THE DYSLEXIA HANDBOOK

INFORMATION FOR CAREGIVERS, EDUCATORS, AND STUDENTS

ILLINOIS STATE BOARD OF EDUCATION
DEPARTMENT OF SPECIAL EDUCATION
IN PARTNERSHIP WITH THE
IL SPECIFIC LEARNING DISABILITY SUPPORT PROJECT
2024

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 with dyslexia, and teachers.

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 seven 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 Dyslexia Toolkit, 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* (2024) created by the SLD Support Project on behalf of the Illinois State Board of Education (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.

Reading the IL Dyslexia Handbook

The IL Dyslexia Handbook contains 7 chapters that can be read chronologically or used individually to access specific information for various stakeholder groups. Below, find out more about what each chapter contains.

If you want to know more about	Read
• The current state of reading in IL • The Comprehensive Literacy Plan • Laws pertaining to dyslexia	**Chapter 1:** Background
• Dyslexia defined and common characteristics • The causes and effects of dyslexia • Dyslexia and students of varying backgrounds	**Chapter 2:** Understanding Dyslexia
• How the brain learns to read • Brain imaging and dyslexia • Reading development informed by science	**Chapter 3:** How Reading Happens
• Early signs of dyslexia • What caregivers can do to help at home • Asking for school-based support	**Chapter 4:** For Caregivers
• The role of RtI and MTSS for students with dyslexia • Screening and assessment • Interventions to support students with dyslexia	**Chapter 5:** School-Based Identification
• Components of effective literacy instruction • Structured literacy • Helping students with dyslexia access the curriculum	**Chapter 6:** Guidance for School Personnel: Research
• Structured literacy in action across grade levels • Guidelines for intervention instruction • Examples of going from assessment to intervention	**Chapter 7:** Guidance for School Personnel: Implementation

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Acknowledgements—Advisory Group Members and Affiliations

Dr. Dimitris Anastasiou, PhD
Professor – Southern Illinois University Carbondale, School of Education, Special Education Program

Anne Brewster, MA, I-CALP
Director – Children's Dyslexia Center of Springfield
Board Member–The Reading League Illinois

Louise Dechovitz
Parent
Co-Founder – Illinois Early Literacy Coalition
Team Lead, Parent & Family Advocates Team Evidence Advocacy Center

Jessica Handy
Executive Director – Stand for Children Illinois

Dr. Katie Havercroft, PhD
Professor – Eastern Illinois University Department of Special Education
Illinois SLD Support Project Grant Partner

Dr. Melissa Jones-Bromenshenkel, PhD
Handbook Chair
Professor – Eastern Illinois University Department of Special Education
Illinois SLD Support Project Grant Partner

Meredith Paige Kroot
Co-founder – CPS Family Dyslexia Collaborative

Amy Magers, SSP, EdM
Regional Specialist – Illinois SLD Support Project
LETRS Facilitator

Tom Parton, MS CCC-SLP/L
Speech Language Pathologist
President – Everyone Reading Illinois

Dr. Courtney Ratliff, EdD, LPC, NCSP
Co-Founder – President of Science of Reading Illinois

Jessica Rodriguez, MEd
Handbook Co-Chair
Early Writing Specialist – Illinois SLD Support Project
LETRS Facilitator

Shira Schwartz, MEd
Parent
Board Member – Everyone Reading Illinois
SLANT Certified Reading Specialist
Educational Advocate

Kellyn Sirach, MEd
Handbook Co-Chair
CALT Trainee Affiliate
Reading Specialist – Illinois SLD Support Project
The Reading League Illinois – Board Member
LETRS Facilitator

Kim Tate, Instructional Coach
International Prep Academy, Champaign CUSD 4

Dr. Robin Thoma, PhD
Project Manager – Illinois SLD Support Project

Melina Thompson, MS CCC-SLP/L, MA Educational Administration

Diane Wendt Uher
Parent
Volunteer Family Advocate

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Linda Cavazos, PhD
ELLAS Consulting

Samantha Conklin, MS, ATP
Assistive Technology Facilitator
Infinitec UPC-Seguin

Linda Diamond, MEd
Executive Director of Evidence Advocacy Center

Claude Goldenberg, PhD
Professor of Education, Emeritus,
Stanford University

Brenda Gorman, PhD, CCC-SLP
Professor, Communication Sciences and Disorders
Elmhurst University

Rob Horner, PhD
Evidence Advocacy Center

Chanita Jones, MEd, NBCT
Regional Specialist – Illinois SLD Support Project

Rebecca Lance, MSW, LSW
Social Worker
Hyde Park Day School

Jill Rogers, EdS
Writing Content Specialist – Illinois SLD Support Project

Mark Shinn, PhD
Evidence Advocacy Center

Jenn T. Skalitzky, MS, ATP
Assistive Technology Facilitator
Infinitec UCP-Seguin

Shannon Smith, MEd
Lead Technician – Illinois SLD Support Project

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. Lastly, Illinois embraces an urgent and collective responsibility to achieve educational equity by ensuring that all policies, programs, and practices affirm the strengths that each and every child brings within their diverse backgrounds and life experiences, and by delivering the comprehensive supports, programs, and educational opportunities they need to succeed.

State Specific Guidance Related to Dyslexia

In July 2014, Public Act 98-0705 was signed into law in the state of Illinois.[1] This law specified that the "State Board of Education shall adopt rules that incorporate an international definition of dyslexia" into the Illinois Administrative Code. Effective January 2016, ISBE 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 increase awareness about dyslexia. On July 20, 2018, House Bill 4369 was signed into law as Public Act 100-0617, requiring that ISBE develop, review for updates every four years, and maintain a handbook that is made available on its internet website to provide guidelines, educational strategies, and a description of resources and services for students, parents/guardians, and teachers on the subject of dyslexia.

Connection to the IL Comprehensive Literacy Plan

One area clearly described in the most recent ISBE Strategic Plan is that of high-quality literacy instruction for all students and related preparation for the educators who serve them. In 2023, Public Act 103-0402 mandated the creation of the Illinois Comprehensive Literacy Plan which is intended to serve as a roadmap for improving literacy skills across the state. This plan outlines three primary goals: providing high-quality literacy instruction for every student, equipping educators with the necessary supports and resources to deliver this instruction effectively, and enabling leaders to establish equitable literacy learning environments. While it is anticipated that this plan and the resulting actions will improve literacy instruction overall, students with dyslexia will still exist, and schools and families will continue to need guidance related to how to best serve this population of children.

Federal Laws Related to Dyslexia

This handbook references four federal laws that apply to students identified with dyslexia[2]:

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.

[1] Public Act 98-0750, 2014

[2] Understanding the Law: ADA, IDEA, and Section 504

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 2004, 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 outlines 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 evaluations, eligibility determinations, or IEP documents[3].

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…"[4]

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

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, 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 a 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

[3] Yudin, 2015, Dear Colleague Letter

[4] Child Find Responsibility, 23 Ill. Admin Code 226.100

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.

Revisions to this Edition

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. The following chapters seek to fulfill that purpose and serve as the updated version of the ISBE Dyslexia Handbook (2024). Changes to this edition include the following:

- Chapter 7 - practical methods of implementing instructional practices related to supporting students with dyslexia and guidelines for educators to analyze student data to inform intervention instruction,
- Connections to the Illinois Comprehensive Literacy Plan,
- Additional information regarding bidialectal and multilingual students with dyslexia,
- Additional social and emotional considerations for students with dyslexia,
- Explicit connections between writing and dyslexia, and
- Expanded content for Caregivers.

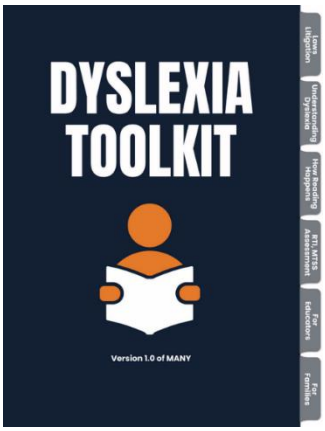
Bridge to Practice

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

Expanded Exploration: Linked Resources

- **Read**: The Illinois Comprehensive Literacy Plan
- **Explore**: Understanding the Law by The Yale Center for Dyslexia & Creativity
- **Learn:** State of Dyslexia – from the National Center on Improving Literacy



Discussion Questions

1. How does the key legislation addressed in this chapter protect students with dyslexia?
2. How can the Illinois Comprehensive Literacy plan be a beneficial tool to help all students as well as students with dyslexia?
3. How do state and federal laws like IDEA and Section 504 impact dyslexia identification and intervention in schools?

CHAPTER 2: UNDERSTANDING DYSLEXIA

The development of reading proficiency in childhood is a public health issue: literacy is a widely recognized factor influencing health outcomes, and is closely associated to success in academic, social, vocational, and academic areas.[5] Dyslexia can significantly impede a child's progress in these areas. Therefore, a thorough understanding of dyslexia is essential so that effective strategies can be implemented to mitigate its impact on an individual's well-being.

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."

While there are multiple definitions of dyslexia used across the United States, the aforementioned definition was adopted by the International Dyslexia Association in 2002 and is now used by many states, including Illinois.[6]

Dyslexia 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. 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, and/or special education services.[7]

Prevalence

The most recent data (from 2022-23), indicate that approximately 7.5 million students (15% of all children and adolescents) in America's schools receive special education.[8] 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

[5] Sanfillippo, 2020, Reintroducing Dyslexia
[6] Public Act 100-0617, 2018
[7] International Dyslexia Association, 2020, Dyslexia Basics
[8] National Center for Education Statistics, 2023, Students with Disabilities

of academic learning and are likely to benefit from systematic, explicit instruction in reading, writing, and language[9].

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.[10] 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

Dyslexia spans a continuum, with some individuals facing severe challenges and others experiencing only mild difficulties. This condition affects people from all backgrounds and intellectual levels, and many with dyslexia excel in areas such as art, computer science, design, drama, electronics, math, mechanics, music, sales, and sports. However, it is also true that some individuals with dyslexia may struggle significantly, requiring targeted interventions and support.

Dyslexia often presents with a variety of characteristics, but not everyone exhibits the same traits or struggles in the same way. For some, the challenges may be manageable, while others may need more intensive support to overcome significant barriers to skilled reading and writing. Additionally, dyslexia can be categorized into three primary types of deficits, each impacting individuals differently[11]:

- *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.
- *Double Deficit*[12]
    - Both a deficit in phonological awareness and naming speed.

As research progresses, new factors and deficits related to dyslexia continue to be explored. Beyond phonological and naming speed deficits, two additional areas have been identified that show strong evidence of impact on students with dyslexia[13]:

- Orthographic Processing
    - Deficit or challenge in processing and recognizing written words and their spelling patterns.
- Neuroanatomical Differences
    - Differences in the anatomy of certain brain regions.

[9] National Center for Education Statistics, 2023, Students with Disabilities
[10] Shaywitz & Shaywitz, 2020, Overcoming Dyslexia
[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
[13] O'Brien, et. al., 2011, Orthographic Processing Efficiency in Developmental Dyslexia

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

Preschool

- Difficulty with sensitivity to rhyming,
- 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),
- Disinterest in books,
- Delay in learning to talk, and
- Difficulty pronouncing words (e.g., "pusgetti" for "spaghetti," "mawn lower" for "lawnmower").

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 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 than the aforementioned characteristics of dyslexia, it is likely that academic areas may also be significantly impacted. Examples include:

Writing

Students with dyslexia often face significant challenges in writing. It is not uncommon to hear a student with dyslexia say something along the lines of, "I know what I want to say, but I just can't write it down." Based on what is known about dyslexia and writing, this is not surprising.

In order to become effective writers, students must be able to master the following skills:[14]

- Hear the sounds in a word and know the corresponding letter(s) for spelling purposes,
- Know and use an in-depth vocabulary,
- Understand and use grammar and syntax,
- Use proper punctuation, and
- Have an overall understanding of the different types and genres of writing.

Since individuals who are dyslexic often do not effectively identify the correct phonemes in words, they are at an immediate disadvantage when it comes to writing as this skill is essential for spelling. Additionally, when an individual with dyslexia is composing a written piece, the time spent on spelling and word selection may take away from the time spent on idea organization and development.

Mathematics

There is a direct connection between how a person processes reading and how a person processes math into memory; both processes utilize the same part of the brain (the left angular gyrus)[15]. Since there is an overlap in the brain structure that is used for math and for reading, it is not uncommon for individuals to have difficulties in both areas, especially individuals who have dyslexia. In math specifically, students with dyslexia may demonstrate deficits in the following areas:

- Reading math content such as word problems,
- Fact fluency,
- Reversals, or transposing numbers, and/or
- Sequencing

Reading content in math is the most obvious deficit area that we would expect students with dyslexia to exhibit. Because students with dyslexia struggle with word reading, regardless of type of text, it is likely that they will struggle to access math content in textbooks, notes, worksheets, directions, and word problems. While in a math class, it is possible that a student with dyslexia may need access to accommodations in order to access the curriculum.

In addition to reading difficulties, students with dyslexia often demonstrate deficits in math fact fluency, sequencing, and directionality. Individuals with dyslexia often have deficiencies within their working memory making it difficult to store and recall information while using it[16]. In math, this may include specific content vocabulary, math facts, and/or learning sequences (i.e. counting, times tables, or the order of operations).[17] These skills are not often automatized by learners who are dyslexic, so it is important that the type of instruction that is being planned is intentional and that students are being provided adequate exposure to new math concepts. [18]

[14] University of Michigan, 2024, Dyslexia Help: Writing
[15] Noel & Karagiannakis, 2022, Effective Teaching Strategies for Dyscalculia
[16] Landerl, et. al., 2009, Dyslexia and Dyscalculia
[17] Chinn & Ashcroft, 2017, Mathematics for Dyslexics and Dyscalculics
[18] Chinn & Ashcroft, 2017, Mathematics for Dyslexics and Dyscalculics

Content Areas

Nearly every subject requires some type of reading or writing, so it should be expected that if an individual has dyslexia, it is likely going to impact them within all of their classes, not just reading or English language arts. Overall, there are aspects of learning that are likely to be impacted in all subject areas for students with dyslexia. Deficit areas may include

- Difficulty with note taking,
- Learning content from assigned readings,
- Reading comprehension,
- Vocabulary acquisition,
- Written responses, including extended written responses.

Moreover, deficits may manifest differently across various content areas. Students with dyslexia may struggle with multiple skills across different subject areas including[19]

- **Science** - following step-by-step directions, learning new vocabulary, navigating a textbook, identifying key ideas, drawing conclusions, difficulty with word retrieval and spelling
- **History/Social Studies** - transposing dates or maps, identifying what is most important, reading fluently, large projects, word retrieval and spelling, recall
- **Music** - reading music, following multistep directions
- **PE** - following oral directions, following written directions, diagrams, learning specific vocabulary, using directionality, remembering directions
- **Art** - following sequences for projects, following diagrams, oral directions, keeping organized
- **Foreign Language** - spelling, learning new vocabulary, knowing where to divide or segment words, learning new grammatical rules, fluently reading

It is essential for all educators, regardless of grade level or subject, to deepen their understanding of dyslexia and strategies for supporting students with the condition. This knowledge increases the likelihood of students with dyslexia thriving in all classroom environments.

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. Reading difficulties within a postsecondary setting, whether that be in college or the workforce, can pose significant challenges. Completing basic tasks such as filling out forms for housing or employment, scheduling appointments, and arranging travel can pose significant issues. When considering if a student may have 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:

- Reading requires great effort and is done slowly,
- Rarely reads for pleasure,
- Avoids reading aloud,
- Spoken vocabulary is less developed than listening vocabulary,
- Avoids saying words that might be mispronounced,

[19] University of Michigan, 2024, How Dyslexia Affects the Curriculum

- Difficulty with note taking, and
- Difficulty with writing production, whether formal or informal.

It is important to recognize that if a student has dyslexia that has not been addressed, they are likely to face secondary challenges with language comprehension, such as vocabulary knowledge and overall reading comprehension, along with primary difficulties in reading and spelling words. Struggles may include

- 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 writing production, and
- Difficulty remembering sequences (e.g., mathematical and/or scientific formulas).

Research consistently indicates that specific factors, as outlined in table 1, can reliably predict future challenges with word-level reading, otherwise known as dyslexia. If a child struggles with any of these areas, early intervention and a structured literacy approach are crucial for their success.

Table 1: Foundational Skills Often Challenging for Students with Dyslexia[20]

Foundational Skills Often Challenging for Students with Dyslexia	
Phonemic Awareness	The ability to manipulate speech sounds in 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).
Encoding/Spelling	The process of breaking a spoken word into each of its individual sounds when writing or spelling it.
Reading Fluency	Reading words at an adequate rate, with a high level of accuracy, appropriate expression and understanding.

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 could make some people more predisposed to dyslexia than 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 individual.

[20] Young & Hasbrouck, 2024, Climbing the Ladder of Reading and Writing

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.[21]

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.[22]

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 co-occurring disorders; studies have shown that as many as 50% of individuals diagnosed with a neurodevelopmental disorder are diagnosed with more than one.[23] Moreover, according to research, the three comorbidities that occur most frequently with dyslexia include: developmental language disorder (DLD), mathematics disorder, or dyscalculia, and attention deficit disorder (ADHD).[24] 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 the following:

ADHD

Attention Deficit Hyperactivity Disorder (ADHD) is the most common type of neurodevelopmental disorder in children and adolescents. ADHD is categorized into three primary subtypes: predominantly inattentive (ADD), predominantly hyperactive/impulsive, and the combined subtype. Individuals with the predominantly inattentive subtype of ADHD often struggle with attention-related skills, including maintaining focus on details, sustaining attention, and organizing tasks. Those with predominantly hyperactive/impulsive subtype may exhibit a pattern of inattention and/or impulsivity such as being unable to sit still, fidgeting, lack of focus, excessive talking or moving, and being impulsive. Individuals with the combined subtype of ADHD exhibit deficits in both inattention and hyperactivity/impulsivity. A consistent finding is that dyslexia is more strongly associated with the inattentive subtype of ADHD than with the hyperactive-impulsive subtype.[25] The cognitive risk factors shared with ADHD and

[21] Dyslexia Myths and Facts, 2023, The Regents of the University of Michigan
[22] Deighton, et al., 2020, Dyslexia and Allied Reading Difficulties
[23] Habib, 2021, The Neurological Basis of Developmental Dyslexia and Related Disorders
[24] Cabell, Neuman, & Terry, 2022, The Science of Reading: A Handbook
[25] Cabell, Neuman, & Terry, 2022, The Science of Reading: A Handbook

dyslexia include processing speed, language skills, working memory, inhibition, and sustained attention.[26]

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 understand, history of ear infections, distractibility, speech and language problems, poor localization skills, and problems in phonics, reading, spelling, and written language.[27]

Developmental Language Disorder

Developmental Language Disorder (DLD) is a brain-based developmental disorder that impairs both the use and comprehension of language. DLD has also been called specific language impairment, language delay, or developmental dysphasia. Students with DLD have deficits in multiple components of language, including: phonology, morphology, syntax, vocabulary, and pragmatics.[28] DLD can affect a child's speaking, listening, reading, and writing. This can manifest as difficulty finding the right words to express ideas or answer questions, understanding information or following directions, maintaining attention, socializing with peers, and overall problems with language. Students with DLD are four times more likely to have math difficulties and six times more likely to have reading difficulties. Additionally, DLD is five times more common than autism. The range of co-occurrence with dyslexia exists between 17-71%, and approximately half of children diagnosed with dyslexia have a language disorder.[29]

Dyscalculia

Dyscalculia is a learning disorder in the area of mathematics. Research indicates that the prevalence of dyslexia and mathematical disabilities varies widely, with reported rates ranging from 11-70%.[30] 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. There are several shared cognitive risk factors among dyslexia and dyscalculia – the primary factor being language. It is well established that dyslexia is a language-based learning disability. Language skills not only form the foundation for literacy, but also play a crucial role in the development of mathematical abilities such as counting principles and number knowledge.[31]

Dysgraphia

Dysgraphia refers to unusual difficulty with handwriting, but not necessarily word reading, decoding, and spelling unless a student has co-occurring dyslexia.[32] Oftentimes, people with dysgraphia struggle to form letters correctly or have handwriting that is illegible. They may also find it difficult to copy information.

[26] Cabell, Neuman, & Terry, 2022, The Science of Reading: A Handbook
[27] Ferre, n.d., A Brief Guide to Central Auditory Processing Disorders
[28] Adolf & Hogan, 2018, Understanding Dyslexia in the Context of Developmental Language Disorders
[29] Adolf & Hogan, 2018, Understanding Dyslexia in the Context of Developmental Language Disorders
[30] Cabell, Neuman, & Terry, 2022, The Science of Reading: A Handbook
[31] Cabell, Neuman, & Terry, 2022, The Science of Reading: A Handbook
[32] Berninger, Richards, & Abbott, 2015, Differential Diagnosis of Dysgraphia, Dyslexia, and OWL

Dyspraxia

Dyspraxia is a learning disorder of 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.[33]

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 in processing, coordinating, and integrating text information at the word, sentence, and passage levels.[34] 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. Though students can be successful "word callers" or decoders, they may lack success with reading comprehension due to executive functioning deficits.

Dyslexia and Multilingual Learners

*Multilingual Learners (*MLLs), also sometimes referred to as English Learners (ELs) or English Language Learners (ELLs), are individuals who are learning more than one language. In Illinois, students who speak a 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.[35]

Multilingual Learners and Dyslexia

Dyslexia is a neurobiological, brain-based disorder that affects individuals of all ages.[36] Dyslexia is found in all languages, including Asian languages with logographic orthographies, such as Chinese and Japanese.[37] While there may be subtle differences in the manifestations of dyslexia by language, there are more core similarities than differences.[38] Therefore, educators can recognize signs of dyslexia in multilingual learners and make appropriate referrals to support timely identification and remediation.

Assessment of Multilingual Learners

Due to concerns with and potential risk of a “false positive” result, dyslexia indicators in multilingual students are often ignored.[39] 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.[40] When considering assessment measures for a multilingual student, it is important to gather

[33] National Institute on Deafness and Other Communication Disorders, 2023, Developmental Language Disorder
[34] Nguyen, et al., 2020, Executive Functions and Components of Oral Reading Fluency
[35] Illinois State Board of Education, 2020a, English Learners in Illinois
[36] Peer & Reid, 2014, Multilingualism, Literacy and Dyslexia
[37] Peer & Reid, 2014, Multilingualism, Literacy and Dyslexia
[38] Ziegler, et al., 2003, Developmental Dyslexia in Different Languages
[39] Peer & Reed, 2014, Multilingualism, Literacy and Dyslexia
[40] Dal, 2008, Dyslexia and Foreign Language Learning

information to understand the student's home and school language experiences in each language. Language questionnaires should be utilized to understand the student's home language, the opportunities the student has to interact with each language, and how often the student hears and communicates in each language. Whereas some children may have exposure predominantly to one language and be appropriately tested in their "dominant" language, many students are exposed to and have skills in multiple languages, and therefore do not have one "dominant" language. Additionally, since language skills are not static and change rapidly over the course of an academic year, the identification of language dominance is not useful for many students. Multilingual learners whose language learning environment has included two or more languages often display different patterns of skill (e.g., speaking, listening, reading, writing, and by context) in each language; therefore, to avoid misidentification, assessment needs to consider skills in all languages.[41] [42] 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 needs in relation to the languages of different orthographies. This offers a picture of the student's verbal ability and guidance for which assessments might be appropriate.

