range of supports from additional instruction time to regular accommodations to special education services. In every case of providing students with additional support it is important to ensure that the interventions are individualized to address student need and that regular progress monitoring is done to guide further educational decisions.

<u>Chapter 5: For Caregivers – Supporting Children and Adolescents with Dyslexia</u>

Scenario: When your child was in first grade, the school contacted you concerned that your child was demonstrating characteristics of dyslexia. Initially, you were nervous, but you worked with them to go through the steps of problem solving and educated yourself as much as possible about the learning disorder. The team agreed to implement interventions as well as give additional time for direct instruction; they even intensified interventions when they were not working, but nothing seemed to stick. Ultimately, after interventions were implemented and data was collected, your child was evaluated for special education services and was found eligible under the category of Specific Learning Disability in basic reading and reading comprehension. Your child was provided with specialized instruction in reading, and things really seemed to be going well. Fast forward to 5th grade. You have noticed lately that your child has been struggling with friends and self-worth; they report that they feel dumb, and they do not want to go to school anymore. How can you help them?

Possible Response: Unfortunately, it is normal for children and adolescents who are diagnosed with dyslexia to face mental health challenges and look to their parents and caregivers for guidance. Being educated on dyslexia has already given you a head start in this scenario, so use it to your advantage and talk to your child about their dyslexia. Explain what it is and that they did not do anything wrong; their brain just works differently. Also, help your child to find their strengths and celebrate their successes. Helping a child understand their needs and find their own voice early on will help them take control of their challenges and manage more effectively well into their adult years. Lastly, do not hesitate to reach out to your child's school; they often have ideas and can provide guidance on how to help your child. These situations are difficult, and dyslexia can take a toll on your child, but if you can be their source of support and information, they will be better for it.

<u>Chapter 6: For Educators, Administrators, and Other School Personnel</u> Supporting Students with Dyslexia

Scenario: As a 4th grade teacher, you've observed that several students are struggling in class. Upon reviewing their benchmark scores from the beginning-of-year assessment, you found that they ranked between the 10-20th percentile nationally. Recognizing the need for further evaluation, you conducted diagnostic assessments with these students. The results revealed a common issue: they all have deficits in word recognition, ranging from consonant-vowel-consonant (CVC) words, variant vowels, and multisyllabic words according to the survey. You have only ever taught 4th and 5th grade before, so are unsure of the instructional strategies to utilize with these students. You understand that these students require targeted support in this area; however, you are unsure of what steps to take next. What do you do?

Possible Response: It is excellent that you are using assessment data and following up with diagnostic assessments to identify skill deficits among struggling students. Following the identification of skill deficits, it would be best to group by those skill deficits. For example, if you notice that three students have deficits in word recognition with CVC words, and five other students have deficits in word recognition with multisyllabic words, then you can group them accordingly. Once you have potential groups of students to work with, you should provide targeted, evidence-based interventions in the deficit areas and continue to collect data. It is likely that several of the students will respond to the additional support; however, if a student does not respond, you may need to look at intensifying or individualizing the support that the student is receiving.

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Glossary

Accommodation	Accommodations are changes to how content is delivered to a student, or the materials that are used during instruction.
Affix	A letter or group of letters attached to the beginning or ending of a base word or root that creates a derivative with a meaning or grammatical form that is different from the base word or root.
African-American English (AAE)	A legitimate and systematic linguistic variety spoken by many African Americans.
Americans with Disabilities Act (ADA)	The Americans with Disabilities Act, first enacted in 1990 and then updated in 2008, prohibits unjustified discrimination based on disability. It is meant to level the playing field for people with disabilities, including those who are dyslexic.
Angular Gyrus & Supramarginal Gyrus	The part of the brain that is used to connect letters to form words for reading aloud.
Assistive Technology (AT)	An item, piece of equipment, or product that is used to increase, maintain, or improve the functional capabilities of individuals with disabilities.
Attention Deficit Hyperactivity Disorder (ADHD)	Attention Deficit Hyperactivity Disorder (ADHD) is the most common type of neurodevelopmental disorder in children and adolescents. ADHD is when a person exhibits a pattern of inattention or impulsivity. Oftentimes people with ADHD display characteristics including being unable to sit still, fidgeting, lack of focus, excessive talking or moving, and being impulsive.
Automaticity	The ability to respond or react without attention or conscious effort. Automaticity in word recognition permits full energy to be focused on comprehension.
Base Word	A word to which affixes are added.
<u>Bidialectal</u>	Speakers are often referred to as those who speak a variety of English in addition to General American English (GAE).
Blending	Putting together the sounds in spoken words.
Cajun English	A variety of English spoken by many Cajuns in Louisiana. Cajun English may exhibit linguistic features influenced by French, as well as unique features that are characteristic of the Cajun community.
Central Auditory Processing Disorder	Individuals with Central Auditory Processing Disorder (CAPD) have deficits in skills related to auditory attention, discrimination, analysis, synthesis, association, and organization. Oftentimes, this disorder