It is useful to examine the correct identification of dyslexia in multilingual students through multiple approaches. One approach considers language-dependent tasks which connect to a student's language experience, such as phonological awareness. Phonological awareness skills have been shown to be a significant predictor of a child's literacy learning in multiple languages, irrespective of the orthographic transparency.[43] Consequently, the assessment of phonological skills is a helpful tool for identifying dyslexia in language/literacy contexts.[44] Additionally, multilingual students benefit from assessment in the home language and school language(s) in the areas of phoneme discrimination, blending skills, *segmentation* skills, and spelling. Spelling can help determine whether there is normal, cross-language transfer between one language and another (e.g. "ship" written as "sip").[45]

Another approach considers cognitive, processing-based examples of these skills and can include naming speed, rhythmic timing and inhibitory control (which show some correlation with reading development). Children with reading difficulties often exhibit working memory deficits in the phonological domain.[46] [47] Examination of various types of processing-based tasks has shown that phonological working memory tasks, including nonword repetition and digit span, help differentiate children with and without reading difficulties; these tasks are also useful for identification of children with and without true reading difficulties across orthographies including multilingual learners.[48] [49] If the stimuli reflect English phonology, these processing-based tasks do not completely remove the influence of children's language experience.[50] Nonetheless, they are often useful and less biased than traditional, language-dependent assessment tasks. Evaluators may modify and score tasks so as not to penalize a student for a production that reflects the phonology of their native or stronger language(s) but that approximates the English target, thereby demonstrating the skill being assessed, phonological working memory.

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[41] Bedore, et al., 2012, The Measure Matters
[42] Bohman et al., 2010, What You Hear and What You Say
[43] Everatt, et. al., 2013, Assessment Approaches for Multilingual Learners with Dyslexia
[44] Firman, 1999, The Bilingual Dyslexia Child
[45] Firman, 1999, The Bilingual Dyslexia Child
[46] Chen, et al., 2023, What Components of Working Memory
[47] Swanson, et al., 2009, Working Memory, Short Term Memory, and Reading Disabilities
[48] D'Anguilli, et al., 2001, The Development of Reading
[49] Lesaux & Siegel, 2003, The Development of Reading in Children who Speak English as a Second Language
[50] Kohnert, et al., 2006, Do Language-Based Processing Tasks Separate Children

Finally, because dyslexia is a language-based disorder, and it often co-occurs with developmental language disorder, language assessment including a developmental speech-language history is a critical component of a comprehensive assessment.[51] By having a thorough understanding of a student's speech and language development timeline, it is possible to identify potential delays or difficulties which may support timely identification of a risk of dyslexia.

Identification of Dyslexia in Multilingual Learners

When attempting to determine if a multilingual learner shows characteristics of dyslexia, key pieces of information to gather before screening include the student's developmental history including speech and language development, experience and proficiency in home and school language(s), and educational history including language(s) of instruction. Even if screening measures are not available in the student's home language(s), educators can obtain valuable information from parents/caretakers about their developmental history via an interview or questionnaire. This is key information, as one of the earliest predictors of reading disorders including dyslexia, is a history of speech and/or and language disorder.[52] Because of this strong association, children with a history of speech and/or language impairment, even if they make sufficient progress to be dismissed from speech-language services, should be monitored or screened for any signs of weak phonological awareness, spelling, and reading.

When students do not have additional risk factors, keep in mind that all students learning to read, whether monolingual or multilingual, need time to learn. Be cautious about terminology – young English-speaking children learning to read are often referred to as "emergent readers;" in contrast, multilinguals learning to read in English are sometimes referred to as "poor readers." Be mindful and avoid such deficit-based language.

It is essential to consider the whole student and their entire background before screening for dyslexia. Ideally, students should be assessed in their native or stronger language(s). When schools are not sufficiently resourced to assess these languages, there is value in assessing in English, including phonological awareness and processing-based, verbal working-memory measures referenced earlier (Phonemic Awareness & Rapid Automatized Naming) because there are *phonology networks* that overlap and often transfer between first and second languages.[53]

After all pertinent information is considered and it has been determined that a student has more than normal language-learning needs, further information should be collected. Like the process for identifying dyslexia in English speakers, assessments of foundational reading skills include phonological awareness, phonics, fluency, vocabulary, and comprehension.

Universal Characteristics of Dyslexia Across Languages

- Difficulties in phonological and phonemic awareness - these difficulties can/should be identified early,
- Early difficulty with *phonological processing,*
- Slower than average reading speed,
- Slower than average performance on measures of *Rapid Automatized Naming (RAN),*
- Inaccurate spelling, including nonwords,

[51] Siegel, 2016, Bilingualism and Dyslexia

[52] Catts, 1993, The Relationship Between Speech-Language Impairments and Reading Disabilities

[53] Pugh, et al., 2023, The Neuroscience of Language and Literacy

- Inaccurate reading, including nonwords,
- Poor *verbal working memory,*[54]
- A history of speech and/or language delay or disorder is also common.

How Districts can Support MLLs with Dyslexia

"Oral language proficiency data, in the native [home] language(s) 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).[55]

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, funds of knowledge, and cultural background as much as possible. These are assets, not deficits.
- Support *oral language development,* 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.
- Support development of the home language and English.
- Explicitly teach morphological awareness in the home language and English.
- Capitalize on cross-linguistic connections and explicitly teach *morphological awareness*.[56] English shares many *cognates,* including prefixes, roots, and suffixes, with languages of Latin and Greek origins. Therefore, leveraging children's morphological and cognate awareness benefits their learning in multiple languages.
- 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.

[54] Peer & Reid, 2014, Multilingualism, Literacy and Dyslexia
[55] Cavazos & Ortiz, 2020, Incorporating Oral Language Assessment into MTSS/RtI Frameworks
[56] Martinez, et. al., 2023, Fostering Cross linguistic Knowledge About Language

Dyslexia and Bidialectal Speakers

All languages and language variations are valuable.

Bidialectal and *Multidialectal* speakers are often referred to as those who speak more than one variety of a given language. All varieties of English are valuable, and terminology used to refer to language variations has evolved and continues to evolve to reflect this. It is important to remember that all dialects of the English language developed as language variations, including *General American English (GAE),* once referred to as *Standard American English.* Moreover, *language variation* refers to a version of a language spoken by a group of people distinguished by characteristics such as culture, race, ethnicity, religion, and/or geographic region. Language variations are systematic, and rule-governed differences in a language that have different rules for expressing the same form, content, and use of a language.[57] A few additional examples of English varieties include *African-American English (AAE), Mexican-American English (Chicano English), Cajun English, Gullah,* and *Southern English.* "In fact, in the U.S., all English speakers speak a language variation of American English. Whether referring to what has been called a "Southern drawl" in the Southeast, "mountain speech" in the Appalachians, or a wicked Boston "r" in the Northeast, language variations serve important communication and cultural functions, and are not "bad," "incorrect," or "broken" English."[58]

When children start school, they come as experts of the oral language system of their home, community, and culture. Like multilingual learners, this language system is valuable; and therefore, cannot and should not be "unlearned" or "untaught". Teaching anyone another language system or variety should only be in the pursuit of expanding, not replacing, language learning opportunities and access to material written in additional varieties. It is important that educators are knowledgeable of and value the language varieties of the students in their class while they also learn to access content presented in the General American English (GAE) language variation.

One common language variety that all educators should learn about is African American English (AAE), also referred to as Black language, Black speak or Black English. In the U.S., approximately 80% of African Americans speak AAE, and students from additional racial and ethnic backgrounds may also live in communities where they learn and use AAE. Supporting students whose language is AAE in the classroom requires learning about, valuing, and leveraging their home language, background knowledge, funds of knowledge, and cultural assets. Research also shows that African American students benefit from having teachers who share their cultural and linguistic backgrounds, as such representation can lead to better educational outcomes and more effective teaching practices.[59]
A growing body of research suggests that African American students are largely underrepresented and underdiagnosed with dyslexia in the education system.[60] Systemic failures such as institutional racism, implicit bias, unconscious low expectations, and negative perceptions that some educators maintain for children of color contribute significantly to this disparity. Moreover, according to the well-documented mismatch hypothesis, the dissimilarity between African American students' oral language variation and the expectations placed on them to use General American English (GAE) in the school environment

[57] Johnson & Gatlin-Nash, 2020, Evidence Based Reading Difficulties Among African American Learners
[58] Johnson & Gatlin-Nash, 2020, Evidence Based Reading Difficulties Among African American Learners
[59] Ladson-Billings, 2021, Culturally Sustaining Pedagogy
[60] Odegard, et. al., 2020, Characteristics of Students Identified with Dyslexia

often exacerbates this issue, especially when educators lack knowledge and understanding of their cultural and linguistic variation.

How Districts Can Support Reading and Writing Instruction for Bidialectal Students in the Classroom
Supporting bidialectal students in reading and writing requires intentionality and strategies that are culturally responsive. In order to ensure that students are receiving the most beneficial and inclusive education possible, consider the approaches outlined below.

Ensure an asset-based mindset within the classroom and school at large. Historically, many language varieties have been systematically devalued within educational institutions and tied to cultural stereotypes and tropes.[61] Instead of viewing a language variation as a deficit, it is important to acknowledge that "Bidialectalism (and bilingualism) is not a risk in need of being remedied."[62] Each student has unique language experiences which allow them linguistic flexibility. Much like learning a new language, every child benefits from learning more than one language. These new language skills allow them to develop a deeper understanding of the English language, its constant evolution, and the many cultures and groups responsible for our linguistic growth.

Again, the idea should never be to "fix" a student's home language. Instead, educators should adopt a multilingual approach with the goal of not just teaching students of different language varieties how to communicate in GAE, but instead providing all students the opportunity to become bidialectal or multidialectal. Doing this will empower them to speak, read and write in a way that allows them to be more easily understood when communicating with people of different language variations, and expand social and professional opportunities.[63] Furthermore, English varieties must be recognized, respected, and affirmed in order to support students in leveraging their dialectical oral language skills to strengthen and support reading and writing development of GAE texts.[64]

Improve teacher knowledge of common language varieties. Educator knowledge of the many language variety features that make up their classroom is imperative as it directly impacts assessment and instruction. "Language varieties can impact all *language domains (i.e., morphology, syntax, semantics, phonology,* and *pragmatics),* meaning that speakers may have language variety-specific rules for how sentences are created and which phonological features are appropriate for use in a given word or context." It is important to advocate for continued professional development in order to differentiate linguistic differences from linguistic deficits.
For more information, the Emmy Award-winning series *Talking Black in America*, produced by the Language & Life Project at North Carolina State University in collaboration with renowned scholars from various disciplines, is an excellent educational resource that is available to view for free at https://www.talkingblackinamerica.org/ and https://languageandlife.org/.

A few sample rules of African American English that educators can familiarize themselves with are shared in the table below.

[61] Washington & Seidenberg, 2021, Teaching Reading To African American Children
[62] Terry, Gatlin, & Johnson, 2018, Same or Different
[63] Smith, 2016, A Distinctly American Opportunity: Exploring Non-Standard English(es)
[64] Washington, Lee-James, & Standford, 2023, Teaching Phonemic and Phonological Awareness to Children

Table 2: Sample Grammatical Rules of African-American English (AAE)

Verb Morphology Morpho-Syntactic Features[65] [66] [67]	AAE Example	GAE Translation
Negation and double negation	I ain't going to his house. Ain't nobody gonna laugh. She don't play baseball no more. I ain't no baby.	I'm not going to his house. Nobody is going to laugh. She doesn't play baseball anymore. I'm not a baby.
Resumptive pronouns	That boy, he funny.	That boy is funny.
Habitual Be (means usually)	She be working late every night.	She works late every night.
Completive "been" and "done" (show emphasis)	I done told you the answer. I done been there.	I told you the answer. I have already been there.
Past tense marking	I jump off the diving board. She dance yesterday.	I jumped off the diving board. She danced yesterday.
Plural noun marking	She saw three cat in the window.	She saw three cats in the window.
Third person	My friend want to buy some candy.	My friend wants to buy some candy.
Possessive marking	I rode in my uncle car.	I rode in my uncle's car.
Syntax		
Reflexive Pronouns	He gonna try to do it hisself. They gonna try to do it theyselves.	He's gonna try to do it himself. They're gonna try to do it themselves.
Subject-verb agreement	My friends was runnin fast to catch the bus.	My friends were running fast to catch the bus.

[65] Washington & Craig, 2002, Morphosyntactic Forms of African American English
[66] Hamilton, Megan-Brette, 2020, AAE Linguistic Features
[67] Bland-Stewart, 2005, Difference or Deficit in Speakers of African American English

	He want to go to the store.	He wants to go to the store.
Variable -ed forms	He lookeded tired.	He looked tired.
Phonology[68] [69]		
Consonant clusters	col fiel an	cold field and
Syllabic emphasis	POlice HOtel	poLICE hoTEL
Vowel + “ng”	thang	thing
medial and final /r/	mo stah foe	more star for
”ing”	jumpin waitin	jumping waiting
“th”	Voiceless “th” in initial position tin Voiceless “th” in medial/final position wif nuttin Voiced “th” in initial position dis Voiced “th” in medial/final position bave bruvu	Voiceless “th” in initial position thin Voiceless “th” in medial/final position with nothing Voiced “th” in initial position this Voiced “th” in medial/final position bathe brother
Metathesis, traces back to Old English.	aks	ask
*With any language variety it is important to remember the features of the language variety occur on a spectrum. Language varieties are continually evolving and taking on features of others. Not all people use language varieties to the same degree, or dialectical density, and they vary according to geographical location. Features noted in one group of users might not be seen in another.		

[68] Hamilton, Megan-Brette, 2020, AAE Linguistic Features
[69] Washington & Craig, 2002, Morphosyntactic Forms of African American English Use

Use phonemic awareness tasks to increase metalinguistic skills.[70] Metalinguistic awareness refers to one's ability to reflect upon language, in other words, the ability to think about language itself. Children with strong phonological awareness skills are more likely to develop stronger encoding and decoding skills.[71] This is also true for bidialectal students as phonemic awareness tasks allow them to make distinctions among different sounds through contrastive analysis.

Again, using the example of working with AAE speakers, one could plan a sound and rhyming phonemic awareness activity that contrasts the sound differences between word ending production in GAE and AAE varieties (e.g., "more" and "mow") and how the different ways these words are produced changes the words that rhyme with them (e.g., more/sore, mow/so). This activity could then be taken a step further by discussing and considering how the sound differences in "more" and "mow" changes the semantic meaning of the word (e.g., in GAE "more" means to add to something, and "mow" is when you cut the grass on a lawn).[72]

At the semantic or syntax level, students could do word or even sentence sorts written in AAE and match them with words or sentences written in GAE. In small groups, students could then discuss how they can listen for and understand these sound and word differences when communicating with someone who speaks another variety.[73]

Other strategies for maximizing the effectiveness of phonemic awareness activities include

- Using Elkonin boxes during phonemic awareness exercises. Elkonin boxes offer valuable visual and auditory support to aid children and adolescents in mastering phonological differences between the two language varieties.[74] By using Elkonin boxes and incorporating letters during phonemic awareness exercises, students can compare the number of sounds in a word and what sounds are produced in the word in both varieties (e.g., b-a-th and b-a-f). Highlighting similarities and differences with Elkonin boxes will increase students' phonological and metalinguistic awareness.
- Incorporating letters with phonemic awareness exercises, bringing particular attention to how spoken words are represented in print in both varieties.
- Explicitly teaching motor movements of the mouth, lips, and tongue for individual sounds. With the use of mirrors, students can practice making distinctions between each sound.

Teacher and student read-alouds aid fluency development while exposing students to linguistic and tonal differences in writing. Similar to MLLs, children and adolescents learning to navigate two language varieties may slow their reading to process and pronounce words correctly.[75] Comprehension and fluency can be impacted as a result. The appearance of lower proficiency can be deeply 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 in that they celebrate cultures without placing greater value on any one culture. These books serve to increase all students' background knowledge and perspective.

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[70] Yopp & Yopp, 2000, Supporting Phonemic Awareness Development in the Classroom
[71] Pittman, et al., 2023, The Importance of Phonemic Awareness Instruction For African American Students
[72] Washington & Seidenberg, 2021, Teaching Reading to African American Children
[73] Pittman, 2017, The Case For Implementing ELL Literacy Strategies with African American Students
[74] Washington, et al., 2023, Teaching Phonemic and Phonological Awareness to Children Who Speak AAE
[75] Washington & Seidenberg, 2021, Teaching Reading to African American Children

Accommodate the cognitive processing demands placed on a student learning a new language variety.[76] Provide sufficient time for complex reading and writing activities as bidialectal students may need more practice and exposure while they are learning to integrate print and oral language to support reading and writing. Other accommodations could include giving important information in verbal and written formats, pairing newly learned vocabulary with pictures in order to make stronger semantic connections,[77] and using graphic organizers to allow students the opportunity to organize their thoughts and language before completing complex tasks that place a higher cognitive load on the student.

Provide opportunities for bidialectal students to speak, read, and write in their language variety. Instruction must incorporate a student's dual communication skills.[78]

Dyslexia and Students who are Twice Exceptional (2e)

Twice Exceptional (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 additional 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.

The following characteristics are commonly observed in 2e individuals, as identified by the International Dyslexia Association:

- 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.

[76] Washington & Seidenberg, 2021, Teaching Reading to African American Children
[77] Pittman, 2017, The Case For Implementing ELL Literacy Strategies with African American Students
[78] Washington & Seidenberg, 2021, Teaching Reading to African American Children

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. The 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 rather than focusing on one area or profile.
- Advocate for professional development and creating a school culture that is inclusive of all students 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 audiobooks.
- 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.

The Social-Emotional Impact of Dyslexia

It is not uncommon for social-emotional challenges to be linked to students struggling within the learning environment; when students are struggling to achieve success in the classroom, they often feel inadequate or frustrated. This is true of any student, whether they have dyslexia or not; however, the impact of dyslexia can extend beyond academics, and may lead to significant social-emotional challenges that may manifest before a child is even deemed at risk for the disorder. Oftentimes, individuals with dyslexia, as well as others who are struggling academically, are at a higher risk of experiencing an array of both *internalized* and *externalized* behaviors and mental health concerns which impact their lives.[79]

Internalized Behaviors

It is not uncommon for individuals with dyslexia to internalize thoughts and emotions as a way to try to cope with their reading challenges. These internalized behaviors may begin as seemingly small, like feeling hesitant to engage with reading or fear of public performance, but over time grow into significant mental health concerns, such as poor self-image, anxiety, depression, somatization, and

[79] Fender & Ozier, 2024, Considering Internalizing and Externalizing Experiences in Dyslexia

inattention. When not addressed, these mental health concerns can significantly impact a student's self-esteem and confidence, including their overall learning experience.

Poor Self-Image

Poor self-image is often one of the first ways that individuals with dyslexia internalize their frustrations with reading. Poor self-image can stem from repeated failures experienced when a student is trying to read. When children are met with failure and frustration, they may internalize that they are inferior to others, and that trying to be successful is futile.[80] Research shows that when individuals are successful, they give themselves credit for their success; however, the same is true when students fail. If a student fails, they take on the failure even more-so than a success and tell themselves to try harder. Oftentimes, students with dyslexia even go as far as attributing any successes they do experience to luck and see themselves as unintelligent.[81]

Anxiety

Anxiety can be defined as "a state of heightened distress, arousal, and vigilance that can be elicited by a potential threat. When extreme or pervasive, anxiety can be debilitating."[82] Students who demonstrate low academic performance often show high levels of anxiety presenting in a variety of ways, including task-avoidance, attention and concentration problems, difficulties with problem solving, and emotional dysregulation.[83] This is especially true for students who have dyslexia or other literacy difficulties. Students with dyslexia are often reported to experience significant reading-related anxiety, along with various other anxiety-related behaviors and symptoms.[84] Moreover, elementary-aged children with dyslexia may exhibit increased levels of generalized anxiety and frequently report a lower quality of life compared to their classmates.[85]

Anxiety is increased when individuals are in situations over which they have no control.[86] Individuals with dyslexia often grapple with frustration due to their persistent struggles despite earnest efforts.[87] They often blame themselves for their reading struggles since even though they are putting forth the effort, they do not see adequate progress. Additionally, they do not always fully understand their disorder and internalize the side effects associated with dyslexia as personal failure. Over time, internalizing feelings of inadequacy can lead to negative consequences, such as increased anxiety and even depression.

Depression

For individuals with reading impairments, including dyslexia, learning to read is a high-stress situation which often leads to the learner feeling frustrated and as if they will always struggle. It is for this reason that students who have dyslexia are also susceptible to depression.[88] Oftentimes, students with dyslexia are perceived as lazy or labeled as "stupid" and are told that they just need to try harder.[89] Over time, this failure mentality is internalized and results in depression. In some cases, students feel so inadequate that they may even experience thoughts of self-harm or suicide. Adolescents with dyslexia tend to show

[80] Sako, 2016, The Emotional and Social Effects of Dyslexia
[81] International Dyslexia Association, 2020, Social and Emotional Problems Related to Dyslexia
[82] Shack-man & Fox, 2021, Two Decades of Anxiety Neuroimaging Research
[83] Fishstrom, 2023, Understanding the Relation Between Reading and Anxiety
[84] Fender & Ozier, 2024, Considering Internalizing and Externalizing Experiences in Dyslexia
[85] Fender & Ozier, 2024, Considering Internalizing and Externalizing Experiences in Dyslexia
[86] International Dyslexia Association, 2020, Social and Emotional Problems Related to Dyslexia
[87] Toth, 2020, Children with Dyslexia Show Stronger Emotional Responses
[88] Sanfilippo, et. al., 2021, Reintroducing Dyslexia
[89] Sanfilippo, et. al., 2021, Reintroducing Dyslexia

higher levels of depression and somatization compared to younger children, with symptoms seeming to worsen as they grow older.[90]

It is important to keep in mind that many negative thoughts begin before a child is even diagnosed with dyslexia, and individuals who are dyslexic are consistently criticized or made to feel "less than" when compared to their peers in the mainstream educational system. This can create trauma for students and negatively impact their views on school, learning, and trusted adults.

Externalized Behaviors

Just as individuals may exhibit signs of internalized behaviors, they also often exhibit externalized behaviors. Oftentimes, the two go hand in hand and the externalized behavior coming out is really pent-up frustration stemming from internalized thoughts. A few examples of externalized behaviors associated with dyslexia include task avoidance, anger or aggression, social withdrawal, and social challenges.

Task Avoidance

Task avoidance is regularly correlated with students who struggle with reading and may have an impact on a child achieving their educational and life goals.[91] This behavior can be associated with student motivation due to the nature of their dyslexia.[92] As students begin to experience difficulties with reading or failure, they begin to become reluctant to practice the deficit skill. This externalized behavior may look like a child asking to leave the classroom and go somewhere else, becoming distracted, or in some cases, even lashing out in anger.

Anger

Anger often results from being put in frustrating situations, as well as being a side effect of anxiety and depression.[93] It is not unheard of for individuals with dyslexia to have angry outbursts. What is not always considered is that these outbursts stem from specific situations that cause the individual to feel frustrated.[94] For individuals with dyslexia, there is often tension between what is expected of them and what they are able to produce in the moment resulting in feelings of anger.

Identifying and addressing the emotional challenges that may be experienced by students with dyslexia is crucial. Something as simple as being aware of how adults respond to a child's reading difficulties can significantly impact their social, emotional, and behavioral development. If a student with dyslexia is experiencing either internalized or externalized behaviors, showing them they are supported and understood can make a significant difference in whether or not they do experience issues like anxiety, depression, or aggression, among others. Conversely, negative responses may exacerbate these challenges.