	manifests in several ways, including difficulty understanding in noisy environments, trouble hearing in groups, difficulty following directions or needs frequent repetition, seems to hear but not understand, history of ear infections, distractible, speech and language problems, poor localizations skills, and problems in phonics, reading, spelling, and written language.
Comorbid Conditions	There is a continuum of neurologically based disorders that are frequently found together. The basic concept is that if something impacts on the developing brain, resulting in an area or system being "wired differently," it is possible that other areas might be involved as well.
<u>Comprehension</u>	Making sense of what we read. Comprehension depends on good word recognition, fluency, vocabulary, worldly knowledge, and language ability.
Consonants	One class of speech sounds in which sound moving through the vocal tract is constricted or obstructed by the lips, tongue, or teeth during articulation.
Cumulative Instruction	Describes instruction that is presented in a sequence that begins with the simplest skills and concepts and progresses systematically to the more difficult.
<u>Data-Based Decision</u> <u>Making</u>	The process of using data (e.g., progress monitoring data) to make instructional decisions.
<u>Decodable Text</u>	Text that is written at the independent reading level of a student; for the text to be decodable the student should be able to read 95-100% of the words independently, with no more than 1 error per 20 words.
Decoding	To break the phonic code (to recognize a word); to determine the pronunciation of a word by noting the position of the vowels and consonants).
<u>Deletion</u>	Leaving out sounds in spoken words.
Developmental Language Disorder (DLD)	Developmental Language Disorder (DLD) is a communication disorder that interferes with learning, understanding, and using language. These language difficulties are not explained by other conditions, such as hearing loss or autism, or by extenuating circumstances, such as lack of exposure to language. DLD can affect a child's speaking, listening, reading, and writing. DLD has also been called specific language impairment, language delay, or developmental dysphasia.
<u>Diagnostic Literacy</u> <u>Assessment</u>	An assessment that measures a specific skill acquisition.

Diagnostic Teaching	Pertaining to instruction in which the teacher is constantly taking notice of how students are handling the lesson concepts.
<u>Dialect</u>	Refers to a version of a language spoken by a group of people distinguished by characteristics such as race, ethnicity, religion, and/or geographic region.
<u>Dialect Density</u>	The extent to which a student's oral language variety differs from that of print.
<u>Discourse</u>	Discourse refers to the ability to use and understand language in extended contexts, such as in conversations, stories, and narratives.
<u>Domain</u>	Area(s) in which students can have strengths and/or weaknesses.
<u>Double Deficit</u>	Both a deficit in phonological awareness and naming speed.
<u>Dyscalculia</u>	Dyscalculia is a learning disorder where people have difficulty in the area of mathematics. If someone were to have dyscalculia, they may have difficulty counting and reading numbers, memorizing and applying basic math facts, estimating speed, distance, or time, and counting money.
<u>Dysgraphia</u>	Dysgraphia refers to unusual difficulty with handwriting, which sometimes affects students' spelling, but not their word reading, decoding, and spelling unless they have co-occurring dyslexia (Berninger, Richards, & Abbott, 2015; Berninger & Wolf, 2016). Oftentimes, people with dysgraphia struggle to form letters correctly or have handwriting that is illegible. They may also find it difficult to copy information.
<u>Dyslexia</u>	Specific learning disability that is neurobiological in origin. Dyslexia 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.
<u>Dyspraxia</u>	Dyspraxia is a learning disorder where a person has difficulties with motor skills and coordination. Dyspraxia is shown in both physical movement and forming sounds. People with dyspraxia may find it difficult to play at recess when trying to run, jump, hop, or kick a ball. They also may find it difficult using facial muscles to form certain sounds or words.
Encoding	The process of breaking a spoken word into each of its individual sounds

Evaluation	A more complex process used to determine whether a child qualifies for special education.
Every Student Succeeds Act (ESSA)	Enacted in December of 2015, the Every Student Succeeds Act (ESSA) aims to "provide all children significant opportunity to receive a fair, equitable, and high-quality education" as well as to "close educational achievement gaps." The legislation requires that each state create a plan for its schools ensuring an equitable education for all students, especially students in poverty, students of color, students who receive special education services, and students with limited English language proficiency. Schools must account for academic standards, annual testing, school accountability, goals in academic achievement, plans for supporting and improving struggling schools, and state and local report cards in their plans. In this law, ESSA includes provisions that are meant to help students with disabilities, including students with dyslexia, receive a more impactful education. Included are provisions specifically designed to improve literacy instruction including requiring evidence-based strategies to effectively teach reading and writing to students with learning disabilities, including dyslexia, and resources to identify and intervene when students are struggling in reading.
<u>Evidence-Based</u>	Programs that are supported by strong, moderate, or promising empirical research evidence of their effectiveness.
Executive Functioning	Executive functioning encompasses seven larger skills: adaptable thinking, planning, self-monitoring, self-control, working memory, time management, and organization.
Explicit Instruction	Explicit instruction is instruction that is systematic, direct, engaging, and success oriented.
Expressive Language	Speaking and writing.
<u>Fluency</u>	Reading words at an adequate rate, with a high level of accuracy, appropriate expression and understanding.
Frontal Lobe	The part of the brain that is responsible for generating speech sounds, aiding in pronouncing written words. It manages various speech functions such as reading fluency, understanding and applying grammar, and producing speech.
General American English (GAE)	Also known as Standard American English or General American, as a standardized accent of American English. It is considered a neutral or non-regional accent that is commonly used in broadcasting and in formal settings in the United States. General American English is not associated with any particular region or dialect and is often used as a reference point for teaching English pronunciation.

<u>Grammar</u>	The system and arrangement of words, phrases, and clauses that make up a sentence.
<u>Grapheme</u>	Written letter or letter combination.
<u>Gullah</u>	A variety of English spoken by many African Americans in the Sea Islands and coastal regions of South Carolina and Georgia, as well as in some other parts of the southeastern United States. Gullah is a distinct linguistic variety with its own grammar, vocabulary, and phonological features. It has its roots in West African languages and English, with influences from other languages as well.
High-Stakes Testing	Any test used to make important decisions about students, educators, schools, or districts.
Illinois Assessment of Readiness (IAR)	The Illinois Assessment of Readiness (IAR) is the state assessment and accountability measure for Illinois students enrolled in a public school district. IAR assesses the Illinois Learning Standards incorporating the Common Core and is administered in English language arts and mathematics to all students in grades 3-8.
Individualized Education Program (IEP)	A plan that describes the special education instruction, supports, and services that students with disabilities are legally entitled to receive.
Individuals with Disabilities Education Act (IDEA)	The Individuals with Disabilities Education Act, enacted in 1975 under a different name and then updated as IDEA in 1990 and updated most recently in 2015, is designed to ensure that students with a disability are provided a "Free Appropriate Public Education" tailored to their individual needs. One of the law's pillars is that students with a disability are entitled to an Individualized Education Program, or IEP, that clearly delineates the services to be provided. The law indicates 13 different categories to define students with a disability who should be guaranteed a free and appropriate public education. One of those 13 is the category of "special learning disability," within which dyslexia is cited as an example. Additionally, in 2015, The Office of Special Education Programs (OSEP) released a memo that provided policy guidance on IDEA/IEP terms to clarify that there is nothing in the IDEA that would prohibit the use of the terms dyslexia, dyscalculia, and dysgraphia in IDEA evaluation, eligibility determinations or IEP documents.
Language Comprehension	Making meaning of something that is heard.
Language Domains	Morphology, syntax, semantics, phonology, and pragmatics
<u>Learning Disorder</u>	A learning disorder is present when the brain takes in and works with information in a way that is not typical. It keeps a person from learning a skill and using it well. People with learning disorders by and large have average or above-average intelligence. So, there's a gap between their