It is also important to keep in mind that when a child with dyslexia is provided effective instruction in a supportive environment, they are much less likely to experience challenging behaviors in the first place. Adolescents with dyslexia may require specialized support to prevent long-term psychological consequences such as self-doubt and even suicidal thoughts, and research shows that individuals with

[90] Fender & Ozier, 2024, Considering Internalizing and Externalizing Experiences in Dyslexia
[91] Syal & Torppa. 2019, Task-Avoidant Behavior and Dyslexia
[92] Lodygowska, Chec, & Samochowiec, 2017, Academic Motivation in Children with Dyslexia
[93] International Dyslexia Association, 2020, Social and Emotional Problems Related to Dyslexia
[94] Sako, 2016, The Emotional and Social Effects of Dyslexia

dyslexia and other reading difficulties achieve better outcomes when they receive high-quality reading instruction and interventions grounded in evidence-based practices.[95] [96] It is imperative that students with dyslexia receive adequate support at school and at home to minimize emotional struggles that often coincide with a dyslexia diagnosis and reading challenges. Additionally, this information should stress the importance of early identification and intervention; the sooner a problem is acknowledged, the sooner students can receive the support that they need. Remember, oftentimes, the best behavior support plan is effective instruction.

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 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.[97] [98] [99] [100] [101] [102]

[95] Alexander, Flipse, Hirschmann, Farris, & Odegard, 2023, Understanding Dyslexia: A Guide for Tennessee Families
[96] Fender & Ozier, 2024, Considering Internalizing and Externalizing Experiences in Dyslexia
[97] Dyslexia Myths and Facts, 2023, The Regents of the University of Michigan
[98] Dyslexia: Myths and Facts, n.d., University of Florida Literacy Institute
[99] National Center on Improving Literacy, 2020, Understanding Dyslexia: Myth vs. Facts
[100] 2.2 Common Myths About Dyslexia, 2020, Colorado Department of Education
[101] Decoding Dyslexia, n.d., Dyslexia – Know the Facts
[102] Dyslexia Myths, n.d., Gaab Lab

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.

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.[103] [104] [105] [106] [107]

Dyslexia is a condition where an individual reverses numbers and/or letters.

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 directly relates to learning to read, spell, and write. Dyslexia does not only cause difficulties in reading, but may also present in challenges with spelling, verbal expression, speech, writing, and memorization along with difficulties in other subjects such as math. While dyslexia primarily impacts word-level reading, other students may struggle with language comprehension issues

[103] Francis, et al., 1996, Developmental Lag Versus Deficit Models of Reading Disability
[104] Juel, 1988, Learning to Read and Write
[105] Shaywitz, et al., 1999, Persistence of Dyslexia
[106] Torgesen & Burgess, 1998, Consistency of Reading-Related Phonological Processes
[107] Gaab, n.d., Dyslexia Myths

that can affect their language skills, verbal expression, and listening abilities.

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.[108] 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 initially at the word level.

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

According to a Dear Colleague Letter 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

[108] Youman & Mather, 2012, Dyslexia Laws in the USA

Education Programs (IEPs). In fact, the letter goes on to discuss that there could be situations where the 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 Illinois Administrative Code Section 23 226.125 Part C, each child suspected of having dyslexia or identified as dyslexic shall be referred for a special education evaluation in accordance with the requirements 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.

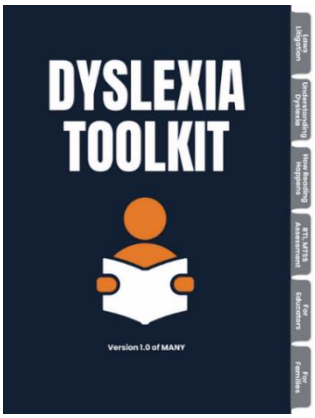
Bridge to Practice

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 prompted for more information, the coworker 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

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



Discussion Questions

1. How can understanding the specific nature of dyslexia affect both students and teaching practices?
2. What factors should be considered as educators work to differentiate between language acquisition challenges and dyslexia when working with multilingual learners?
3. Which misconceptions regarding dyslexia were you most surprised or concerned by? Why?

CHAPTER 3: HOW READING HAPPENS

Did You Know?

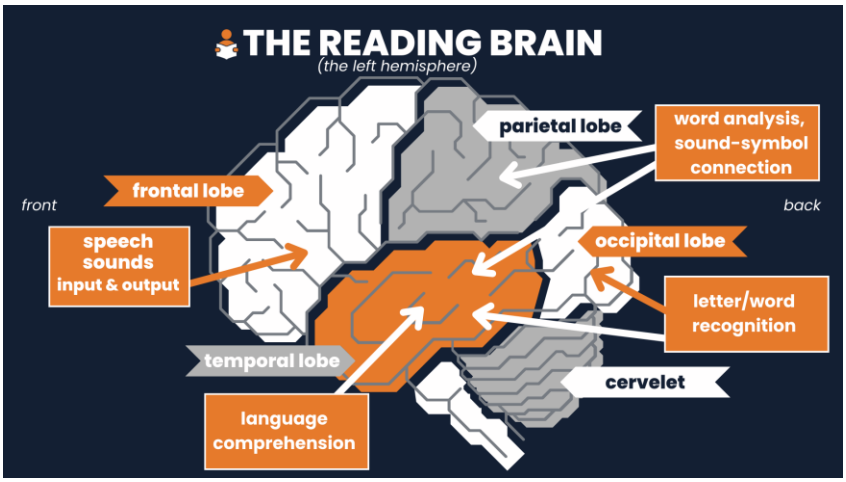
Reading is **not** a natural process like speaking. We create new neural networks in our brains when a child is taught to read. Because dyslexia is neurobiological in origin, these students must work extra hard in activating the brain regions to create these neural networks.

How the Brain Learns to Read

Learning to read does not occur naturally (like speaking) because the human brain is not "hardwired" to read.[109] 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 different regions. Proficient readers use and synchronize several left hemisphere regions, including the following:[110]

- *Temporal Lobe:* 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 brains undergo 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 *word recognition.* Recognizing these brain regions involved in the complex process of reading coupled with the brain's adaptability with practice is essential for those teaching reading and especially for those providing intervention and remediation for students with dyslexia.

[109] Seidenberg, 2020, The Role of Orthographic Mapping in Learning to Read
[110] Sedita, 2020a, How the Brain Learns to Read

The Key to Reading

The key concept in teaching a child to become a skilled reader is orthographic mapping. **Orthographic mapping** is the process by which successful readers become fluent readers.[111] The goal for students with dyslexia 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 (*phonemes*) they know to the letters in those words (spellings or *graphemes).* 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 *"sight words."*

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.[112] 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 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 engage different parts of the right hemisphere, which is less efficient. Moreover, 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 and Chapter 7 for more information on instruction.

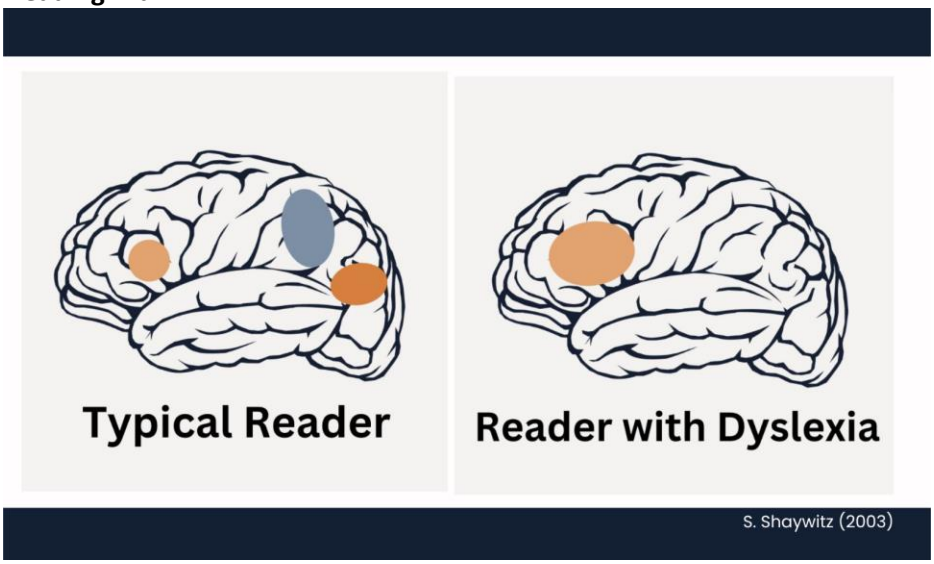
[111] Kilpatrick, 2015, Essentials of Assessing, Preventing, and Overcoming Reading Difficulties

[112] Ehri, 2014, Orthographic Mapping in the Acquisition of Sight Word Reading, Spelling Memory, and Vocabulary Learning

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 practices[113].

Figure 1: The Reading Brain

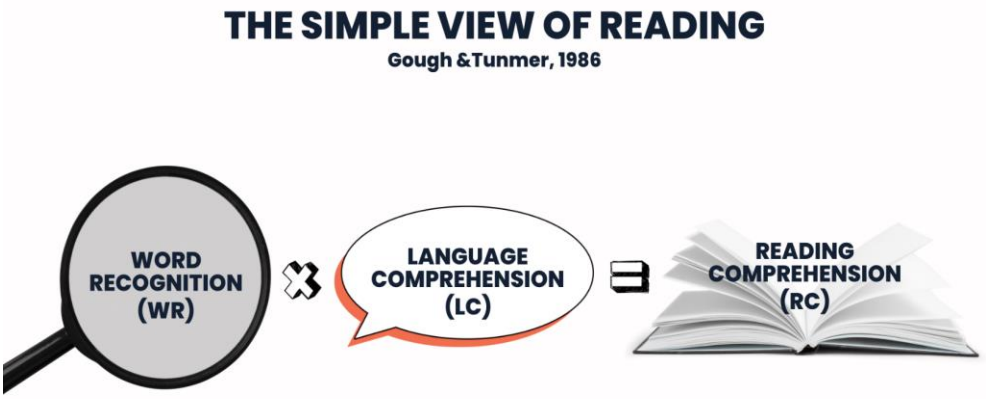


Reading Development Informed by Science

The Simple View of Reading (SVR) is a model that can help educators understand how students learn to read.[114] 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.[115] Research supports this idea, showing that good reading involves both word recognition and understanding language comprehension. It is important to note that the SVR is not simple itself. Both word recognition and language comprehension have many parts that work together, and they rely on each other. It is not as simple as just teaching one or the other; however, when students struggle with reading, especially if they have dyslexia, teaching methods considering the SVR are essential.

[113] Eden, 2016, Dyslexia and the Brain
[114] Hoover & Gough, 1990, The Simple View of Reading
[115] Gough & Tunmer,1986, Decoding, Reading, and Reading Disability

Figure 2: Adapted from the Simple View of Reading[116]



To further understand the reading process, we can examine Scarborough's Reading Rope.[117] 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.

Figure 3: Scarborough's Reading Rope[118]

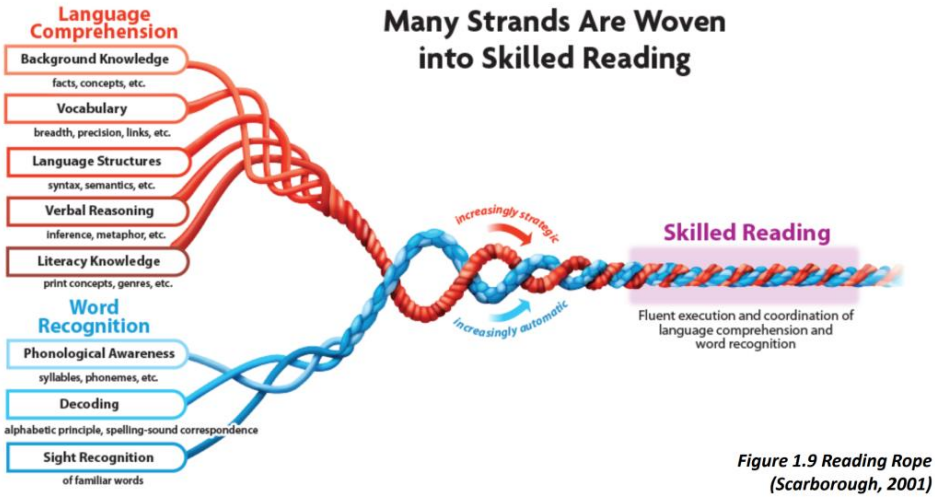


Figure 1.9 Reading Rope (Scarborough, 2001)

[116] Hoover & Gough, 1990, The Simple View of Reading
[117] Scarborough, 2001, The Reading Rope
[118] Scarborough, 2001, The Reading Rope

How Does this Relate to Dyslexia?

In order to fully understand the complexity of dyslexia, it is important 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 6. Due to the specific deficits in the *phonological component* 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, *language comprehension* might be more of a focus in regard to instruction depending on the severity of the word recognition deficit.

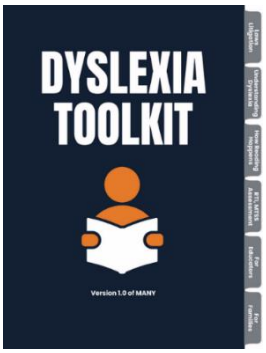
Bridge to Practice

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

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:** How the Brain Learns to Read with The Hill Center



Discussion Questions

1. How does understanding the brain's process for learning to read influence instructional strategies used for teaching early literacy?
2. Why is early identification and intervention critical in supporting students with dyslexia?
3. How can educators use the scientific knowledge in this chapter to better support students with dyslexia in their classrooms?

CHAPTER 4: FOR CAREGIVERS - SUPPORTING CHILDREN AND ADOLESCENTS WITH DYSLEXIA

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. A child will likely look to their caregiver 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 following[119]:

- Family history since dyslexia often runs in families,
- Evidence that your child is delayed in speech development or in 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 reading[120]:

- 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.

[119] The Yale Center for Dyslexia and Creativity, 2022, Signs of Dyslexia
[120] Shaywitz, 2022, Developing a Foundation for Reading

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.

Table 3: Sample Reading Conversation[121]

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!

In addition to the suggestions mentioned above, there are other ways that caregivers can support their child in literacy development regardless of the child's age. Table 4 outlines suggestions for children grades preschool-high school.

Table 4: Suggestions for Supporting A Child's Literacy Development[122]

Preschool	● Read aloud books with rhyme patterns and repetitive text ● Use songs, chants, and nursery rhymes ● Engage a child in conversation with open-ended questions ● Encourage fine-motor development
Kindergarten and First Grade	● Continue to read out loud ● Play games that build sight-word recognition (i.e. sight-word bingo) ● Demonstrate strategies for decoding and encoding ● Demonstrate monitoring for meaning while reading ● Engage in question-based discussion

[121] National Center for Improving Literacy, 2019
[122] WI Department of Public Instruction, 2021, Dyslexia and Related Conditions

Second and Third Grade	● Listen to the child read out loud ● Engage the child in conversations about a text they are reading ● Continue to read to your child, including texts that are above their reading level
Fourth through Eighth Grade	● Provide a homework routine and location ● Guide and teach time-management and planning skills ● Assist with and support the use of technology to increase engagement and ease of writing ● Encourage reading for pleasure ● Read to your child; children at this age often still enjoy being read to
Middle School and High School	● Encourage reading for pleasure ● Ensure access to a library and other sources of reference information ● Assist with and support the use of technology to increase access and ease ● Help the student understand their learning needs. Provide them with the language necessary to advocate on their own behalf with teachers

Empowering a Child with Dyslexia

Given that dyslexia often poses challenges through life, having access to tools which empower those impacted is important. With a good set of strategies and supports, paired with high-quality instruction and supportive families, children with dyslexia can go on to achieve their academic and life goals, just like anyone else.

Caregivers 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.

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 including:

- 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 and 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," do not dismiss it, while validating it may be more difficult for them due to their dyslexia, they are still more than capable.
- Teach your child how to self-advocate so that they can feel success regardless of the situation.
- Use apps, including Grammarly, Learning Ally, Read and Write for Google Chrome.
- Allow the child to read anything they like (comic books, etc.).
- Share with your child everyone has both strengths and challenges.
- Use your supports (Tools, Apps, Teachers, Tutors, Speech and Language Pathologists, etc.).

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

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. Table 5 outlines several ways that caregivers can support the emotional needs of a child with dyslexia. Additionally, Chapter 2 contains more specific details regarding the social and emotional needs of individuals with dyslexia.

Table 5: Supporting The Emotional Needs of Children with Dyslexia

If Your Child…	Then You Can…
Does not understand why they "cannot learn how to read like everyone else"	● Begin or continue to learn about dyslexia so that you are prepared to talk to your child about it ● Discuss dyslexia with your child ● Validate that their dyslexia is going to make learning to read more difficult ● Recognize and talk about your child's strengths
Says that they do not want to go to school	● Talk with your child about why they do not want to go to school ● Help your child identify a trusted adult at school who they can go to for support when they are not at home
Says that they are feeling sad or depressed	● Talk with your child to determine where feelings of sadness or depression are coming from ● Validate the way in which your child may be feeling at that moment ● Remind your child of their strengths ● Provide your child with emotional support services, if needed ● Help your child understand that they are capable of greatness
Is avoiding reading	● Discuss and validate the reasons why your child may be avoiding reading ● Read with your child ● Provide access to audiobooks if possible ● Allow your child to read in different formats (comics, magazines, etc.) ● Allow your child to read what they are passionate about
Is lashing out with anger due to reading frustrations	● Give your child time and space to calm down ● Partner with your child's school to learn how they are supporting learning and behavioral challenges ● Determine what led your child to that point ● Avoid responding with anger or phrases like "just try harder"

	● Validate the difficulties your child has with reading ● Provide your child with emotional support services if needed
Is exhibiting negative self-talk behaviors and calling themselves “dumb”	● Discuss specific challenges that your child is experiencing ● Focus on your child’s strengths ● Partner with your child’s school to learn how they are supporting learning and behavioral challenges
Feels like a failure after receiving a bad grade	● Acknowledge your child’s effort even when things are not going as planned ● Celebrate even small successes
Does not feel like they are getting the help that they need at school	● Advocate for your child by partnering with the school ● Teach your child to self-advocate ● Discuss your child’s concerns with the school

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

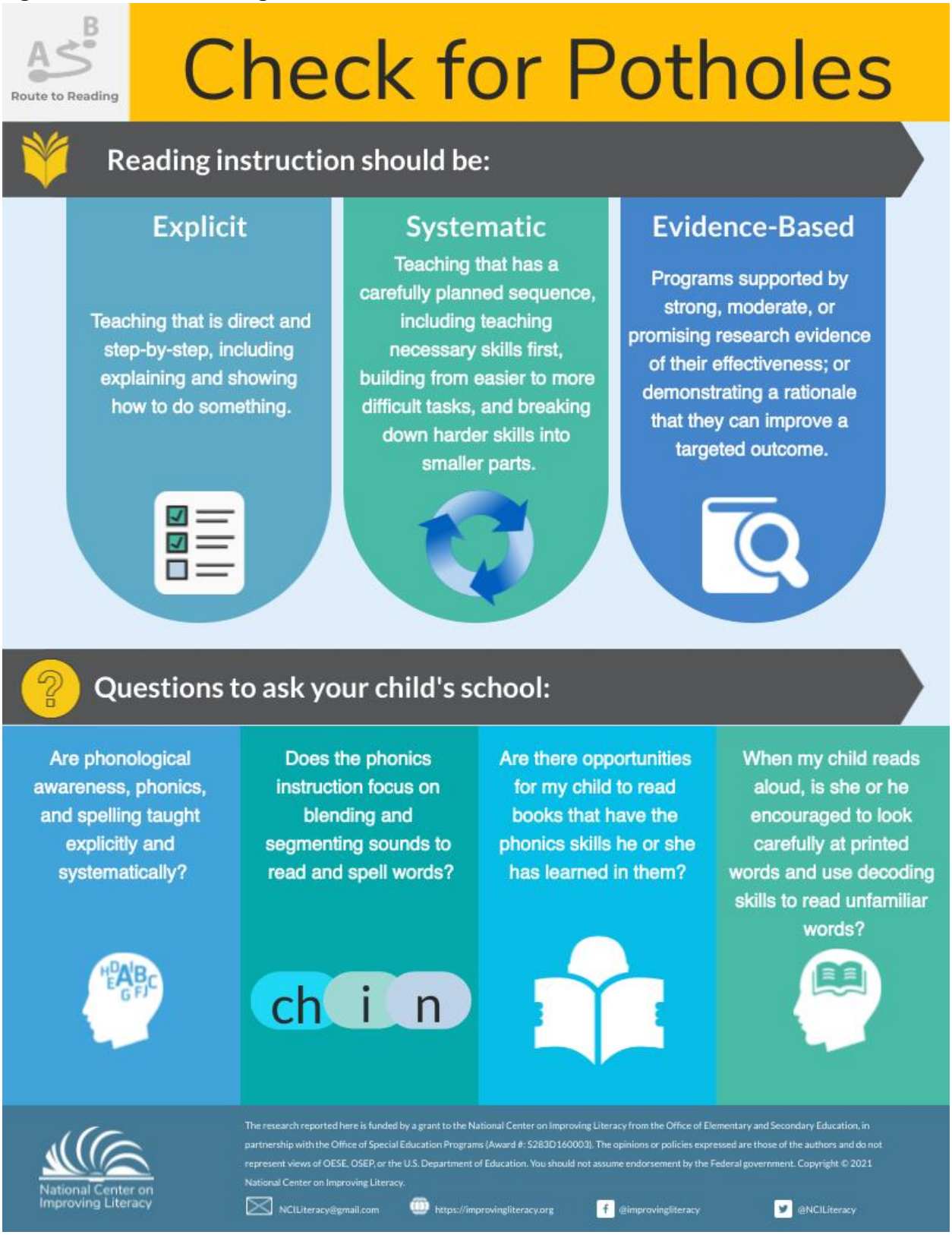
If, as a parent or caregiver, there are concerns regarding a child's reading, comprehension, spelling, writing, learning, or any other sign of dyslexia found in Chapter 2, they should absolutely be brought up and discussed in the educational setting. It is important for parents and caregivers to write 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. 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 functioning 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 4 for more information.[123]

[123] National Center on Improving Learning, 2020a, Route to Reading: Check for Potholes

Figure 4: 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

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. *Universal screening* is a systematic process for the assessment of all students on essential 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.

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 school days after receiving a request for an evaluation, the district will decide whether an evaluation is warranted and formally respond in writing. 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 convene a team meeting, often called a "Domain Meeting" or a "Review of Existing Data Meeting" (see Table 6 on page 57), 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 team requires additional information, such as testing, interviews, observations, etc., the team will request informed written consent in order to collect this data. If the district determines that the evaluation is not warranted, it must notify the parent(s) or guardian(s) in writing of the decision not to evaluate and the reasons for the decision.

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 615
Chicago, IL 60603
312-939-3513 voice / 312-939-3519 TTY & TDY
312-939-7297 FAX
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
217-318-3516 FAX
866-436-7842 Toll-Free
Email: info@fmptic.org
Website: www.fmptic.org

Qualifying for Special Education and 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. This team will hold a meeting often referred to as an Eligibility Determination Conference (EDC) or Multidisciplinary Conference (see Table 6 on page 57) to 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 disability categories.

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."[124] 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 must[125]:

[124] Individuals with Disabilities Education Act
[125] Illinois State Board of Education, 2021b, Instructions for Individualized Education Program Forms

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).