	expected skills, based on age and intelligence, and how they do in school.
Metalanguage Awareness	Metalanguage awareness refers to an individual's ability to recognize, understand, and use language to talk about language. It involves the capacity to reflect on and discuss the structures, rules, and functions of language itself. This includes recognizing parts of speech, understanding syntax and grammar, and being able to analyze and discuss linguistic elements.
Mexican-American English (Chicano English)	A variety of English spoken by many Mexican Americans in the United States. This variety of English may exhibit linguistic features influenced by Spanish, as well as unique features that are characteristic of Chicano communities.
<u>Modification</u>	A modification is a change to what a student is taught or expected to do in school.
<u>Morpheme</u>	The smallest meaningful linguistic unit.
Morphology	The internal structure of the meaningful units within words and the relationships among words in a language. The study of word formation patterns.
Multi-Tier Service Delivery Model	A model in which in which each tier represents increasingly intense services that are associated with increasing levels of learner needs.
Multi-Tier Systems of Support (MTSS)	A proactive and preventative framework that integrates data and instruction to maximize student achievement and support students' social, emotional, and behavior needs from a strengths-based perspective.
Multilingual Learners (MLLs)	Individuals who are learning an additional language or languages.
Multimodal	Improving multiple sensory pathways. Engaging visual, auditory, and kinesthetic/tactile senses.
Naming Speed Deficit	A deficit in naming and processing speed which allows us to focus on the automaticity of retrieval.
National Reading Panel	The National Reading Panel (NRP) was convened by Congress in 1997 to determine the effectiveness of different approaches used to teach children and adolescents to read. The panel was made up of 14 people including scientists in reading research, college representatives, educators, educational administrators, and parents.

Occipital Temporal Region	The part of the brain that is used for storing word appearances and meanings (letter-word recognition, automaticity and comprehension), vital for quick and fluent reading.
Oral Language	A spoken system of words with rules for their use that includes listening and speaking.
Oral Reading Fluency (ORF)	ORF involves having students read aloud from an unpracticed passage for one minute. An examiner notes any errors made (words read or pronounced incorrectly, omitted, read out of order, or words pronounced for the student by the examiner after a 3-second pause) and then calculates the total of words read correctly per minute (WCPM). This WCPM score has 30 years of validation research conducted over three decades, indicating it is a robust indicator of overall reading development throughout the primary grades.
Orthographic Mapping	The process readers use to store written words for immediate, effortless retrieval. It is the means by which readers turn unfamiliar written words into familiar, instantaneously accessible sight words.
<u>Orthography</u>	The study of the written system of language.
Orton-Gillingham Approach (OGA)	A multisensory method of teaching language-related academic skills that focuses on the structure and use of sounds, syllables, words, sentences, and written discourse. Instruction is explicit, systematic, cumulative, direct, and sequential.
Outcome Measure	A state-mandated assessment to tell if students are reaching sufficient levels of achievement.
Parietal-Temporal Region	The part of the brain that is used in breaking down written words into sounds (word analysis).
<u>Phoneme</u>	The smallest unit of speech that makes a word distinguishable from another in the system of a spoken language.
Phonemic Awareness	The ability to manipulate speech sounds in words.
<u>Phonics</u>	The paired association between letters and sounds.
Phonological Awareness	The ability to consciously manipulate (play with) rhymes, syllables, and phonemes (speech sounds) in words.
Phonological Core Deficit	A deficit in the phonological system in language which is the ability to process and manipulate phonemes (sounds).
Phonological Component	Pertaining to sounds and sound patterns in a language.

Phonological Processing	The ability to perceive, understand, and use the sound of structures of words in both oral and written language.
Phonological/Language Based Memory	The ability to immediately process and recall sound-based information in short-term memory of temporary storage.
Phonology	The science of speech sounds, including the study of the development of speech sounds in one language or the comparison of speech sound development across different languages.
Phonology Networks	Networks within the brain that are devoted to speech sounds.
<u>Pragmatics</u>	Set of rules that dictates behavior to communicative intentions in a particular context and the rules of conversation or discourse.
<u>Prefix</u>	An affix attached to the beginning of a word that changes the meaning of the word.
Progress Monitoring	An assessment to determine if a student who's receiving instruction is making progress and it informs decisions about when to exit a skill and which skill to address next.
Rapid Automatic Naming (RAN)	A speed naming task, most often administered to prereaders, in which the individual is asked to quickly name a series of printed letters, numbers, or blocks of color repeated in random order.
Receptive Language	Listening and reading.
Response to Intervention (RTI)	A method of responding to student needs to reduce both academic and behavioral difficulties before they become a barrier to student success.
Root	A morpheme to which affixes can be added.
Screening	A brief, informal test(s) used to provide a quick way to determine whether further, more in-depth assessment (testing) is needed.
Section 504 of the Rehabilitation Act of 1973	Section 504 covers qualified students with disabilities who attend schools receiving Federal financial assistance. To be protected under Section 504, a student must be determined to: (1) have a physical or mental impairment that substantially limits one or more major life activities; or (2) have a record of such an impairment; or (3) be regarded as having such an impairment. Section 504 requires that school districts provide FAPE to qualified students in their jurisdictions who have a physical or mental impairment that substantially limits one or more major life activities. Major life activities, as defined in the Section 504 regulations at 34 C.F.R. 104.3(j)(2)(ii), include functions such as caring for oneself, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning, and working. While this list is not exhaustive, reading and/or writing could fall under the function of "learning," and

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	thus students struggling in those areas would be protected if their challenges substantially limit major life activities.
<u>Segmentation</u>	Taking apart the sounds in spoken words.
<u>Semantics</u>	Semantics is the aspect of language concerned with meaning. Meaning is conveyed both by single words and by phrases and sentences.
Sight Word	A word that is immediately recognized as a whole and does not require decoding to identify.
Southern English	A broad term that encompasses various regional dialects and accents spoken in the southern United States. These dialects may include features such as distinctive pronunciation patterns, vocabulary, and grammatical structures that are characteristic of the Southern linguistic variety.
Special Education	Specially designed instruction, at no cost to parents, to meet the unique needs of a child with a disability.
Specially Designed Instruction (SDI)	Refers to adapting, as appropriate to the needs of an eligible child, the content, methodology, or delivery of instruction to address the unique needs of the child that result from the child's disability and to ensure access of the child to the general curriculum.
Specific Learning Disability (SLD)	A disorder in one or more of the basic processes involved in understanding or producing spoken or written language.
Structured Literacy (SL)	A research-based approach to instruction that involves the simultaneous use of multisensory teaching strategies.
Suffix	A morpheme attached to the end of a base word that creates a word with a different form, use, or meaning.
Syllable Structure	Also referred to as syllable types; orthographic classifications of syllables. In English, the six most common are: closed, open, vowel-consonant e, vowel pair, vowel-r, and consonant-le.
Syllable Types	Orthographic classifications of syllables; There are six syllable types in English: closed, open, vowel-consonant e, vowel pair, vowel-r, and consonant-le.
Syllables	A spoken or written unit that has a vowel or vowel sound and may include consonants or consonant sounds that precede or follow the vowel. Syllables are units of sound made by one opening of the mouth or one impulse of the voice.

Syntactical Level	The ability to manipulate or judge word order within the context of a sentence based on the application of grammatical rules (syntactic awareness).
<u>Syntax</u>	Syntax is the system for ordering words in sentences so that meaning can be communicated; the meaning of words and the relationship among words as they are used to represent knowledge of the world.
Systematic Instruction	The orderly presentation of linguistic concepts based on frequency and ease of learning in a continuous series of connected lessons or retrieving names of things such as letters of the alphabet or the act of ordering information.
Temporal Lobe	The part of the brain that deciphers sounds and fosters phonological awareness, dissecting syllables, phonemes, and words.
Tier 1	Core instruction for all students.
Tier 2	Targeted interventions for some students.
Tier 3	Intensive individualized intervention for few students.
Transcription Skills	Spelling, handwriting, and/or keyboarding skills.
Twice Exception (2e)	Those who possess both a learning challenge such as dyslexia, dysgraphia, dyscalculia, ADHD, or Autism Spectrum Disorder, and exceptional or gifted abilities in some area.
Universal Design for Learning (UDL)	An educational approach that concentrates on designing instructional practices, teaching materials, and educational environments that intends to meet the needs of all students, including those with disabilities.
Universal Early Literacy Screener	A brief assessment that assesses foundational literacy skills such as phonological awareness, letter-sound knowledge, etc.
Universal Screening	A systematic process for the assessment of all students on critical academic skills within a given grade, school building, or school district.
Verbal Memory	Verbal memory refers to the ability to encode, store, and retrieve information that is presented in a verbal or auditory form. It involves the processes of encoding information from speech or written language, maintaining that information in memory, and then retrieving it when needed.
<u>Vocabulary</u>	A large store of words that a person recognizes and/or uses in his or her oral and written language for communication and comprehension.

Vowels	A class of speech sounds produced by the easy passage of air through a relatively open tract.
Word Recognition	The ability to read written words accurately and effortlessly.
Working Memory	The process of holding onto (i.e., short term memory) and manipulating information.