If the IEP team determines that the student meets the criteria for a disability under IDEA, then the team must next consider the effect of the disability on the student's education and needs. 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 hold an Individualized Education Planning Meeting with the parent/guardian to develop the IEP for the student within 30 calendar 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 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. Students who qualify for an IEP will receive services from a special educator and may receive services from related service professionals including, but not limited to, Speech Language Pathologists (SLPs), Social Workers, School Counselors, Interpreters, Occupational Therapists (OTs), Physical Therapists (PTs), Adaptive PE Teachers, School Nurses, Rehabilitation Specialists, and others outlined in Section 300.34 of IDEA. Potential related service providers will be involved in your child's *eligibility determination* meeting and will share evaluation results. Parents/caregivers should ask and use information from related service provider assessments to fully understand how their child's skills impact their academic performance, specifically as they relate to reading, writing, and math.

Here are some questions a caregiver might wish to ask related service personnel:

- What strengths and weaknesses did you identify in your evaluation?
- How do my child's skills compare to same-age peers in the areas you assessed?
- How do the results of your evaluation affect my child's ability to learn and use reading and writing skills? In what ways?
- How do the results impact the ability to learn and apply math skills?
- Which specific skills need remediation to build a stronger foundation in reading (decoding and comprehension), writing (spelling, organization, narrative skills), and math (concepts and computation)?
- Are there any patterns of avoidance or behaviors related to classroom demands for reading, writing, or math?
- Did you notice any signs of speech or language delays?
- Were there concerns regarding memory? How can these be supported through instruction and accommodations?
- Are there concerns with receptive language skills (e.g., following directions, comprehension)?
- Are there concerns with *expressive language* skills (e.g., sentence structure, vocabulary, narrative abilities)?
- Were there any issues with handwriting? What steps should be taken to address these concerns?
- What remediation strategies and accommodations would you recommend?

Related service providers are present at the eligibility determination meeting, and again at the IEP meeting that follows if they will be providing direct services. This is where decisions are made about which related services are needed and how much of each service is needed (if any). If it is decided that related services are needed by the child, the related service professionals will continue to attend annual IEP review meetings.

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, *Educational Rights and Responsibilities: Understanding Special Education in Illinois* and the *Notice of Procedural Safeguards* document for further information and potential next steps.
Following is a table which includes the various meeting types referred to in this section along with the purpose for each and the parent/caregiver's role.

Table 6: Special Education Meeting Types

Type of Meeting	Purpose	Parent/Caregiver Role
Domain Meeting, also called Review of Existing Information	To review the information that the school already has for a student and to determine what other information is needed (academic testing, surveys, interviews, or observations) to determine whether a student requires special education.	Share information and concerns related to health, academics, social and emotional skills and behavior, motor skills, expressive and *receptive language*; give written permission to collect additional information.
Eligibility Determination Conference (EDC), also called Multidisciplinary Conference (MDC) The first of these is called an **Initial**; subsequent meetings called a **Re-evaluation**	To share information collected for all team members to hear; to determine whether the child has a disability, the level of impact of the disability on their education, and whether the child requires instruction designed just for them in order to make meaningful progress.	Review the information and reports in advance; prepare questions. During the meeting, confirm and clarify information shared, especially the eligibility criteria; participate in the decision regarding whether the child meets criteria for special education. Give consent for the child to receive special education services if the child meets the eligibility criteria.
Individualized Education Program (IEP) Meeting, also called an Annual Review	To co-construct a written plan describing the current level of academic and functional skills of the child, goals for advancing progress, ways to support the child in the classroom, and list the services that are required to make progress on the identified goals.	Review the IEP draft in advance, prepare questions and contributions. During the meeting, confirm or clarify information shared; share family priorities, concerns, goals and insight on what has or has not worked for their child in the past. Advocate for any needed adjustments.

Transition: Moving Beyond High School

Planning for the next steps in a young adult's life should begin when a student is still in the K-12 education system, but transition planning may look different for students who have an IEP or 504 plan. Starting with the first IEP in effect at age 14-and-a-half, or sooner if the IEP team determines appropriate, students' IEPs must include a transition plan to address postsecondary employment, education/training, and independent living.[126] 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 is necessary for the student to be successful after high school. In addition, in both cases, a testing coordinator or case manager should apply for and secure appropriate accommodations (if needed) for any **high-stakes testing** that occurs while the student is still in high school. Documentation

[126] 105 ILCS 5/14-8.03(a-5)

should include a description of the student's reading and writing skills and accommodations that the student uses for academic support.

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, and they will have to advocate for any reasonable accommodations for which they may qualify. 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 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 postsecondary 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.

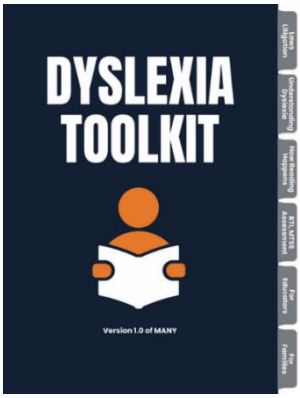
Bridge to Practice

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

Expanded Exploration: Linked Resources

- **Explore:** The Evidence Advocacy Center Parents & Family Advocates Curated Resource Menu
- **Watch:** Dr. Sally Shaywitz give Dyslexia Advice for Parents
- **Utilize:** The National Center on Improving Literacy Toolkit for Advocating for the Literacy Needs of Children



Discussion Questions

1. What early signs of dyslexia should caregivers be aware of, and how can they differentiate these signs from typical developmental variations in reading?
2. In what ways can empowering a child with dyslexia change their academic and social experiences?
3. What are the most important initial steps that caregivers should take when they suspect that their child may have dyslexia? Why are these steps crucial?

CHAPTER 5: 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."[127]

The Role of RtI and MTSS

Response to Intervention (RtI) and *Multi-Tiered Systems of Supports* (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 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.

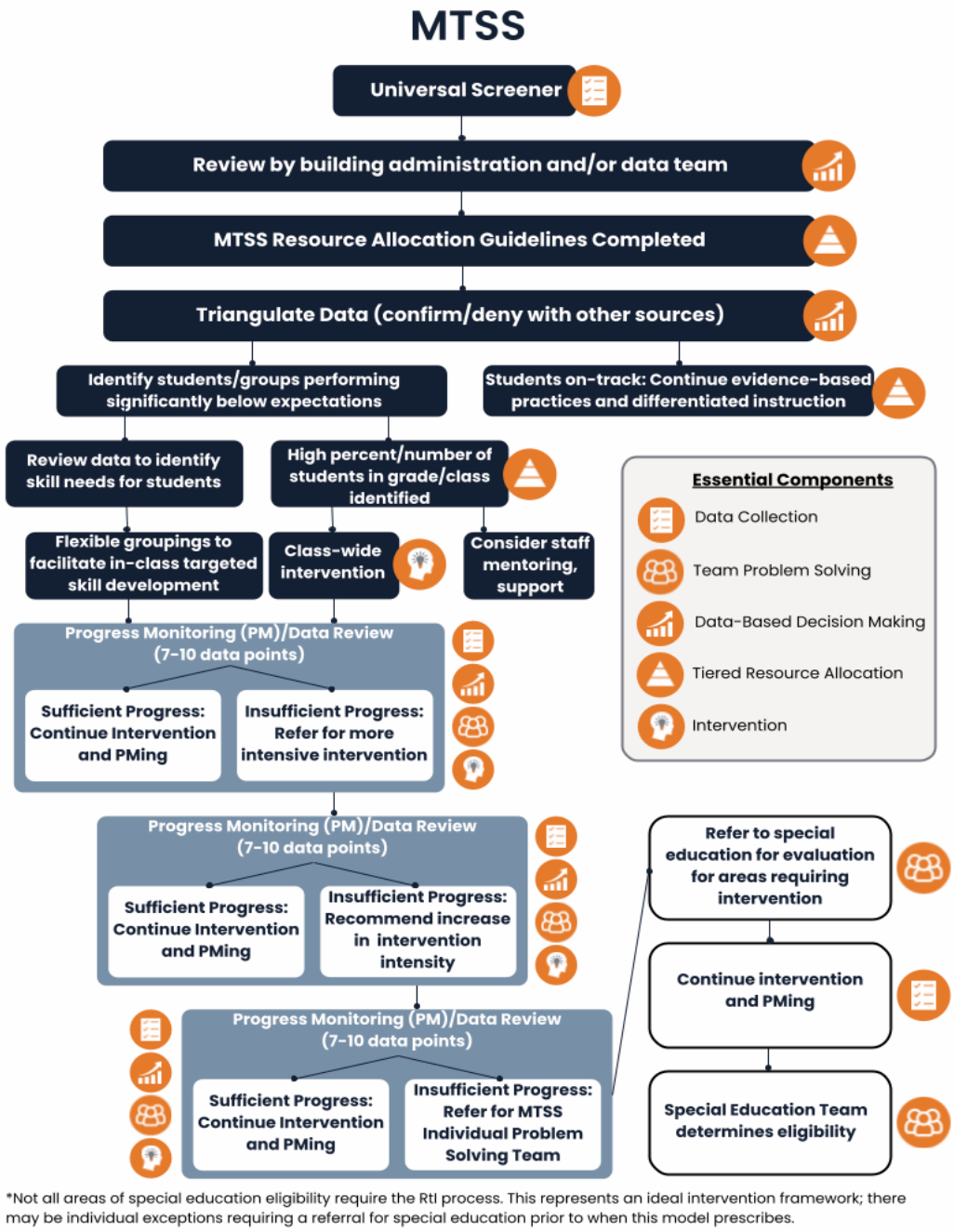
In practice, an MTSS framework for schools helps to identify students who need support and match those supports to appropriate interventions that will meet student needs. Thus, it is necessary to embed early literacy screening and intervention into the MTSS process to detect early signs of reading problems 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 5 for a flowchart that depicts the process):

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

[127] American Institutes for Research, 2022, Essential Components of MTSS

Figure 5: The Multi-Tiered Systems of Support Progression



*Not all areas of special education eligibility require the RtI process. This represents an ideal intervention framework; there may be individual exceptions requiring a referral for special education prior to when this model prescribes.

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.[128] 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 assessments and the purposes for which they are used are described below.

Table 7: Types of Literacy 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, letter-sound knowledge, etc.	Identify which students and systems are at risk	All students K-2	Acadience, FastBridge, AimsWeb
*Benchmark	A standardized assessment used to evaluate student progress at regular intervals	Determine student growth throughout the year as compared to predefined learning goals	All students 3-12	MAP, STAR
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 or benchmark Note - if the majority of students are "at-risk" there is likely a tier 1 issue that needs to be addressed	Phonics Survey, Phonological Awareness Skills Test

[128] Gaab, n.d., Dyslexia Myths

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) Letter Sound Fluency (LSF), Nonsense Word Fluency (NWF), Word Reading Fluency (WRF), Oral Reading Fluency (ORF)
Outcome Measure	State-mandated assessment to tell if students are reaching sufficient levels of achievement	Determining if instruction was sufficient	All students within a specific grade level as defined by state guidance	Illinois Assessment of Readiness (IAR), ACT
* The first benchmark of a school year may act as a screener of sorts to identify students who may be at risk of reading difficulties; however, subsequent benchmark assessments are used to monitor student progress.				

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 the 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 Hall explains, "A universal screener informs you about students who are not meeting the expected standard."[129] *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 child being diagnosed with dyslexia or any other learning

[129] Hall, 2018, 10 Successful Factors for Literacy Intervention

disorder.[130] Ideally, screening results answer the question, "Who is at risk for reading difficulty?" and "Who needs additional support?"[131]

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 intervention 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.[132] If a universal screener can "catch" students at risk of 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 8 for a list of skills recommended for inclusion in early literacy screening.[133] 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 8: 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 Automatized Naming assessment measure) • Spelling (end of kindergarten)
First Grade	• Phonemic awareness segmentation task • Phonological processing task (Rapid Automatized Naming assessment measure)

[130] Albers & Hall, 2023, Best Practices for Universal Screening in Schools
[131] Brehmer, et al., 2022, Michigan Dyslexia Handbook: A Guide to Accelerating Learner Outcomes in Literacy
[132] Hall, 2018, 10 Successful Factors for Literacy Intervention
[133] Massachusetts Dyslexia Guidelines, 2021, Massachusetts Department of Elementary and Secondary Education

	• Nonsense 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 for the team to 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 in-depth skill evaluation in a broader MTSS framework.

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.[134] 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 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.

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 Chapter 6 for a visual representation). In cases where benchmark assessments are not in place, a practical starting point is to administer an *Oral Reading Fluency* (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.[135] Oral Reading Fluency assessments serve as an initial step in identifying students who require additional diagnostic assessments to determine appropriate intervention.

Screening and Assessment of Multilingual Learners

Multilingual Learners (MLLs) may require a more nuanced approach during the screening process; it is essential that varying factors which may alter how data is collected are considered. In the United States, MLLs are often under-identified for special education services in primary grades and overidentified for special education services in secondary grades.[136] Oftentimes, this can be attributed to the fact that

[134] National Center on Intensive Intervention, 2021, Academic Screening Tools Chart
[135] Petscher, et al., 2020, How the Science of Reading Informs 21st Century Education
[136] Goodrich, et al, 2023, Assessing Oral Language When Screening

many teachers are unclear whether an MLL's skills reflect normal patterns of multilingual acquisition or patterns of an underlying learning disability.[137] To obtain data to address these concerns, the screening process can and should be used; however, there are several additional considerations that need to be addressed when administering screeners to MLLs.

As discussed in Chapter 2, parent/caregiver input is essential, and the collection of the following information is recommended prior to the screening: the student's developmental history including speech and language development, experience and proficiency in the home language and school language(s), and educational history including language(s) of instruction.[138] Once this information is collected, formal screening procedures for MLLs can be broken down into four steps:

1. Select a literacy screener with the highest sensitivity and specificity available that is culturally and linguistically appropriate for the student.
2. Administer and score the literacy screener.
3. Collect multiple forms of data including diagnostics, caregiver interviews, and a *true peer* comparison if possible.
4. As a team, use all sources of data collected to make informed decisions about the student.

Selecting a Literacy Screener

When selecting a literacy screener, it is important to consider whether or not the assessment is likely to provide accurate information about what the MLL student truly knows and can do, in accordance with IDEA. A few considerations include languages the assessment is available in, which populations were represented in the norming sample, and if sensitivity and specificity data were determined for children of the student's cultural and linguistic background. It is becoming more common for assessments to be made available in multiple languages; however, not all screeners are. Additionally, it is important to check to make sure that the screener being administered has been normed and validated for MLLs with similar language and educational experience. In some cases, assessments are normed using samples of monolingual students or students who received English instruction or bilingual instruction. It is essential to ensure that the screener being administered has been developed and normed for MLLs of a similar language and educational background; otherwise, the results may provide inaccurate conclusions about a child's abilities in the assessed skills as well as language abilities.[139] The following guiding questions may help in the process of selecting a literacy screener[140]:

- Does it provide guidance on interpreting scores for MLLs?
- Has it been validated for multilingual learners similar to the student's language and educational background in the norming process?
- Does it offer some or all subtests in a language(s) other than English?
- Does it use measures that are culturally and linguistically authentic rather than directly translated from English?
- Does it provide guidance regarding when and how to present students with instructions in their home language?

Administering the Literacy Screener

When administering a screening tool to an MLL, the assessment should be given in the student's stronger, predominant language whenever possible. Using a screening tool in that language will

[137] Goodrich, et al, 2023, Assessing Oral Language When Screening
[138] Catts, 1993, The Relationship Between Speech-Language Impairments and Reading Disabilities
[139] Goodrich, et al, 2023, Assessing Oral Language When Screening MLLs
[140] Massachusetts Department of Elementary and Secondary Education, 2020

highlight deficit areas and inform educators if a student is at-risk of having dyslexia or other reading disabilities. Remember, though, not all students have just one predominant language, especially if their learning environment has included two or more languages; their skills will be distributed across their languages and may vary by modality —such as speaking, listening, reading, writing. Therefore, assessments in each language may be necessary. This approach can help to prevent misidentification. However, if the student clearly demonstrates skills within the normal range in one of the languages, additional assessments may not be required.[141] [142] Since dyslexia is neurobiological in nature, it will manifest in both languages.

If a student who is newly exposed to English has already been identified as having a disability in the native or predominant language, services should not be delayed until the child learns more English. Waiting until the student becomes more proficient in English will only delay needed services, exacerbate and create additional barriers, and hinder student progress since the underlying disorder requires timely intervention.

Though administering a screener in a student's predominant language is ideal, it is not feasible for all languages, and administering a screener in English can still provide valuable information. Screening MLLs in English can provide data that can be used as a baseline for student proficiency and growth in English language development; however, it is important to understand that the assessment will not necessarily show if a student is truly at risk for a reading disability. Processing-based tasks referenced in Chapter 2, as well as dynamic assessment methods (test-teach-retest) are invaluable, particularly for MLLs for whom validated measures are not available in the student's language(s).

Scoring the Literacy Screener

After a student has completed a literacy screener, it should be scored and interpreted for patterns by someone who is trained to do so, and results should be shared with the student's educational team. Many screening guides now include instructions for how to score assessments in a culturally responsive manner. If the guide does not include guidelines for culturally responsive scoring, the team may want to consider taking two scores - one score that shows the student's performance as the guide outlines and one that allows for culturally responsive modifications. As with monolingual students, the screener should be analyzed to determine whether or not the student is exhibiting signs of reading difficulties.

Collecting Multiple Forms of Data

When determining if an MLL is at risk for dyslexia, it is essential that more than one piece of data is used and that any academic decisions made are done so as a team. The team should collect any useful information sources, including but not limited to the following:

- Classroom observations,
- Data from the home language survey,
- Developmental history,
- Interviews with the student and family,
- A detailed educational history including schooling and language exposure,
- Formative assessments,
- Work samples,
- Data in the student's primary language and in English, and
- Processing-based tasks and dynamic assessment, as needed.

[141] Bedore, et al., 2012, The Measure Matters

[142] Bohman, et al., 2010, What You Hear and What You Say

Additionally, the team should aim to answer the questions: are the student's reading difficulties due to limited time and opportunity to learn the language, or to true language learning difficulties, and is the student making progress when compared to true peers? A true peer can be defined as a student who has the following characteristics:

- Shares a similar language proficiency, culture, and experiential background,
- Is of a similar age and has spent a similar amount of time in the United States,
- Has a similar input (exposure) and output (use) of Language 1 and Language 2 at home, school, and in the community, and
- Has a similar education experience and services.

Additional Factors to Consider

When determining if an MLL is at risk for dyslexia or may require intervention, it is essential to consider the whole student. No academic decisions should be made using screening data alone. Some additional factors to consider include the following[143]:

- The number of years the student has received high-quality instruction in English and/or the home language.
- Variables that may be causing difficulties with reading and writing in English, such as emerging English proficiency.
- If there is a history of speech and/or language delay or disorder.
- If there is a history of dyslexia in the family.
- How the student is performing compared to *true peers,* or "students from comparable backgrounds who have the same or similar levels of language proficiency, acculturation, and educational backgrounds."[144]
- Specific error patterns; determine if the errors are typical or unusual when compared to MLLs' true peers.
- Potential environmental, educational, or personal factors that may be related to learning to read.
- Classroom observations.
- Student work and performance samples.
- A student's language skills in both their primary language and English.

Use the Data to Make Informed Decisions

Once all relevant data is collected, an educational team should convene to discuss a plan for intervention. If a student is showing signs of dyslexia, it is likely that they will require reading intervention from a reading specialist; a large percentage will also need intervention from a speech-language pathologist to address the underlying phonological and/or language difficulties that underlie or contribute to the student's literacy difficulties. The plan should be individualized and all relevant participants should be involved in creating it, including the student's parents and even possibly the student. At this stage it is essential that regular progress monitoring data is collected to ensure the student is receiving adequate services and support.

[143] International Dyslexia Association, 2023, English Learners and Dyslexia

[144] Brown & Aceves, 2022, Multilingual Learners: Testing, Assessment, and Evaluation

Screening and Assessment of Bidialectal Students

As educators screen, assess, and provide appropriate reading interventions for students, it is important to be able to differentiate normal language variations from true signs of reading difficulty so as not to under-identify or over-identify students needing intervention.

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:[145]

- Collect a thorough case history that includes the language(s) spoken by caregivers. While children often do not use the exact same language features as their parents/caregivers, a good background will help determine the dialect to which the student has primarily been exposed.
- Students may use their dialect or language variation during screening and assessment; therefore, the practitioner should be knowledgeable about the characteristics of that dialect or refer testing to someone available who is so that they can accurately distinguish normal language varieties from disorders.
- Collect and analyze a language sample(s) including a contrastive analysis, as appropriate.[146] The language sample should be at least 150 words in length and may be collected during a conversation or a narrative sample with the student in order to determine if the student's language patterns are consistent with the known rules of the student's dialect. A language sample not only allows one to distinguish speech and language patterns that are consistent with the student's dialect from true language errors, but will also provide a baseline to determine the student's dialectical density.
- Select standardized tests judiciously.[147] When available, use standardized assessments that accommodate language variation in their scoring.
    - If using assessments that don't take dialectical differences into account, possible modifications to standardized tests could include[148]
        - Modify scoring procedures to ensure that points are not deducted for normal dialectical features or using alternative scoring methods such as percentage correct or reporting the raw score instead of the standardized score,
        - Allowing the student extra time to respond to questions,
        - Increasing the number of practiced and/or trial items,
        - Eliminating any culturally biased questions,
        - Asking the student to explain any responses when the item is considered incorrect but could be attributed to dialectical or cultural differences,
        - Recording full responses in order to determine if the answer may include dialectical or cultural differences when scoring the test later, and
        - Gathering information from a contrastive analysis of the language sample should be weighed and reported on equally to any standardized assessments conducted.
- Use criterion referenced assessments when possible

[145] Johnson & Gatlin-Nash, 2020, Evidence-Based Reading Difficulties Among African American Learners
[146] Bland-Stewart, 2005, Difference or Deficit in Speakers of African American English
[147] Bland-Stewart, 2005, Difference or Deficit in Speakers of African American English
[148] Seymour & Bland, 1991, A Minority Perspective in the Diagnosing of Child Language Disorders

- Consider the student's background knowledge when assessing vocabulary and reading comprehension skills and its impact on performance. Assessments that are not culturally normed will not accurately identify the student's vocabulary knowledge, but rather, it will identify vocabulary the student has not yet had the opportunity to learn.
- Again, processing-based tasks referenced earlier as well as dynamic assessment methods (test-teach-retest) are invaluable, particularly for MLLs for whom validated measures are not available in the student's language(s).

After all pertinent information is considered and it has been determined that a student is indeed displaying true signs of reading difficulties, 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.

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. Educators' knowledge and implementation of effective instructional techniques that honor the cultural and linguistic backgrounds of their students is key to developing successful readers and writers.

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. *Diagnostic literacy assessments* are utilized to provide a snapshot of one specific skill area such as phonological awareness. "The diagnostic tells you why a student is not reading at benchmark and what to do about it."[149]

Diagnostic assessments are only given to ***some*** students. Teams can identify students needing further 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."[150] Moreover, it is essential for the interventionist to match the skill deficit to an evidence-based 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, an interventionist would begin with an intervention in word recognition that is systematic, explicit, and cumulative. Refer to the Dyslexia Toolkit and Chapter 7 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, benchmark level, convenience of scheduling, or quadrants assigned by digital assessment programs. 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 deficient, unclear goals, and overall lack of direction for the teacher

[149] Hall, 2018, 10 Successful Factors for Literacy Intervention
[150] Hall, 2018, 10 Successful Factors for Literacy Intervention

or interventionist providing the instruction.[151] Instead, teams should form intervention groups based on skill needs. 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 and Chapter 7.

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, monitor the effectiveness of instruction in intervention, and make instructional changes to improve student performance.[152] 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 struggle[153].

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) Taxonomy of Intervention Intensity.[154] 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 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 Iris Center Progress Monitoring Module and the NCII Reading Progress Monitoring Module.

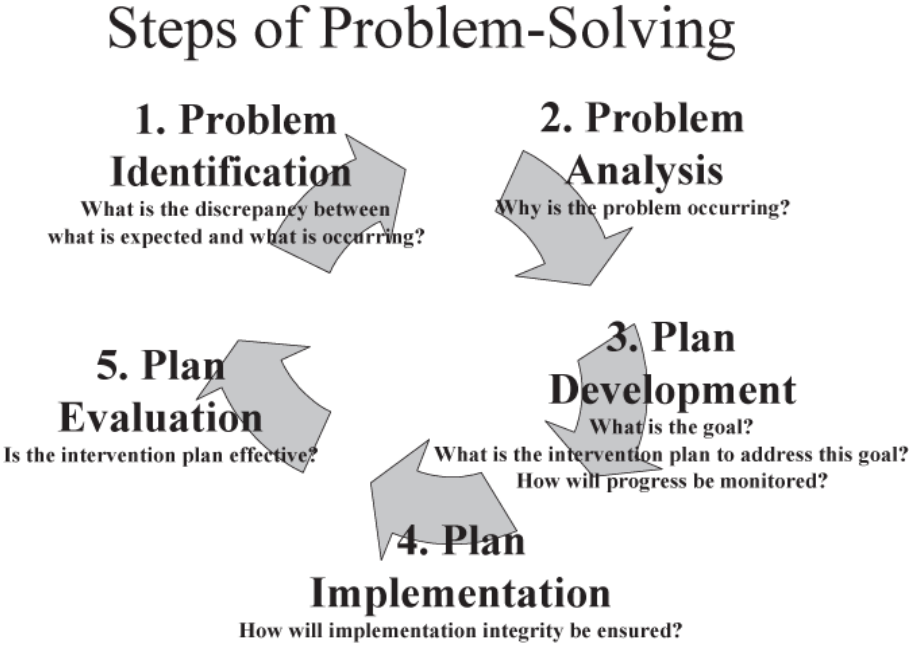
Problem-Solving Model

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 6).[155]

Paired with *data-based decision making,* 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.

[151] Hall, 2018, 10 Successful Factors for Literacy Intervention
[152] IRIS Center, n.d., Progress Monitoring
[153] National Center on Intensive Intervention, 2013, Data-Based Individualization
[154] Fuchs, Fuchs, & Malone, 2017, The Taxonomy of Intervention Intensity
[155] Gibbons & Coulter, 2015, Making Response to Intervention Stick

Figure 6: 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 from a tiered literacy intervention and observing insufficient progress towards the goal, a team may engage in individual problem solving for a child.[156]

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 throughout the RtI/MTSS problem-solving process.[157]
3. A problem-solving framework should be used, with clearly documented discrepancy statements based on data. Goals specific to the discrepancy should be determined, and dates for follow-up meetings should be scheduled following literacy intervention implementation.

[156] National Center on Intensive Intervention, n.d., What is Data Based Individualization

[157] Public Act 101-0515, 2019

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.

Tiered Resource Allocation

Another key component of MTSS is the *multi-tiered service delivery model*. Within the MTSS model, all students should have access to high-quality, evidence-based literacy instruction in foundational reading skills, reading fluency, and language comprehension development in order to be successful in the classroom and beyond.

The universal tier (Tier 1) represents the initial intervention for all students and presents the prime opportunity to make the 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 9: Tiers of Instruction

Tier	Description	Provider	Audience
Tier 1: Core Instruction and Primary Prevention	Evidence-based, grade-level instruction that is highly differentiated in a general education setting	Classroom Teacher	All students
Tier 2: Targeted Interventions	In addition to Tier 1 core instruction, but aligned to core instruction– focused on skill deficits	Trained 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	Trained Reading Interventionist, Dyslexia Therapist, Special Educator, 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. [158]

Interventions to Support Students with the Characteristics of Dyslexia

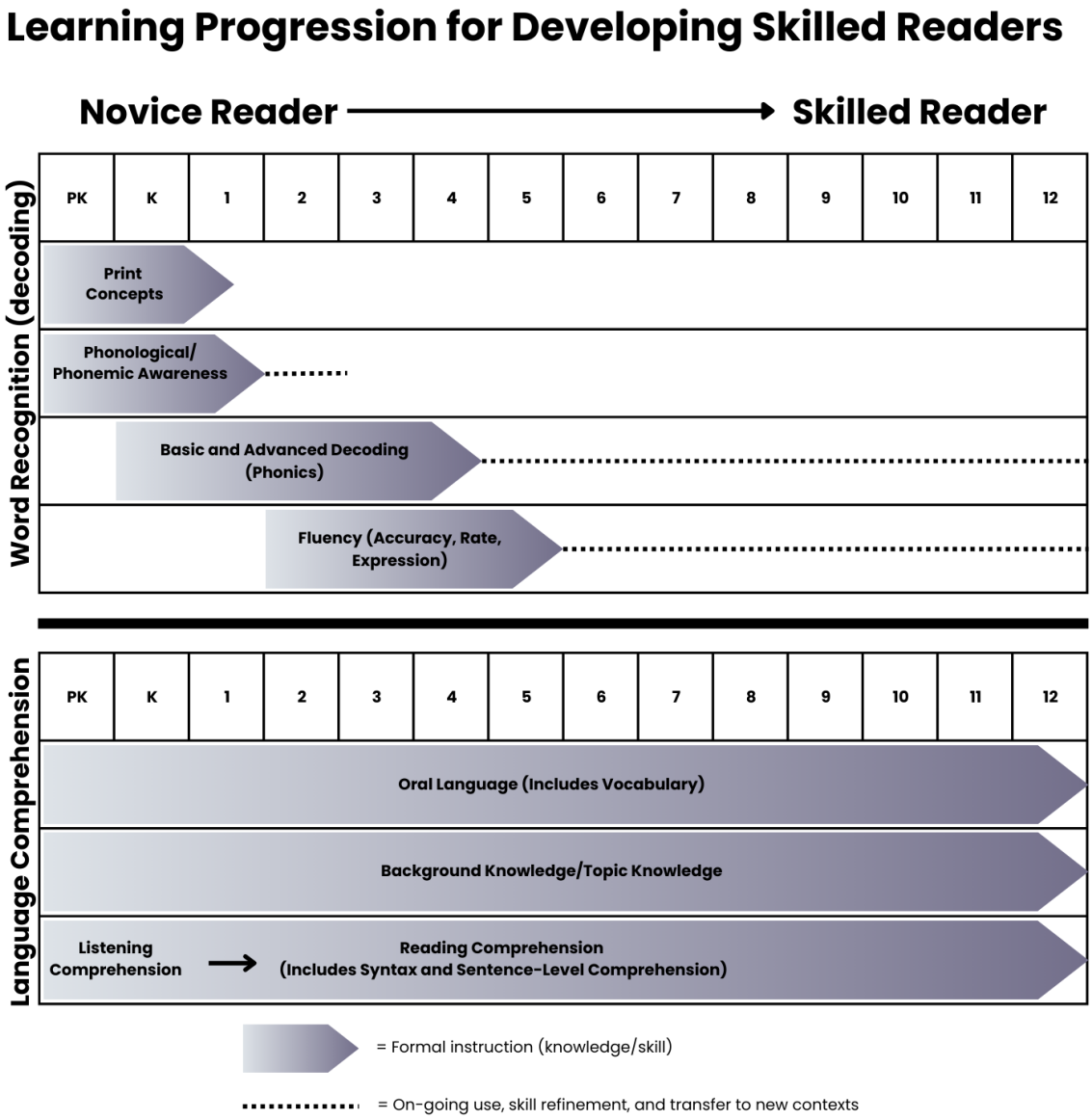
As mentioned previously, screening and assessment data in a school setting does not diagnose a student who has dyslexia; however, there are many interventions that can be implemented in a tiered system through MTSS that may prove to be beneficial to students who are exhibiting characteristics of dyslexia. 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 essential early literacy skills such as print concepts, phonological and phonemic awareness, phonics, fluency, and language comprehension skills (see Figure 7 below). In the elementary grades, particularly in kindergarten through second grade, Tier 1 instruction should serve as a primary prevention approach to reading difficulties. *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.

[158] Fletcher, 2023, Systems, Assessment, and Reading Difficulties

Figure 7: Learning Progression for Developing Skilled Readers[159]



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.[160] Popular reading approaches such as Guided Reading and Balanced Literacy are not effective for these students.[161] 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 *semantics*. For instance, if a student in 3rd grade is still struggling with sounds/basic phonics, it will be

[159] Martin, et al., 2020, Intensifying Literacy Instruction
[160] Fletcher, 2023, Systems, Assessment, and Reading Difficulties
[161] International Dyslexia Association, 2016, Effective Reading Instruction

apparent that the student will need intervention (see Figure 5). See Chapter 6 and Chapter 7 for more information.

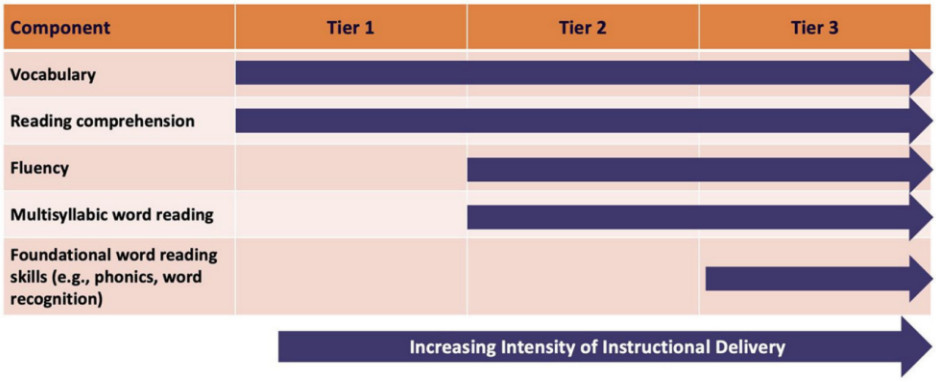
Secondary Reading Instruction Across Tiers

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.[162] 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. Students in the secondary environment may still require support in the word recognition skills outlined in Figure 7 above; if this is the case, it becomes critical that the intervention incorporates explicit, systematic, and diagnostic instruction in word recognition. This instruction should encompass a focus on various aspects based on student need. While all students in a secondary setting require and deserve access to Tier 1 curriculum focused on content-specific vocabulary and comprehension, some students will need intervention based on foundational word reading skills, multisyllabic word reading, and fluency (See Figure 7). 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 and Chapter 7.

Figure 8: Tiers of Reading Instruction for Secondary Settings[163]



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-based interventions, the problem-solving team (which includes a student's family) may request an

[162] Swanson, et. al., 2015, Improving Reading Comprehension and Social Studies Knowledge
[163] Capin, et. al., 2022, Evidence-Based Reading Instruction for Secondary Students

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, though they may also qualify in other areas due to the possibility of comorbidity.

Moreover, a referral for special education evaluation can be made at any time by any member of the student's problem-solving team (including caregivers). It should be noted that a referral is not a means to bypass RtI in order to receive services. Although following the RtI 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 outside 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 referred for a special education evaluation.

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 for 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 grade, 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.[164]

Additional factors that may also affect eligibility for a specific learning disability include lack of appropriate instruction or limited English proficiency (LEP). 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

[164] Illinois State Board of Education, 2021b, Instructions for Individualized Education Program Forms

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, although a child may certainly be eligible for Special Education in addition to being LEP. It is essential to consider the whole student when determining eligibility for SLD.

Related to literacy, a lack of "appropriate instruction" occurs when there is a lack of explicit, teacher-led instruction in any of the five essential components of reading; use of a program/methodology that is not research-based; the instructional program is not implemented with integrity; or there is a lack of a scientific, research-based curriculum (e.g., all teacher-made materials). Thus, it is clear that Evidence-Based Practices (EBPs) and programs are essential components within an MTSS framework. In order to properly identify and serve students, districts must provide the curriculum and instructional strategies that are the most effective. Moreover, it is often the case that best practices for students with dyslexia and other reading challenges will benefit *all* learners.

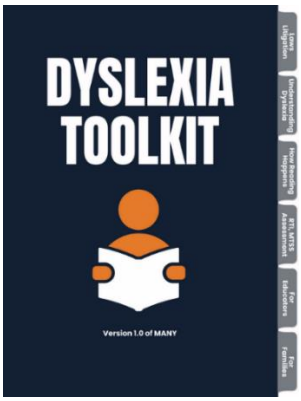
Bridge to Practice

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

Expanded Exploration: Linked Resources

- **Read:** Dyslexia Testing and Evaluation with the International Dyslexia Association
- **Explore:** SLD & Dyslexia Venn Diagram from the IL SLD Support Project
- **Watch:** Dr. Matt Burns discuss what to do when intervention isn't working with PATTAN



Discussion Questions

1. What might be the potential challenges and benefits of implementing RtI and MTSS specifically for students with dyslexia?
2. What inferences can be drawn about the importance of early and accurate assessment in improving long-term outcomes for students with dyslexia?
3. In what ways can screening and diagnostic assessments impact identification and intervention for students with dyslexia?

CHAPTER 6: GUIDANCE FOR EDUCATORS, ADMINISTRATORS, AND OTHER SCHOOL PERSONNEL SUPPORTING STUDENTS WITH DYSLEXIA: RESEARCH FINDINGS

Understanding the challenges and unique needs of students with dyslexia is essential when creating an inclusive learning environment. With over 50 years of dyslexia research, more information is available now than ever before, and knowledge continues to expand daily. Embracing best practices for students with dyslexia fosters supportive classrooms that help students reach their full potential. This chapter equips educators with essential knowledge to make informed instructional decisions in the classroom. The next chapter, Chapter 7, guides readers on effectively putting those principles into practice.

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.[165]

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 the following occurs:

- 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 paper or report so other researchers can review the methods used and replicate the research in other settings, and
- It can be replicated; the more studies or research that support a program or practice, the stronger the evidence.

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.

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

[165] National Center on Improving Literacy, 2020a, Route to Reading, Check for Potholes

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:

- **F**easibility: is it possible to implement the intervention as designed (with fidelity)?
- **A**cceptability: what do students, families, and professionals think about the intervention?
- **I**mpact: is there evidence of positive results from implementation of the intervention?
- **R**elevance: 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.[166]

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:

- 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,
- Literacy Dialog Tool,
- The Reading League Compass,
- 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 should be more cautious than if there were many large studies completed on the program or practice across time[167].

[166] National Center for Systemic Improvement, n.d., Guiding Questions: The FAIR Test
[167] REL Midwest, 2019, ESSA Tiers of Evidence

In addition to evaluating the evidence related to specific curricula, programs, and instructional practices, it is crucial to consider the extensive research accumulated over the past 50 years on how children learn to read. This body of research should inform administrators as they make curricular and programmatic decisions, as well as guide educators in their daily instructional choices. Below are the current understandings of how children learn to read:

Table 10: Ten Maxims[168]

Ten Maxims: What We've Learned So Far About How Children Learn to Read
1. Almost all children learn to speak naturally; reading and writing must be taught.
2. Literacy begins at birth. It is rooted in early social interactions and experiences that include regular exposure to oral language and print. Strong roots tend to produce stronger readers.
3. All good readers are good decoders. Decoding should be taught until children can accurately and independently read new words. Decoding depends on phonemic awareness: a child's ability to identify individual speech sounds. Decoding is the on-ramp for word recognition.
4. Fluent readers can instantly and accurately recognize most words in a text. They can read with expression and at an appropriate rate for their age. Reading fluency requires comprehension AND it supports comprehension.
5. Comprehension—the goal of reading—draws on multiple skills and strengths, including a solid foundation of vocabulary and background knowledge.
6. One size does not fit all: use student data to differentiate your instruction.
7. Direct, systematic instruction helps students develop the skills they need to become strong readers. Indirect, three-cueing instruction is unpredictable in its impact on word reading and leaves too much to chance.
8. These maxims apply to English Learners/Emergent Bilinguals, who often need extra support to bolster their oral language as they learn to read and write in a new language.
9. We should support students who speak languages or dialects other than General American English at home, by honoring their home language and by giving them expanded opportunities to engage with General American English text.
10. To become good readers and writers, students need to integrate many skills that are built over time.

This evidence is not only crucial to how we teach all students how to read, but especially for our students with dyslexia.

Components of Effective Literacy Instruction

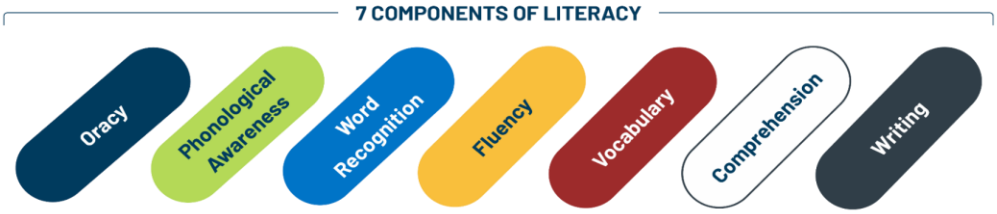
More than twenty years ago, the *National Reading Panel* (2000) identified the following as essential components of high-quality reading instruction:

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

[168] Lyon, 2023, Ten Maxims

Additionally, as outlined in the Illinois Comprehensive Literacy Plan, educators should ensure literacy instruction includes evidence-based practices in oracy, phonological awareness, word recognition, fluency, vocabulary, comprehension, and writing.

Figure 9: The Seven Components of Literacy Instruction[169]



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 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, *diagnostic teaching* 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.

Students with dyslexia often require instruction, which not only targets the skills and employs the procedures described above, but is also more intensive. 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

[169] ISBE, 2024, IL Comprehensive Literacy Plan

the process through which reading occurs.

Basics of Effective Structured Literacy Instruction[170]

Explicit - direct modeling and teaching of concepts with well-chosen examples not only with foundational skills, but also in higher-level aspects of literacy
Systematic - planned sequence of instruction
Sequential - prerequisite skills are taught prior to more advanced skills
Cumulative - each step is based on concepts previously learned
Highly Interactive - meaningful interactions with language occur during the lesson and engagement is monitored and scaffolded
Scaffolded - providing support and guidance as students learn new concepts and skills, gradually reducing it as they gain mastery
Targeted Prompt Feedback - targeted corrective feedback is provided after initial student responses
Data Driven - ability to individualize instruction based on continuous assessment
Multimodal - simultaneous association of visual, auditory, and kinesthetic-motor modalities

Structured Literacy Approach

Research has shown that *Structured Literacy Instruction* (SL) is the most effective approach to learning to read and write, and it is critical for those who have difficulties with reading and writing. Because dyslexia and most reading difficulties 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 *discourse* within longer texts. In addition, SL involves hands-on, engaging practice that is *multimodal* (e.g. manipulating letter tiles, using gestures, writing, saying, color-coding, etc.) and 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.

Structured Literacy should include the following[171]:

Phoneme awareness. Becoming consciously aware of the individual speech sounds (*phonemes)* 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.

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

[170] International Dyslexia Association, n.d., Structured Literacy Defined
[171] International Dyslexia Association, 2019b, Structured Literacy

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 11: 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. *Decoding* (and *encoding)* 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. *Graphemes* 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 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.

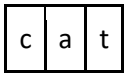
When explicitly teaching sound-symbol correspondences, it is important to provide *decodable text* as a scaffold for student learning. Decodable text consists of phonics patterns that students have learned. In this way, students can explicitly practice and utilize their knowledge in regard to the learned sound-symbol 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.

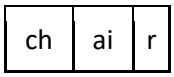
Patterns and conventions of print (orthography or orthographic conventions). Through explicit instruction and practice, students with dyslexia can be taught to understand and remember patterns of letter use in the writing system through encoding or spelling. The paired association between letters and 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.[172] In this way, students who are able to orthographically map words will increase automaticity when reading instead of having to rely on laborious decoding.

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.



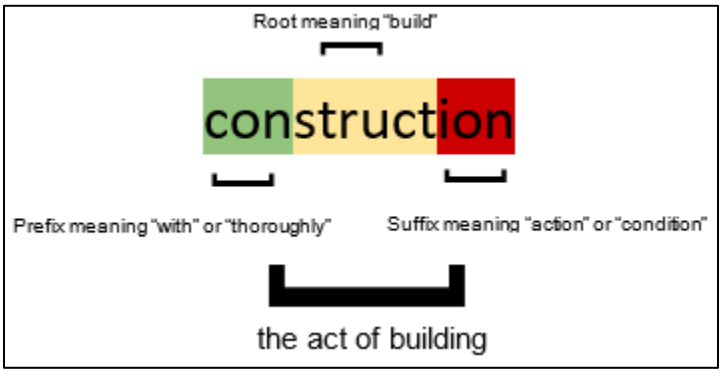


Syllable and Stress Patterns. Print patterns and conventions exist as well for representing the vowel sounds in written syllables. It is a convention that almost every written syllable in English has a vowel grapheme. Structured Literacy programs usually teach six basic types of written *syllables:* closed (com, mand), open (me, no), vowel-consonant-e (take, plate), 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). In addition to syllable patterns, stress patterns also play a role in clarifying meaning and resolving any potential ambiguity caused by word order. Moreover, multisyllabic words carry a primary *stress* and in some cases may also have a secondary stress. Stress patterns can differ depending on the region or dialect.

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 10).

[172] Kilpatrick, 2015, Essentials of Assessing, Precenting, and Overcoming Reading Difficulties

Figure 10: Building a Word



Sentence Structure and Grammar including:
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.

Semantics. 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.

Text Structure. Understanding and recognizing text structures plays an important role in helping students navigate different types of reading materials. This awareness provides essential background knowledge that enhances their ability to comprehend and process the information presented. Mastery of text structures is a key skill in text processing, enabling readers to better interpret and engage with content.[173] [174] While narrative texts are typically more familiar with students because of children's books and television, it is still important to teach story elements such as setting, characters, problem, climax, resolution, etc. Students often find informational or expository texts more challenging because they differ from the familiar narrative structure of stories. These texts tend to feature unknown vocabulary, many details, and new content, all of which can make comprehension much more difficult. Commonly encountered information text types include comparison, problem and solution, cause and effect, sequence, and description.

Critical Thinking. To truly understand a text, a reader must engage in a diverse set of skills and abilities, with cognitive functions such as attention, memory, and most importantly, critical thinking, playing key roles. Critical thinking allows readers to analyze, infer, and visualize the information being processed. Authors often expect readers to go beyond what is explicitly stated, encouraging them to make connections, draw implications, and infer deeper meanings. These cognitive processes work together to construct a mental model of the text, which is essential for achieving deep comprehension.[175]

[173] Williams, 2017, Teaching Text Structure
[174] O'Conner & Vadasy, 2011, Handbook of Reading Interventions
[175] Snow, 2002, Reading for Understanding

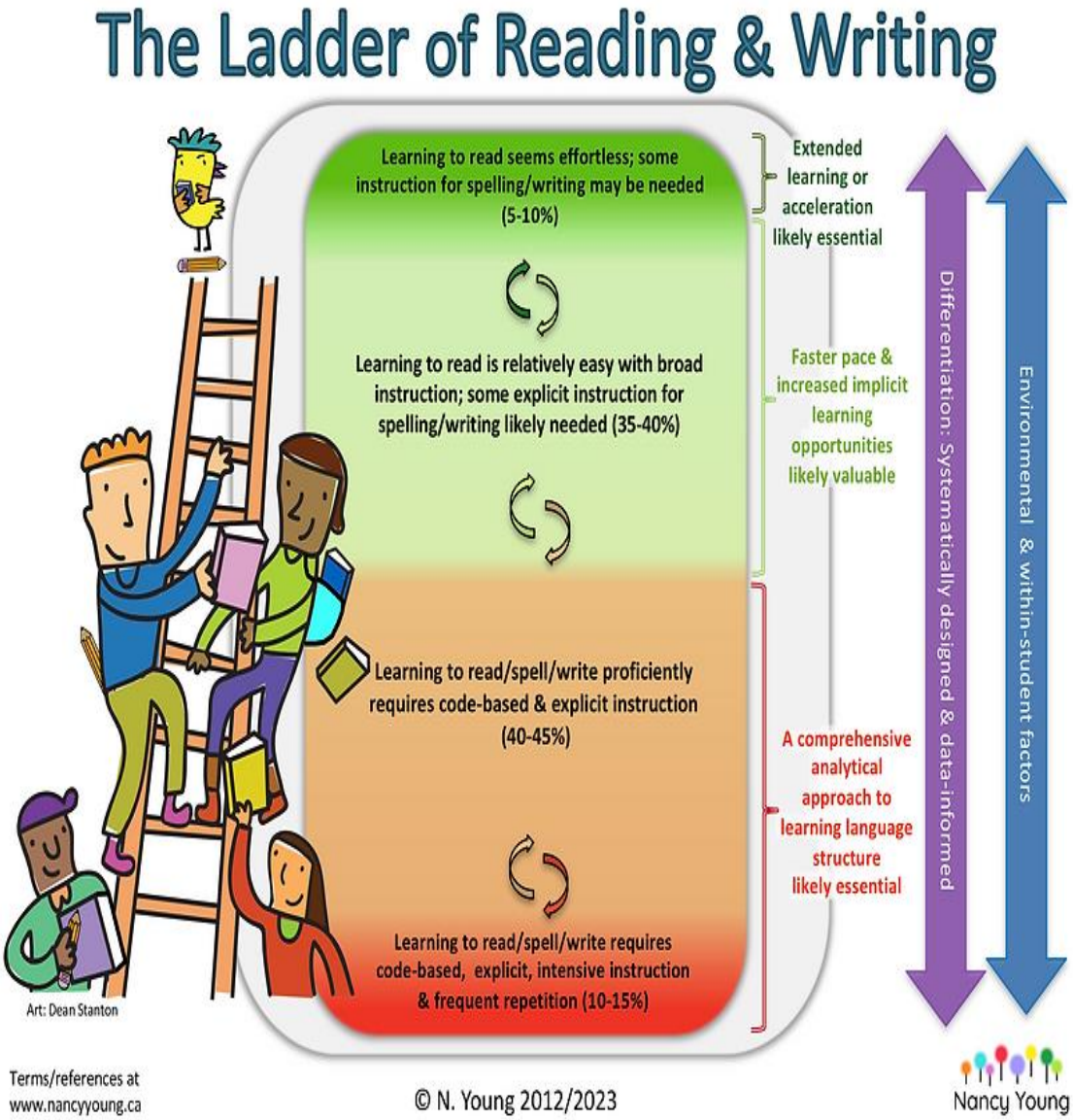
Throughout Structured Literacy instruction, students should be supported as they work with many kinds of texts—stories, informational text, poetry, drama, and so forth, even if that text is read aloud to students who cannot yet read it independently. Reading worthwhile texts that stimulate deep thinking is a critical component of Structured Literacy.[176]

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 Structured Literacy approach is essential to the 60% of students who struggle to learn to read, it is beneficial for all students. Figure 11 depicts the appropriateness and value of Structured Literacy for all developing readers.[177]

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

[177] Young, 2023, Nancy Young – The Ladder of Reading and Writing

Figure 11: 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 12 compares the Structured Literacy approach and "typical" literacy practices so one can better understand how the instructional approaches differ.

Table 12: Structured Literacy Comparison Chart

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

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

Interventions and Programs

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

- 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.

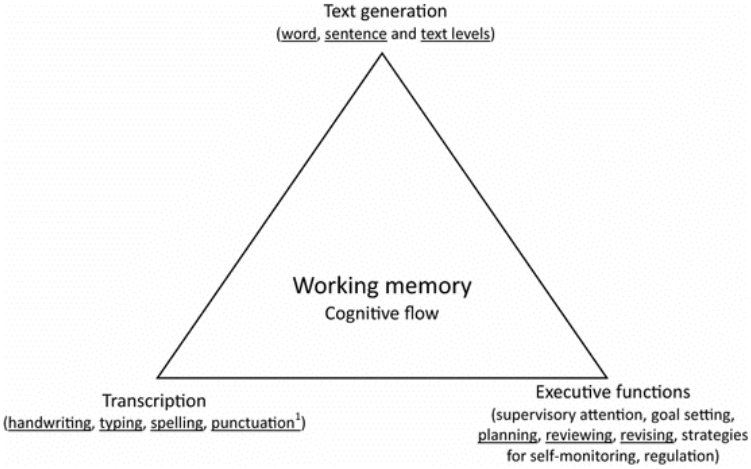
While a trained educator, specialist, or therapist in every school is ideal, it is equally critical to implement an *evidence-based* intervention curriculum to support the needs of students who are struggling to read. Some examples of intervention curriculum include the following:

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

Dyslexia and Writing

It is not uncommon for individuals with dyslexia to also struggle with writing since reading is theorized to be a central component of writing development.[178] Writing is a complex activity that involves multiple processes, each of which can be impacted when a student has dyslexia. These processes are outlined in the Simple View of Writing.

Figure 12: The Simple View of Writing[179]



The Simple View of Writing suggests that in order to produce effective writing, one must possess transcription skills, executive functioning skills, and text generation skills; however, it is not enough to simply possess these skills. When writing, students also need to be able to hold information for each process within their working memory. If their working memory has to focus more attention to one process than the others, writing deficits may become apparent.[180]

Individuals who have dyslexia often exhibit deficits in their writing due to the overlap of reading and writing processes. For example, an individual who has dyslexia may have poor handwriting. This is not necessarily because they do not have good motor control, but rather because they have poor spelling skills due to their lack of sound-symbol correspondence, and their working memory is focused more on which letters they should write rather than the physical process of transcription.[181] In addition to handwriting, students with dyslexia may exhibit the following writing deficits:[182]

- Poor spelling,
- Legibility issues,

[178] Herbert, et al., 2018, Why Children With Dyslexia Struggle With Writing
[179] Berninger, et. al, 2006, Implications of Advancements in Brain Research
[180] Herbert, et al., 2018, Why Children With Dyslexia Struggle With Writing
[181] Berninger, 2008, Writing Problems in Developmental Dyslexia
[182] Herbert, et al., 2018, Why Children With Dyslexia Struggle With Writing

- Lack of diverse vocabulary,
- Poor idea development, and/or
- Lack of organization.

Additionally, as students get older, it is not uncommon for them to have to read source materials and interpret information within their writing; students also have to read and reread their own writing for revisions and edits.[183] If an individual has dyslexia, these tasks become more complicated since they struggle with reading.

There are several compensation and remediation techniques that educators can use in order to help students with dyslexia become more effective writers:

- *Compensation:* using knowledge of morphemes, spell-check, learning keyboarding, using speech-to-text systems, dictating, using writing structures to help students compensate for planning difficulties, using self-regulated strategy development, using sentence combining.
- *Remediation:* improving phonics skills, learning letter-sound relationships and rules, improving orthographic memory and analysis, improving letter formation, using modeling and self-verbalization, using visual cues, multicomponent interventions, using self-regulated strategy development to improve planning, organization, goal setting, and self-monitoring, using sentence combining to improve sentence level planning and organization.

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, it also tells us that there are some commonly advertised "treatments" which have not been proven effective. Ineffective treatments or practices include the following:

- Colored overlays,[184]
- Specialized fonts designed for those with dyslexia,[185]
- Vision therapy,[186]
- Specific working memory training programs,[187]
- 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),[188]
- Memorizing lists of sight words by whole word or word shape,[189] and
- Learning spelling words by rote memorization for weekly spelling tests.[190]

Accommodations

Many students with dyslexia or other learning disabilities require *accommodations* 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

[183] Herbert, et al., 2018, Why Children With Dyslexia Struggle With Writing
[184] Griffiths, et al., 2016, The Effect of Coloured Overlays and Lenses on Reading
[185] Kuster, et al., 2017, Dyslexia Font Does Not Benefit Reading In Children With or Without Dyslexia
[186] Handler & Fierson, 2011, Learning Disabilities, Dyslexia, and Vision
[187] Melby-Lervag, Redick, & Hulma, 2016, Working Memory Training Does Not Improve Performance on Measures of Intelligence or Other Measures of Far Transfer
[188] Kilpatrick, 2015, Essentials of Assessing, Precenting, and Overcoming Reading Difficulties
[189] Kilpatrick, 2019, Reading Development and Difficulties
[190] Carreker & Birsh, 2019, Multisensory Teaching of Basic Language Skills

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 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, does not mean the educator should reduce learning expectations,
- 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[191]:

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 phonics-based 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.

[191] ISBE, 2011, Assessment Accommodations Students with Disabilities

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.

When implementing any type of accommodation, it is important to use a gradual release process. This approach helps students develop the skills necessary to use their accommodations effectively and independently.

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 ***modifications*** 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.

Assistive Technology

According to the Individuals with Disabilities Education Act (IDEA), *assistive technology* (AT) is a set of tools or devices, and a critical service used to support the educational needs of students with disabilities in the classroom. These technologies can help students perform tasks they find difficult or impossible to do independently. Assistive technology in schools is essential for providing an inclusive education, ensuring all students have equal access to learning opportunities. These tools can help students with disabilities achieve greater independence, enhance their academic performance, gain self-confidence, and improve their overall educational experience. Assistive technology can be as simple as a magnifying glass or as complex as a computerized communication system. Examples of AT that might benefit struggling readers and writers range from low-tech to high-tech options and should be considered on an individual basis. Some examples may include the following:

- Tracking aids
- Expanded spacing between words
- Spell check
- Grammar check
- Word prediction software
- Speech-to-text software
- Text-to-speech software

AT serves as a compensatory intervention by offering tools that help students overcome learning barriers, enabling them to accomplish tasks they might find difficult. For example, text-to-speech makes text accessible to students with a reading disability, and speech-to-text software aids those that have difficulty with the motor and composition aspect of writing. Instruction, running parallel to AT, focuses on teaching the essential skills and knowledge needed for long-term success. While AT compensates for immediate functional limitations, allowing for greater independence and efficiency, instruction develops skills and understanding. By integrating both approaches concurrently, educators ensure that students receive comprehensive supports, increasing their educational outcomes and fostering independence.

All school teams should be aware of the laws that support assistive technology including IDEA, the Rehabilitation Act of 504 and accessible education materials.

IDEA and Assistive Technology

The Individuals with Disabilities Education Act (IDEA) states that every child must be considered for an assistive technology device and services. The legal definition of AT is provided by IDEA, 34 C.F.R. § 300.5:

Assistive technology device means any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of a child with a disability. (Authority: 20 U.S.C. 1401[1]s)

IDEA 2004 provides a definition of AT services at 34 C.F.R. § 300.6.:

Assistive technology service means any service that directly assists a child with a disability in the selection, acquisition, and use of an assistive technology device. The term includes—

(a) The evaluation of the needs of a child with a disability, including a functional evaluation of the child in the child's customary environment;

(b) Purchasing, leasing, or otherwise providing for the acquisition of assistive technology devices by children with disabilities;

(c) Selecting, designing, fitting, customizing, adapting, applying, retaining, repairing, or replacing assistive technology devices;

(d) Coordinating and using other therapies, interventions, or services with assistive technology devices, such as those associated with existing education and rehabilitation plans and programs;
(e) Training or technical assistance for a child with a disability or, if appropriate, that child's family; and
(f) Training or technical assistance for professionals (including individuals providing education or rehabilitation services), employers, or other individuals who provide services to, employ, or are otherwise substantially involved in the major life functions of that child. (Authority: 20 U.S.C. 1401(2))

AT service delivery involves more than simply providing AT. It is a process recorded in a student's IEP by which AT is considered, selected, provided, supported, and periodically re-assessed to determine its effectiveness for a student.

Assistive Technology and Section 504 of the Rehabilitation Act
Section 504 of the Rehabilitation Act ensures that students with disabilities have equal access to education as students without disabilities. Schools are legally obligated to assess and provide the necessary accommodations, which can include various assistive technologies such as text-to-speech software or writing aids. A 504 Plan for each student outlines the specific accommodations, and it is the school's responsibility to implement and support them, ensuring that the assistive technology effectively meets the student's needs and facilitates their academic success.

Accessible Educational Materials (AEM)
Accessible Educational Materials (AEM) are specialized formats of educational content designed to ensure that students with disabilities, including those with reading disabilities, can access the same educational materials as their peers. AEM can include formats like braille, large print, audio, or digital text that can be adapted to individual needs. For students with reading disabilities, AEM can be beneficial by providing text-to-speech options, interactive digital text, or audio versions of textbooks, enabling them to comprehend and engage with the material more effectively and independently. This ensures they can participate fully in their education, supporting better learning outcomes and equity in the classroom. AEM is also supported by the law through IDEA, the ADA, and Section 504 of the Rehabilitation Act.

For additional information on AEM, the following resources may be consulted:

- NIMAC (National Instructional Materials Access Center) is a U.S. federally-funded repository that stores digital versions of K-12 textbooks and instructional materials. These materials are made available in accessible formats like braille, audio, and digital text for students with print disabilities.
- NIMAC Materials or AEM in Illinois.
- Bookshare is a nonprofit organization which contains an online digital library that provides accessible books and textbooks to individuals with print disabilities.

Universal Design for Learning or Assistive Technology
Universal Design for Learning (UDL) is a set of principles guiding curriculum development that results in equal opportunities for learning. UDL focuses on instructional goals, methods, materials and assessments that can be effectively accessed and used by all students, regardless of ability or background, UDL is a flexible approach that may be adjusted to meet individual needs.

The focus of UDL is to reduce barriers that prohibit student learning. AT, on the other hand, allows individual students to overcome barriers presented by curricular tasks. The consideration and use of AT responds to issues a student with a disability may face when engaging in curricular tasks. To

differentiate between UDL and AT, assistive technology devices and services are delivered reactively after a referral and evaluation of an individual student. UDL is given to everyone with the understanding that those who need specialized support will use the tools when they need them (i.e., embedded, just-in-time supports).

Technology can be used in the classroom to support Universal Design for Learning (UDL); however, for some students, the same tool may also function as assistive technology. For example, in a class, an app with text-to-speech may be available for all students on their Chromebooks. A student reading at grade level in a sixth-grade literature class may utilize the text-to-speech to read a novel because that is his preferred method of reading; this supports UDL in that it provides a flexible option to access the content from the novel. Another student in that same class reads at the second-grade level due to difficulties with decoding. This student may utilize text-to-speech as assistive technology in that it is being used as a compensatory strategy related to the difficulty with the demand (decoding) of the task (comprehending the content of the novel).

Assistive Technology Consideration and Decision-Making

The Individuals with Disabilities Education Act (IDEA) mandates that IEP teams consider several *"special factors"* for every student receiving special education services. Section 300.324(a)(2)(v) of the IDEA regulations states that IEP teams must "consider whether the child needs AT devices and services" when developing a student's IEP. Although it is required while developing an IEP, AT consideration should happen year-round if a student is having difficulty performing a task efficiently, effectively and/or independently.

Consideration of assistive technology devices and services is a purposeful, collaborative, decision-making process. The IEP team reviews existing information and potentially collects additional information about a student before deciding whether he or she needs AT. If the answer is yes, the IEP team identifies the AT needed for the student to receive a free and appropriate education. The responsibility for AT consideration falls upon the entire IEP team and is not relegated to an individual or an outside evaluator. While schools may engage in ongoing and recurring AT consideration, discussion of the need for AT is required at every IEP meeting.

If the team determines that assistive technology could potentially support progress on goals or access to the curriculum, they should begin the decision-making process to determine which assistive technology tool or strategy best matches a student's needs. Teams should use a systematic framework to gather information (e.g., SETT website) and/or to guide them through the decision-making process (e.g., John Hopkins University Assistive Technology Cycle website). The student's IEP team should collaboratively review and share information regarding the student and customary environment(s) in which the assistive technology could be used. An integral part of the process is clearly identifying the task for which the student has difficulty. The task should be narrowly defined (e.g., writing a five-sentence paragraph with grade-appropriate conventions) so that the team can analyze the demands placed upon the student when completing the task. This process, also known as task-demand analysis, allows the team to identify specific areas of difficulty associated with the task for the student. In knowing the areas of difficulty, the team can complete a feature-match analysis, identifying appropriate features of AT tools or systems needed to help a student overcome barriers and enhance his or her performance on educational tasks. The outcome of the feature-match analysis will yield AT tools or systems that the student can trial in the customary environment(s) in which they complete the task. Each AT tool or system should be trialed independent of one another for a minimum of 3-4 weeks.

For the trial period, the team should select 1-2 naturally occurring activities during the school day in which the student will use the assistive technology to support the identified task. The team should collect data to document progress on the identified task with each AT tool or system to determine which best matches the student's needs. To illustrate this concept, consider the following example:

John has difficulty in the area of reading; his team would like to explore the use of assistive technology to increase his independence in completing reading comprehension activities. The team has narrowed the reading task to reading 1-2 pages of text and answering multiple choice comprehension questions. As John has difficulty accurately reading multisyllabic words, the team has identified two applications for trial that have text-to-speech to support the decoding demands of reading text in both the passage and the comprehension questions. The team has decided to run a trial using text-to-speech applications during his instructional reading and social studies classes, each for four weeks. During the trial period, the team will keep copies of his responses to the comprehension questions as a means to document and compare progress in using the two text-to-speech applications.

Documentation of AT in the IEP

Once the team determines if and what AT tool or system is needed for a student to make progress on IEP goals or access the curriculum, the team should document this need within the student's IEP. Assistive technology can be documented in several places in the IEP. As the legal definition of assistive technology not only includes tools/systems but also services, it is critical that both components are documented to ensure quality implementation and access. Sections of the IEP in which a team may document the need for AT tools/systems and services include the following:

- Present levels of performance,
- IEP goals and objectives,
- Consideration of special factors,
- Related services, accommodations and modifications,
- Additional information, and
- Supports for school personnel.

For specific information and examples of documentation in the aforementioned areas, please reference the Illinois Assistive Technology Guidance Manual. It is important to note that specific tool names may only be listed in the present levels of performance. In all other locations of the IEP, only features of the assistive technology tools should be listed to describe the tool or system. This will allow the district to remain in compliance if the routinely used tool is not available (e.g., in need of repair) while assuring that the student will have access to assistive technology needed to make educational progress.

Resources Available for Illinois Educators

Every state or territory has an AT program that provides support for all IEP team members (including parents and students) in extending assistive technology knowledge and application. In Illinois, educational teams can seek out additional information about assistive technology through the following websites:

- Infinitec/Illinois School Assistive Technology Support
- Illinois Assistive Technology Program

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. These related service professionals such as speech-language pathologists, social workers, occupational therapists, and school psychologists, are vital in supporting students with dyslexia, as they provide essential expertise and interventions that address the multifaceted needs of these students and enhance their overall school and life experience.

The Role of Speech-Language Pathologists

Speech-Language Pathologists (SLPs) 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 learning to read.[192] As students move through school and reading and 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 so in high school.[193] 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 RtI/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 IEP 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 table can provide assessment guidance[194]:

[192] Spear-Swerling, 2006, Specific Language Impairment
[193] Fletcher & Lyon, 1998, Reading: A Research Based Approach
[194] Lowell, 2020, Dyslexia Assessment: What Is It and How Can It Help

Table 13: 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	• Auditory • Visual-auditory • Auditory short-term memory
Rapid Automatic Naming – speed of naming objects, colors, digits, or letters	• Time • Efficiency of recall
Receptive Vocabulary – understanding of words heard	• Vocabulary • Listening/language comprehension
Phonics Skills – understanding of the symbol (letter) to the sound(s) relationship, either individually or in combination with other letters	• Symbol recognition • Visual-auditory • Memory/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 language • Receptive language • Syntactic structure • 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.

The Role of a Social Worker

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 important indicators of the student's social-emotional state. The antecedent of the demands is critical in reviewing and assessment, especially when completing a Functional Behavioral Assessment (FBA). Students may act out, avoid, or display other various behaviors due to frustration, embarrassment, or negative self-image, possibly due to 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 past 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.

Working with Students and Families

Social workers play a crucial role in supporting students with dyslexia, especially those who are at-risk, demonstrating characteristics, or have received an external dyslexia diagnosis. They help guide both children and their families through the school system, ensuring that students receive the necessary interventions and resources for success.

During initial meetings with students, social workers should explore potential learning disabilities, including dyslexia and word reading challenges. It is important to understand that dyslexia might be present even without a formal diagnosis or label. Additionally, social workers must address the mental health challenges, such as depression and anxiety, that can arise from coping with dyslexia. For some students, a social worker may be the first person to guide them in self-advocacy. However, many

students with dyslexia struggle to advocate for themselves due to concerns about appearing "different," or because they do not have the skills to do so.[195]

> "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." [196]

Social workers can also assist parents and caregivers in preparing for conversations with teachers and school administrators about dyslexia. They can recommend community reading intervention programs and provide guidance on apps and materials that can be used at home to support school-based interventions.

Some key recommendations for social workers include the following[197]:

- Teach students self-advocacy skills,
- Find opportunities for development of skills and non-academic talents to enhance self-esteem, such as the arts or athletics, and
- Teach problem-focused coping skills and social skills.

Working with Teachers

Beyond working directly with students, social workers can advocate for students with dyslexia by educating teachers on how to address the social-emotional needs of students with this learning disorder and those with other learning challenges across all classrooms. Key recommendations include the following[198]:

- Validating students' emotions and ensuring their voices are heard,
- Offering various options and choices for class assignments, such as small group work or independent tasks,
- Normalizing the process of making mistakes,
- Emphasizing that students are more than their dyslexia and separating their identity from the condition,
- Utilizing mindfulness tools in the classroom such as Smiley Mind, Headspace, and Calm,
- Providing a connection time with teachers and parents (one-on-one if possible),
- Creating a calm corner in the classroom for students to decompress,
- Teaching grounding techniques (5 senses),
- Using visuals to communicate as necessary,
- Collaborating with families, and
- Providing praise.

Overall, service professionals are essential in supporting students with dyslexia and reading challenges. Social workers, along with other related school professionals such as occupational therapists and school psychologists, are some of the key professionals who can make a significant difference for students with dyslexia. By working together with related service professionals, educators, families, and the student, the educational team can provide accurate and effective support for the student.

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[195] Schelbe, et. al., 2021, Dyslexia in the Context of Social Work
[196] Moats & Darkin, 2008, Basic Facts About Dyslexia and Other Reading Problems
[197] Schelbe, et. al., 2021, Dyslexia in the Context of Social Work
[198] Schelbe, et. al., 2021, Dyslexia in the Context of Social Work

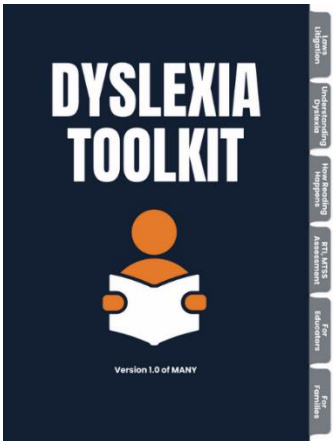
Bridge to Practice

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

Expanded Exploration: Linked Resources

- **Read:** What Is Structured Literacy? with Reading Universe
- **Listen: R**esearch **E**ducation **Ad**vocacy (READ) Podcast with Winward Institute
- **Explore:** The National Center on Improving Literacy Website



Discussion Questions

1. What are the key components of a Structured Literacy approach and why are they especially effective for students with dyslexia?
2. How might teachers adapt their instructional practices to better support students with dyslexia?
3. How does dyslexia affect writing development, and what specific instructional strategies can educators use to support students with dyslexia in writing tasks?

CHAPTER 7: GUIDANCE FOR EDUCATORS, ADMINISTRATORS, AND OTHER SCHOOL PERSONNEL SUPPORTING STUDENTS WITH DYSLEXIA: IMPLEMENTATION IN ACTION

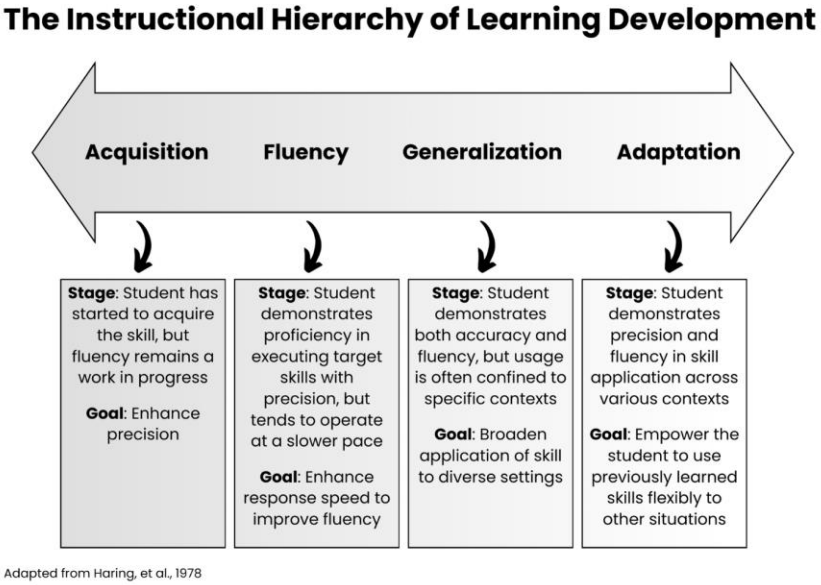
The educator holds a pivotal role, serving as the foundation of the learning process by directly engaging with students on a daily basis. It is essential for educators to be equipped not only with the understanding of how to identify students facing challenges in reading, such as those with dyslexia, but also with tangible, effective, evidence-based instructional strategies ready for immediate application in the classroom. Understanding and applying evidence-based strategies throughout all tiers of instruction is key to fostering academic achievement for all students, particularly those who may encounter difficulties with reading and writing.

In Illinois, we affirm the fundamental right of every learner to receive education that is both enriching and accessible, as outlined in the ISBE Comprehensive Literacy Plan.[199] Central to this commitment is the moral imperative to ensure that our Tier 1 instruction is not just of high quality, but also inclusive, differentiated, and firmly grounded in evidence-based approaches. This ensures that all students, including those with dyslexia, specific learning disabilities, and word recognition difficulties, have equitable access to literacy instruction.

The Instructional Hierarchy

When planning for instruction, at any tier, it is important to consider the *instructional hierarchy of learning development* (Figure 13). By identifying the phase students are in within the instructional hierarchy, educators can tailor practice and instruction to meet their specific needs.

Figure 13: The Instructional Hierarchy of Learning Development[200]



[199] ISBE, 2024, IL Comprehensive Literacy Plan
[200] Haring, et al., 1978

Errors, delayed responses, and inconsistent responses signal that a student is in the ***acquisition stage*** of learning, while students who read accurately but slowly are in the ***fluency-building phase***. Students who struggle with word reading are likely within the acquisition and/or fluency phase. Students who read both accurately and fluently are prepared for ***generalization***.[201]

Students in the Acquisition Phase of Learning

Students who fall within the acquisition phase of learning do not know how to perform a targeted skill. For example, a student who makes many errors when identifying sound-symbol correspondences would be considered to be within the acquisition phase of the learning hierarchy. Educators working with students within the acquisition phase of learning need to explicitly model and teach sound-symbol correspondences. Effective instruction during the acquisition phase includes designing task materials and teacher behavior to minimize errors and to promptly identify and address errors to prevent and correct student misunderstandings. The goal of instruction within this phase should be to build an accurate understanding of a specific skill. Without mastery of the targeted skill, students will not get to the fluency or generalization phases of learning. When teaching students in the acquisition phase, educators should utilize the following techniques:

- Frequent and high-level prompting and scaffolds,
- Corrective, immediate feedback,
- Many guided practice opportunities to ensure students will make few errors,
- Controlled presentation of skills, and
- Removing scaffolds and fading prompts once adequate responding occurs.[202] [203]

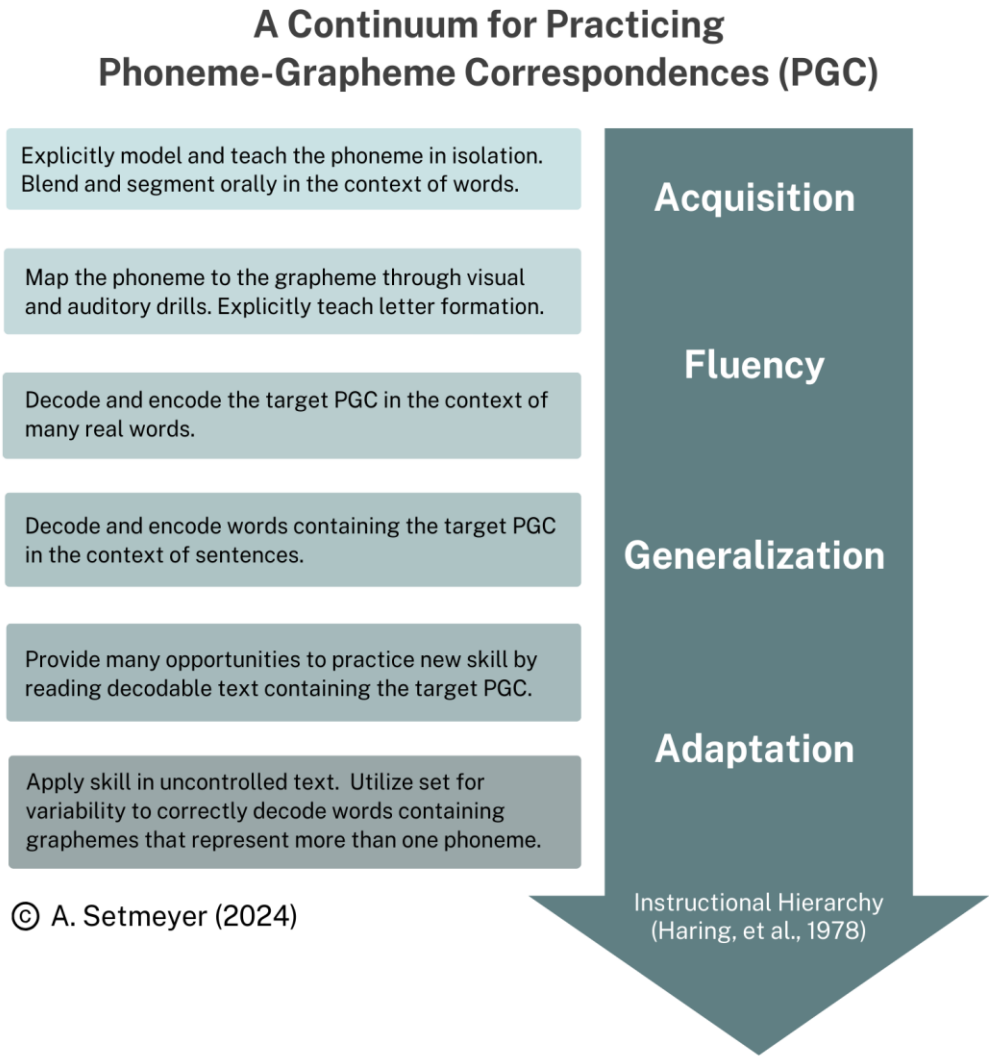
Students in the Fluency Phase of Learning

Students who fall within the fluency phase of learning have an understanding of the targeted skill, yet lack automaticity and fluency with said skill. Because of this, students require numerous repetitions and practice opportunities to transition from accuracy to automaticity.[204] For example, as seen in Figure 14, a student with dyslexia may have knowledge of sound-symbol correspondences, yet they are working on developing automaticity with the sound-symbol connection and with word, phrase, and sentence reading.[205] Practice within this phase is absolutely crucial, yet will look slightly different than the practice within the acquisition phase. Educators should utilize these methods:

- Intervals of practice such as
    - Visual & auditory drills,
    - Word chaining,
    - Decodable text, and
- Opportunities to respond (OTR)[206]

[201] Stollar, 2023, Using Assessment to Efficiently Match Students to Effective Practice
[202] VanDerHeyden & Burns, 2023, The Instructional Hierarchy
[203] Stollar, 2023, Using Assessment to Efficiently Match Students to Effective Practice
[204] Stollar, 2023, Using Assessment to Efficiently Match Students to Effective Practice
[205] Setmeyer, 2024, A Continuum for Practicing
[206] VanDerHeyden & Burns, 2023, The Instructional Hierarchy

Figure 14: A Continuum for Practicing Phoneme-Grapheme Correspondences



Students in the Generalization and Adaptation Phases

Students in the generalization and adaptation phases tend to make few to no errors, demonstrating a high level of accuracy and automaticity in their responses. Once students achieve mastery, they are more likely to transfer their skills to unfamiliar texts or related tasks without explicit instruction. At this stage, the teacher's role shifts from direct instruction to facilitating opportunities for application. While observing student performance, the teacher can intervene with support if necessary to ensure successful generalization.[207]

[207] VanDerHeyden & Burns, 2023, The Instructional Hierarchy

Evidence-Based Practices in the Tier 1 Setting

There are many evidence-based practices that support all learners, including students with specific learning disabilities, within the Tier 1 general education classroom. The following section highlights practices from the Illinois Comprehensive Literacy Plan that can be used for all learners, but are especially crucial for students with dyslexia, specific learning disabilities, and/or word recognition deficits. Though the examples that follow are limited to one per literacy component, it is important to note that this is not an exhaustive list and should not be implemented in isolation. Rather, all components should be integrated throughout literacy instruction. Additionally, research-based instruction should be utilized throughout all tiers of instruction in both general education and special education.

Explicit and Systematic Instruction

Explicit and *systematic* instruction is imperative to the skill development of both emerging readers and struggling readers. Within the framework of the instructional hierarchy, it is crucial to recognize that within the acquisition phase, during which students are grasping foundational skills and concepts, explicit and systematic instruction stands as the evidence-based approach essential for their progress. There are many aspects of explicit instruction that should be considered and implemented within a classroom setting; see Table 14 below for more detail.

Table 14: Explicit and Systematic Instruction[208]

Explicit Instruction	Systematic Instruction
Encourages active student participation	Is cumulative and diagnostic
Emphasizes clear communication that is free of ambiguity and minimizes cognitive overload	Scaffolds skills, beginning with those foundational to reading success
Maximizes student/teacher interaction, and offers timely feedback	Follows a planned scope and sequence of skills that progresses from easier to more difficult
Enhances long-term retention through purposeful practice techniques	Fosters deeper understanding and proficiency

Oral Language/Oracy

Language is the basis for reading development. A focus on language is a focus on literacy. *Oracy* can be defined as the skill of effective communication through rich vocabulary, complex syntax, and comprehension through dialogue. Beginning as soon as students enter preschool and continuing through 12th grade, educators should engage students in oral language activities to foster a rich vocabulary, critical thinking, and overall literacy skills.

[208] ISBE, 2024, IL Comprehensive Literacy Plan

Table 15: Example of Oral Language Evidence-Based Practice

Engage students in spoken language activities to expand vocabulary, construct sentences, and improve grammar proficiency.[209] [210] [211]	
Audience	**Tier 1 Grade Band:** PreK-12
What and Why	*Syntax* is the part of language that relates to the arrangement of words, phrases and clauses into sentences. Typically, students develop syntactic awareness as they listen, speak, read, and write sentences. As students increase their *syntactic awareness*, their ability to comprehend what they read increases. Students will practice expanding information about nouns or verbs by answering the questions when, where, what, which, and how. Depending on skill level, this can be done with pictures or phases.
How	Choose a list of verbs OR nouns related to the content students are learning. Explain to students that we can tell more about an action (verb) or a namer (noun) to make what is happening more interesting. To do that, we can answer a few questions about the action or namer.[212] For verbs, have students respond to the following questions: When? Where? How? For nouns, have students respond to the following questions: How many? What kind? Which one?
Additional Resources	Printable Video Explainer

Phonological Awareness

Many students with dyslexia have a deficit in the phonological component of language. *Phonological awareness* is the ability to hear, identify, and manipulate word parts and sounds within words. Research is clear that phonological awareness, and particularly phonemic awareness, is critical in order to understand the alphabetic writing system. For many of our students with dyslexia, the task of identifying, isolating, segmenting and blending individual sounds within words can be particularly challenging. This means that ensuring competency in *phonemic awareness* is necessary for these students.

[209] Yopp & Yopp, 2006, Informational Texts as Read-Alouds
[210] Herrera, et. al., 2021, Effectiveness of Early Literacy
[211] National Institute for Literacy, 2008, Developing Early Literacy
[212] Gillis & Eberhardt, 2018, Syntax Knowledge to Practice

Table 16: Example of Phonological Awareness Evidence-Based Practice

"Deliver explicit phonemic awareness instruction with a clear scope and sequence."[213] [214]	
Audience	**Tier 1 Grade Band:** PreK-2
What and Why	As early as PreK, educators can start to practice phonological awareness with students starting with rhyming and sentence segmentation. Within phonological awareness is a subset of skills called phonemic awareness. Phonemic awareness is the ability to hear, identify, and manipulate phonemes or sounds within words. Phonemic awareness serves a significant role in helping students grasp and apply the alphabetic system in reading and writing. Research shows that students with poor phonemic awareness skills in first grade are more likely to have reading difficulties in fourth grade.[215] When teaching phonemic awareness, it is most beneficial to focus on one or two phonemic awareness skills rather than 3 or more. Moreover, instruction in phoneme manipulation should include letters. Incorporating letters can strengthen letter-sound correspondence. Educators can utilize letters even if a student doesn't know their letters yet.
How	*Elkonin Sound Boxes*[216] Provide students with Elkonin Sound Boxes. This can be on paper, whiteboards, etc. To begin teaching phonemic awareness, start with words that contain two sounds such as CV (me) and VC (at) words. Gradually progress to more complex patterns like CVC, CCV, and CCVC words. Orally say the word. Have students repeat the word. Students can use Elkonin Boxes, letter tiles, and/or manipulatives to mark each sound they hear in the word. To extend, have students write the corresponding letter that represents the sounds that are heard within the word.
Additional Resources	Printable Video Explainer

[213] Cunningham, 1990, Explicit Versus Implicit Instruction
[214] Ehri, et al., 2001, Phonemic Awareness Instruction
[215] Pressley, Gaskins, & Fingeret, 2006, Instruction and Development of Reading Fluency
[216] US Department of Education, 2003, Identifying and Implementing Educational Practices

Word Recognition

In addition to a deficit with phonological awareness, an additional primary characteristic of dyslexia is difficulty at the word level when reading and/or spelling. *Word recognition* refers to the efficient, accurate identification and ability to read words. This provides the basis for reading comprehension. All good readers are good decoders.[217] From the very beginning of early literacy instruction, educators must "deliver explicit, direct phonics instruction that follows a clear scope and sequence" and "provide explicit spelling instruction aligned with phonics."[218]

Table 17: Example of Word Recognition Evidence-Based Practice

"Deliver explicit, direct phonics instruction that follows a clear scope and sequence" and "provide explicit spelling instruction aligned with phonics"[219] [220] [221]	
Audience	**Tier 1 Grade Band:** K-5
What and Why	Research indicates that students' decoding skills improve when phonics instruction is provided in a systematic and explicit manner.[222] Additionally, there is a vital connection between spelling and reading. Both skills rely on the same mental representation of a word, so knowing how to spell a word strengthens the representation, making fluent reading more accessible.[223] Not only does including spelling support decoding, but "the correlation between spelling and reading comprehension is high because both depend on a common denominator: proficiency with language."[224]
How	*Word chaining* is an instructional strategy that supports phonemic awareness, as well as decoding and encoding skills. Educators can implement this strategy once students have acquired knowledge of sound-symbol relationships. It is important to use a *systematic* and *cumulative* phonics scope and sequence when teaching phonics concepts. Although there is not a single best scope and sequence, this is an example. To word chain, the teacher starts by saying a word that fits within the targeted phonics pattern. Students write down the word. They can use Elkonin Boxes as a scaffold. Then, the teacher changes one sound in the word and says the new word. Students write the new word by changing just one sound and its corresponding letter(s). This continues on for several rounds. As students are writing, the teacher circles the room giving immediate and corrective feedback.

[217] Lyon, 2023, Ten Maxims
[218] ISBE, 2024, IL Comprehensive Literacy Plan
[219] Cardenas-Hagan, 2018, Cross-Language Connections
[220] Rayner, et al., 2001, How Psychological Science Informs
[221] Ehri, et al., 2001, Systematic Phonics Instruction
[222] Foorman, et al., 1998, The Role of Instruction in Learning to Read
[223] Snow, Griffin, & Burns, 2005, Knowledge to Support the Teaching of Reading
[224] Joshi, et al., 2009, How Words Cast Their Spell

	Example - CVC words with emphasis on medial vowel sounds: **Teacher:** The word is dog. Repeat. **Students:** Dog. **Teacher:** Unblend. **Students:** /d/ /o/ /g/ **Teacher:** Write it. *Teacher circles the room providing support and feedback as necessary.* **Teacher:** Change dog to dig. Repeat. **Students:** Dig. **Teacher:** Unblend **Students:** /d/ /i/ /g/ **Teacher:** Write it. *Teacher circles the room providing support and feedback as necessary.* **Teacher:** Change dig to dug. Repeat. And so on and so forth, continuing for several rounds.
Additional Resources	Printable Video Explainer

Fluency

Fluency can be defined as reading words at an adequate rate, with a high level of accuracy, appropriate expression, and understanding. Fluency serves as a bridge between decoding and reading comprehension. While fluency supports comprehension, fluency on its own is not enough for comprehension. In addition to fluency, students must have robust language comprehension to support their overall understanding. Students with dyslexia oftentimes struggle with fluency because of the deficit at the word level when reading.

Table 18: Example of Fluency Evidence-Based Practice

"Promote repeated oral reading practices"[225] [226] [227] [228]	
Audience	**Tier 1 Grade Band:** K-5
What and Why	There are three components that are involved in achieving reading fluency: *accuracy*, *rate*, and *prosody*.[229] Before achieving passage reading fluency, educators must be cognizant of accuracy and automaticity at the sub-skill level including letters, letter-sound correspondences, words, phrases, and sentences. When working on building fluency, the repeated reading strategy

[225] Dowhower, 1987, Effects of Repeated Reading
[226] Herman, 1985, The Effects of Repeated Reading on Reading Rate
[227] Rashotte & Torgesen, 1985, Repeated Reading and Reading Fluency
[228] Rasinski, 1990, Effects of Repeated Reading and Listening
[229] Hudson, et al., 2005, Reading Fluency Assessment and Instruction

	works on all three components of fluency: accuracy, rate, and prosody.
How	In a Tier 1 classroom, *repeated reading* can be effectively implemented in small groups or pairs to enhance fluency. The process involves having students read a text at least three times. There are various components involved in using the technique of repeated reading, including timing *words correct per minute (WCPM).* Here is a structured approach to the repeated reading procedure: 1. **Select a passage:** Choose a text between 50-200 words that students can read with few errors. 2. **Model fluent reading:** The teacher first models fluent reading of the passage. 3. **Student Reading:** Students then read the passage aloud. If a student encounters an unknown word, the teacher waits three seconds before providing the word. 4. **Debrief:** Once finished with the first read, discuss accuracy, rate, and prosody. 5. **Repetition:** Students read the passage two more times. 6. **Progress Monitoring:** Use a chart to help students track their progress and set goals. This procedure supports students in improving their reading fluency through practice and feedback.
Additional Resources	Printable Video Explainer

Vocabulary

Vocabulary acquisition begins early in life through conversations. Vocabulary includes word knowledge of both oral vocabulary (words we use when speaking and listening) and reading vocabulary (words we use in reading and writing) for effective communication. Students often have an easier time decoding words that are in their oral vocabulary; therefore, vocabulary not only supports reading comprehension, but decoding as well. While students with dyslexia or word recognition deficits struggle with decoding and encoding, oftentimes this leads to secondary consequences such as reduced vocabulary knowledge. It is important to be cognizant of students' vocabulary knowledge in order to inform instruction.

Table 19: Example of Vocabulary Evidence-Based Practice

"Instruct in word-learning strategies related to morphology, word parts, grammar, and syntax."[230] [231]	
Audience	**Tier 1 Grade Band:** 3-12

[230] Mancilla-Martinez, et. al., Investigating English Reading Comprehension
[231] Crosson, et al., 2021, Morphological Analysis Skills

What and Why	Vocabulary is crucial in being able to understand text. Educators can enhance students' word learning skills through instruction in *morphology*. A *morpheme*, the smallest meaningful unit of a word, includes affixes, roots, and base words. As students encounter multisyllabic words, understanding these morphemes and how morphemes work together can help them connect the words to their meanings, which ultimately leads to greater comprehension of the text. While initially the teaching procedure will be explicit and guided, ultimately, the goal is for this to become a *metacognitive* strategy that students use when reading text.
How	While there is not one scope and sequence for teaching morphology, educators should be cognizant of the morphemes that come up frequently in grade-level text. After explicitly teaching the meaning of a morpheme, allow students to think about, build, and write words that contain that morpheme. It is also important to note that educators can begin teaching morphemes and syntax orally as early as preschool, while parents and caregivers can support this development as early as birth. **Example:** Teach students about the suffix -er. Explain that adding -er to the end of a word makes it a comparative adjective, meaning "more." Provide students with index cards or paper containing previously learned morphemes (affixes, roots, and bases). For example, use cards that include suffix -er with bases such as "tall" and "fast" so that students can build the words "tall-er" and "fast-er." In pairs or independently, students will create real words using these morphemes along with the new suffix -er. Then, have students discuss the possible meanings of the created words based on their understanding of morphemes. Students can share their words with the class. To extend the activity, have them write a sentence or paragraph using words that they built with the morphemes.
Additional Resources	Printable Video Explainer

Comprehension

Ultimately, comprehension is the goal of reading. As readers, we must make sense of the text that we read. Instruction in foundational skills, vocabulary knowledge, and syntax are all required for successful comprehension. While comprehension is not the main challenge for individuals with dyslexia, it can still be affected. If a student's dyslexia-related deficits are not addressed promptly and effectively, and if appropriate accommodations are not provided, comprehension deficits can arise as a secondary consequence.

Table 20: Example of Comprehension Evidence-Based Practice

"Teach strategies like summarizing, visualizing, and questioning."[232] [233]	
Audience	**Tier 1 Grade Band:** K-12
What and Why	"The ultimate goal of reading is comprehension."[234] Comprehending a text will then foster critical and analytical thinking skills. While comprehension cannot be reduced to a single skill, "it is the orchestrated product of a set of linguistic and cognitive processes operating on text and interacting with background knowledge, features of the text, and the purpose and goals of the reading situation."[235] Needless to say, comprehension is complex and requires various metacognitive skills to be employed while fluently reading various types of text. While some students may learn to use these processes fairly easily, many students will benefit from explicit instruction in the processes of thinking before, during, and after reading to monitor their understanding of a text.[236] Additionally, it is the job of educators to scaffold strategies so that students go from passive to active readers. *Summarization*, when combined with knowledge, is an invaluable tool for enhancing comprehension. It requires students to identify key ideas, synthesize information, and articulate concise statements. Although summarizing is only one strategy and should be used alongside knowledge building, research indicates that pausing to summarize during reading significantly boosts understanding.[237]
How	*Paragraph shrinking* is an instructional strategy that is often paired with partner reading. This instructional strategy allows students to monitor their own comprehension while they read, focus on the main idea of each paragraph, pay attention to important details, and elaborate on content. This practice is most effective when used while reading text to build knowledge. Like any instructional strategy, this will need to be explicitly modeled first followed by the gradual release of responsibility. As students read in pairs, they pause after each paragraph to ask these questions: 1. Who or what is this paragraph about? 2. What is the main idea about the who or what?

[232] Duke & Pearson, 2002, Effective Practices for Developing
[233] Yopp & Yopp, 2006, Information Texts as Read-Alouds
[234] Nation, 2009, Reading Comprehension and Vocabulary
[235] Castles, et al., 2018, Ending the Reading Wars
[236] Shanahan, et al., 2010, Improving Reading Comprehension
[237] Shanahan, et al., 2010, Improving Reading Comprehension

	3. Write the main idea in 10 words or less. As partners work together, the teacher needs to monitor, offering corrective feedback and scaffolding as needed.
Additional Resources	Printable Video Explainer

Writing

Writing is the clear expression of thoughts and ideas through text which involves various skills including *transcription* and *translation*. Transcription skills include handwriting, spelling, conventions, and keyboarding, while translation skills include grammar, morphology, sentence structure, syntax, the writing process, audience awareness, and text structure. Writing can help students improve their thinking and ability to reflect deeply when engaging with content. It is also a skill which directly interacts with reading; reading can help students to improve in writing, and writing can help students improve in reading. Since students with dyslexia may find spelling difficult, they also may struggle with multiple components of writing, including handwriting, word choice, and organization.

Table 21: Example of Writing Evidence-Based Practice

"Instruct explicitly in handwriting, including cursive."[238] [239]	
Audience	**Tier 1 Grade Band:** PreK-2
What and Why	Writing is a skill that is required of all students throughout their entire academic career. To be able to write effectively, students have to master the ability to write with fluency and legibility.[240] While there are some students who may be able to learn how to form their letters by observing how they look, the majority of students require explicit instruction on how to write, especially those who have been identified with disabilities.
How	Using consistent, student-friendly handwriting procedures can help students learn how to form their letters in the correct way. When teaching students how to form their letters, start by modeling exact procedures about which part of a letter to write first. Letters that have numbered arrows showing the order and direction of each pencil stroke are great visual tools to help accomplish this. Additionally, using consistent language to describe what is happening with each pencil stroke can help students understand what is going on. Consider labeling the parts of a line to help students conceptualize what is happening:

[238] Graham & Herbert, 2010, Writing to Read

[239] Datchuk, et al., 2015, Effects of Sentence Instruction

[240] Santangelo & Graham, 2015, Meta-analysis of Handwriting Instruction

	● Hat - the top line ● Belt - the middle line ● Shoe - the bottom line While the exact labels that are used may change from person to person, it is essential to make sure that whatever terminology is decided upon remains consistent. In other words, the general educator, interventionist(s), or any other related service professionals who work with a child should use the same language to reduce confusion for students. Additionally, this language should be shared with caregivers so that it can be used at home. In practice, explicit handwriting instruction may sound something like this: ● Today we are going to learn how to write an uppercase A. ● Step one is to put your pencil on the shoe line and draw a slightly diagonal line all the way to the hat. ● Step two is to draw a second diagonal line from where your pencil is all the way down to the shoe line. You do not need to pick up your pencil for this line. ● Step three is to pick up your pencil and draw a line on the belt line connecting the two lines you just wrote. As you teach this procedure, show models of the uppercase A with numbered arrows outlining the procedures and explicitly model each step of the process for the students. Students who need additional support may benefit from tracing letters before writing them independently, though this scaffold should be removed as soon as appropriate.
Additional Resources	Printable Video Explainer

For additional evidence-based practices in all components of literacy in the Tier 1 classroom, explore the Illinois Comprehensive Literacy Plan. The practices listed above are just a starting point.

Although there is no one-size-fits-all approach to teaching reading, starting with evidence-based practices is highly effective. Additionally, many students, including students with dyslexia or a specific learning disability in reading, will benefit from differentiation in the Tier 1 classroom.[241]

Differentiation could look like this:
- Using explicit teaching procedures,
- Clarifying both written and spoken directions, even if you think that they are simple,
- Presenting work in small chunks,
- When presenting a lot of information at once, highlight what is essential,

[241] International Dyslexia Association, 2017, Dyslexia in the Classroom: What Every Teacher Needs to Know

- Providing ample opportunities for practice,
- Utilizing graphic organizers when possible,
- Combining verbal and visual information,
- Entwining mnemonic devices into instruction,
- Reviewing the previous day's content every day, and
- Having clear and consistent procedures and expectations.

Structured Literacy Intervention in Action

If a student needs support beyond Tier 1 core instruction, a skilled educator must provide the intervention. The following section outlines structured literacy intervention guidelines, procedures, instruction, and assessment for K-2nd grade and 3rd-12th grade.

Using Assessment to Guide Instruction

Prior to beginning Tier 1 classroom instruction, it is essential for general educators, special educators, and interventionists to analyze screening or benchmark data, along with any historical or diagnostic data related to student reading proficiency. Analyzing this data allows educators to identify class-wide skill gaps and pinpoint students who require additional support through targeted interventions.

When analyzing data, it is helpful to have a data analysis tool to determine instruction and intervention. See an example of a data analysis tool here.

Guidelines for Intervention Instruction

Any student can receive intervention, regardless of whether or not they have an IEP. These interventions are determined based on student needs through careful analysis of student, classroom, and school data. It is crucial that the educator delivering the intervention possesses a strong knowledge base and effectively utilizes a learning progression to develop skilled readers and writers.[242] Furthermore, the educator delivering the intervention must be proficient in analyzing data to guide and inform their instructional decisions.

Intervention Curriculum and Instructional Programs

Intervention instruction should be based on evidence-based curriculum resources and practices. Districts and schools are strongly encouraged to use curriculum resources that have shown strong evidence of effectiveness. To learn more about evaluating whether an educational intervention is supported by evidence, see Identifying and Implementing Educational Practices Supported by Rigorous Evidence. For some, an audit of intervention curriculum may be necessary. The Hexagon Discussion and Analysis Tool from the National Implementation Research Network or the Academic Rating Rubric from NCII are helpful for that. Additional information regarding evidence-based interventions can be found in Chapter 6.

Instruction

While instruction throughout all tiers, including special education, should be research-based, educators providing reading interventions should ensure they are utilizing evidence-based teaching practices in combination with the school's identified intervention program. Additionally, all educators providing intervention need to ensure the intervention program is aligned to Tier 1 instruction and curriculum.

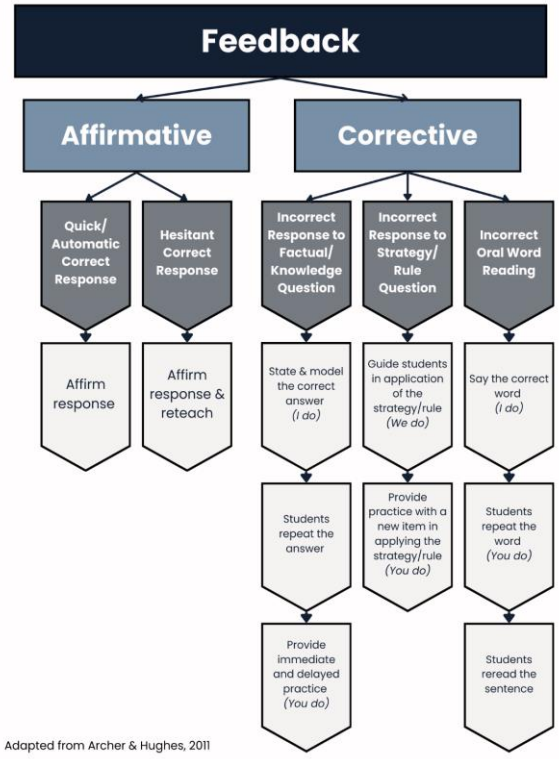
[242] St. Martin, et al., 2020, Intensifying Literacy Instruction

There are several critical components to consider when planning for intervention strategies and procedures including the following:[243]

- Utilize explicit instruction following the gradual release of responsibility,
- Provide many practice opportunities with immediate affirmative and corrective feedback (see below),
- Build in cumulative review based on previously learned concepts,
- Monitor the progress of students through analyzing progress monitoring data to inform instruction,
- Group students in intervention based on specific skill deficit,
- Allocate appropriate time for intervention,
- Ensure there is an appropriate student-teacher ratio,
- Select an intervention that is appropriate for the identified target skill according to the instructional hierarchy,
- Embed active engagement,
- Manage necessary documentation of intervention,
- Identify baseline performance of students,
- Set a specific goal in regard to student improvement, and
- Ensure progress monitoring data is collected to determine if the intervention is successful.

Immediate, Targeted, Affirmative and Corrective Feedback

Immediate, effective feedback is crucial for enhancing student learning, especially within an intervention setting. Feedback is a straightforward practice that demands minimal preparation, yet yields substantial benefits for students.[244] Researchers have pinpointed several elements of valuable and impactful feedback; it should be goal-oriented, constructive, immediate, and respectful.[245] To help ensure feedback is effective whether it be affirmative or corrective, see Figure to the right.



Responsive Instruction and Intensification

An educator delivering any intervention must offer responsive instruction. If progress monitoring data indicates that a student is not making adequate progress for a sufficient amount of time, the instruction should be adjusted accordingly. Through use of the NCII's Intervention Intensification Checklist, educators and teams can make decisions to intensify the intervention based on student need using a variety of methods:

- Strength: The evidence of intervention effectiveness
- Dosage: The number of opportunities a student has to respond and receive feedback from the teacher

[243] Wright, 2010, Academic Interventions Critical Components Checklist
[244] Hattie & Timperley, 2007, The Power of Feedback
[245] Kennedy, et al., 2018, High-Leverage Practices

- Alignment: How well the intervention matches the targeted skill deficit
- Attention to Transfer: If the intervention is designed to support students in making connections between skills taught in the intervention and other contexts
- Elements of Explicit Instruction: How well the intervention incorporates elements of explicit instruction
- Behavior, Engagement, and Motivation Support: If the intervention incorporates behavioral strategies that supports students' overall ability to learn

Additionally, adjustments may be required, such as having the intervention delivered by a more experienced specialist or completely changing the intervention itself.

Throughout the next sections, case studies will be presented to demonstrate what the process looks like from assessment through intervention. These sections have been divided into two grade bands: K-2nd and 3rd-12th.

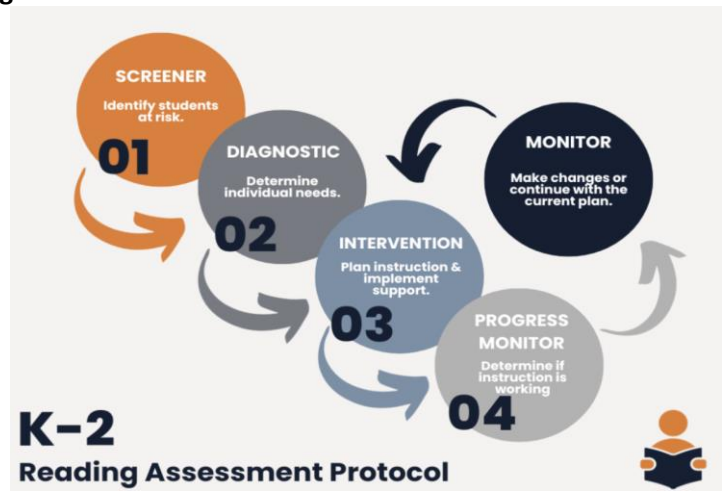
From Assessment to Intervention in K-2nd Grade

When young students are not making adequate progress in the Tier I setting, early intervention is critical to their success. This process should begin the first time that screening data indicates that a student might be at-risk; however, when a student initially begins school, there are additional considerations that warrant special attention.

When screening students in kindergarten, it is important to consider the "*floor effect*." Research indicates that conducting screening early in the school year for kindergarteners can lead to many children scoring at the lower end of the scale due to lack of exposure or developmental maturity, thus causing a high rate of overidentification, particularly among students without preschool experience.[246]

While districts and schools may use different screeners and progress monitoring assessments, the following information can serve as a guide for educators to interpret their data effectively. Additionally, keeping in mind that screeners are only the first look at a student's potential reading abilities, educators can move through the process of assessment to intervention; Figure 15 outlines this process.

Figure 15: K-2 Reading Assessment Protocol



[246] MA Department of Elementary and Secondary Education, 2021, Massachusetts Dyslexia Guidelines

Screening

The first step in determining whether a student requires additional support in reading is to administer an early literacy screener. The purpose of a screening tool is to identify students who are potentially at-risk for reading failure. The screener should assess all skills relevant to early reading proficiency including these:

Table 22: Screener Skills 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 Automatized Naming assessment measure) ● Spelling (end of kindergarten)
First Grade	● Phonemic awareness segmentation task ● Phonological processing task (Rapid Automatized Naming assessment measure) ● Non-word reading fluency ● Word-reading fluency ● Oral reading fluency ● Spelling
Second Grade	● Word-reading tasks ● Oral reading fluency ● Spelling

Once a screener is administered, results should be analyzed for "red-flags," or students who are achieving below and significantly below the benchmark for the assessment. Data from the screener may suggest that a student is struggling in the areas of word recognition or language comprehension. Generally, students who have dyslexia or who demonstrate signs of dyslexia show deficits in the word recognition piece of reading, which encompasses alphabetic coding skills, concepts about print, knowledge of the *alphabetic principle*, letter knowledge, and phonemic awareness.

Early literacy screener results are typically generated by the program being used in one of two ways: an overall *composite score* or a breakdown of scores for each area assessed. Tables 23 and 24 below are examples of screening results from a 1st grade class using each of the two formats; this sample data will act as the starting point for the case study that follows.

Table 23: 1st Grade Screening Data with Composite Score

Student	Grade	Composite Score
1	1st	123 (Minimal Risk)
2	1st	121 (Minimal Risk)
3	1st	23 (At-Risk)
4	1st	115 (Minimal Risk)
5	1st	103 (Some Risk)
6	1st	64 (At-Risk)
7	1st	107 (Some Risk)
8	1st	127 (Minimal Risk)
9	1st	128 (Minimal Risk)
10	1st	101 (Some Risk)

Table 24: 1st Grade Screening Data Broken Down by Area[247]

Student	Grade	Letter Naming Fluency	Phoneme Segmentation Fluency	Nonsense Word Fluency		Word Reading Fluency	Reading Composite
				Correct Letter Sounds	Whole Words Read		
1	1st	42	45	45	16	18	Minimal Risk
2	1st	45	45	46	15	19	Minimal Risk
3	1st	2	5	10	0	1	At-Risk
4	1st	43	44	46	17	19	Minimal Risk
5	1st	38	31	30	5	9	Some Risk
6	1st	30	14	19	2	7	At-Risk
7	1st	41	30	29	2	8	Some Risk
8	1st	45	47	46	15	20	Minimal Risk
9	1st	45	43	47	20	21	Minimal Risk
10	1st	40	31	25	4	9	Some Risk

[247] Acadience, Learning Inc., 2011, Acadience Assessment Manual

Stop and Think	Which students would you pull for further testing?
	Looking at the screening results from Tables 23 and 24, it is apparent that students 3 and 6 are performing below what is expected, so they have been labeled as "at-risk". Additionally, Students 5, 7, and 10 also scored in a range that suggests that they may be at-risk; they have been identified as "some risk". It is possible that these students may need intervention in reading, but that decision should not be made on this single data point alone. More information should be collected to determine whether each of these students requires reading intervention.

Diagnostic Assessments

Step two of the reading assessment protocol for students in grades K-2 is to administer a diagnostic assessment to students who are at-risk of reading difficulties. The purpose of a diagnostic assessment is to dig deeper into what is happening with a student to identify if intervention is necessary; ultimately, it is an assessment used to determine the root cause of a reading deficit. It is important to note, though, that if the majority of students in a class fall "below benchmark" on their early literacy screener, then there is likely a Tier 1 issue that needs to be addressed rather than attempting to complete a diagnostic for every student. When reviewing early literacy screening data, if a classwide issue in Tier 1 instruction is identified, consult the Illinois Comprehensive Literacy Plan for evidence-based strategies that can be applied in your classroom.

There are many diagnostics available for administration. Some of them include the Core Phonics Survey, the Phonological Awareness Skills Test, and the Quick Phonics Screener. When administering a diagnostic assessment, it should be individually administered to students. These assessments do not generally take a lot of time to administer, but they help determine if intervention is necessary, as well as what specific skills the intervention should target and beginning at what point. It is also important to note that diagnostic assessments come with administration directions that outline what the assessment is, how to administer it, and what sections to administer based on student grade level. Additionally, oftentimes diagnostic instructions also come with important notes regarding scoring for students who speak languages other than English as their primary language as well as bidialectal students.

The screening results above indicated that Students 3, 5, 6, 7, and 10 were all at-risk, or potentially at-risk of reading problems. Although both composite score and expanded screener results are presented, the process of administering a diagnostic assessment will be explained for clarity. Like previously stated, Students 3, 5, 6, 7, and 10 are at-risk, so a diagnostic assessment should be given to each of them. Table 25 outlines each student's diagnostic assessment results.

Table 25 - Diagnostic Assessment Results

1st Grade Diagnostic Assessment - Administered August 27, 2020						
Student	Letter names - uppercase	Letter names - lowercase	Consonant sounds	Long vowel sounds	Short vowel sounds	Short vowels in cvc words
3	13/26	10/26	4/21	0/5	2/5	2/15
	Letter Names and Sounds - 29			Word Reading - 2		
5	23/26	21/26	15/21	3/5	5/5	9/15
	Letter Names and Sounds - 67			Word Reading - 9		
6	17/26	13/26	10/21	2/5	3/5	5/15
	Letter Names and Sounds - 45			Word Reading - 5		
7	26/26	26/26	19/21	4/5	5/5	11/15
	Letter Names and Sounds - 80			Word Reading - 11		
10	25/26	26/26	16/21	5/5	5/5	5/15
	Letter Names and Sounds - 77			Word Reading - 5		

Once a diagnostic assessment is administered and scored, it can be analyzed for a student's strengths and deficit areas. Knowing this information will allow an educator to make a data-informed decision about whether or not a student needs intervention, as well as potentially how far behind the student is from their peers. In the example above, all four students demonstrate deficiencies in letter names and sounds, word reading abilities, or both.

Stop and Think	**Where would you begin instruction for each of the students?**
	To determine where intervention should begin, examine the continuum of skills that were assessed in the diagnostic and find the most foundational skill in which the student did not demonstrate proficiency. It is important to look at each student's data individually to form intervention groups based on similar skill deficits. In the case above, it would be beneficial to place Students 3 and 6 in an intervention group since they are both struggling to consistently identify letter names and sounds. This group may be composed of only these two students, or students from other classes who are demonstrating similar deficits may be included in the group as well. It would not be appropriate for Students 5, 7, and 10 to be in the same group since they are consistently doing well with letter names and are more successful with consonant sounds than the other students, though students 5 and 10 have similar skill needs and could be grouped together. Both students have some consonant sounds that they do not know, and neither read short vowels in

	CVC words effectively. Though Student 7 was flagged on the screener as potentially at-risk, the diagnostic assessment suggests that intervention may not be warranted. The student is able to identify letter names, letter sounds, vowel sounds, and read most CVC words. In this case, Student 7 should be monitored during class to ensure progress continues to be made and if concerns arise, they should be addressed at that time.

Intervention

As emphasized in Chapter 6, when working with students with or at risk for dyslexia, it is imperative to utilize a structured literacy approach. As a reminder, students with dyslexia have issues at the word level, so intervention will need to be focused on reading and spelling words and connected text. The following lesson plan template can be used as a resource to guide intervention. If an intervention program for word recognition difficulties is being used, it is important to ensure that it includes the lesson plan components in addition to multiple meaningful practice opportunities. When planning for intervention, it is necessary to utilize screening and diagnostic data to pinpoint deficit areas in which the student needs support. Additionally, educators delivering the intervention must understand that students require various practice opportunities to effectively develop their skills. While some students may require a handful of practice opportunities, other students may require a multitude of practice opportunities. Each student will differ. Moreover, it is crucial to align the scope and sequence used in the intervention with that used in the Tier 1 setting.

The following practices, previously emphasized in this chapter, are essential components of a strong Tier 1 instructional environment. While these practices are crucial in Tier 1, it is important to ensure that interventions align with the Tier 1 curriculum, as these same practices should be emphasized during interventions dependent on student need. In an intervention setting, however, their application must be reinforced and intensified to help students make sufficient progress. Educators can apply the Instructional Hierarchy to guide this process, focusing first on accuracy, then automaticity, and finally generalization to determine the appropriate types of practice and responses needed for student success.

Phonemic Awareness and Letter Knowledge

In the early stages of learning to read, phonemic awareness and letter knowledge (including letter-sound and sound-letter knowledge) are critical skills. For students at risk in these areas, it is essential to focus on closely developing both phonemic awareness and letter knowledge. Early activities centered on *phoneme segmentation* and word spelling can effectively enhance word decoding skills.[248] Moreover, letters should be incorporated into phonemic awareness instruction for students starting in kindergarten and continuing through subsequent grades.[249] [250]

Phonics, Spelling, and Irregular Words

It is clear that explicit, systematic phonics interventions for reading and spelling words are highly effective (see Chapter 6). When providing intervention, it is important to include both reading and spelling of words. Initial spelling instruction should be aligned with phonics instruction so that students practice spelling the sound-symbol correspondences that they are learning to decode. Intervention

[248] Herron & Gillis, 2020, Encoding as a Route to Phoneme Awareness and Phonics
[249] Brady, 2020, A 2020 Perspective on Research Findings on Alphabetics
[250] National Reading Panel, 2000, Teaching Children to Read

should address both phonetically regular words and irregularly spelled words– those that do not adhere to typical phonics patterns.

Fluency

It is important to recognize how fluency influences the development of proficient reading in our youngest learners. Focusing on building *automaticity* with essential word-reading skills such as recognizing letter sounds, sound combinations, and *irregular words* will lay a strong foundation for the fluent reading of text. Initially, this can be practiced at the letter or word level but then increased to phrase and sentence level. Additionally, decodable text can be utilized to practice phonics concepts to move students from the acquisition and fluency phases to the generalization phase in which students have mastered the target phonics concept.

Writing

Many students with dyslexia excel at generating ideas for writing but often face challenges in both transcribing and translating those thoughts into written form due to difficulties with foundational writing skills. This is likely due to the fact that students with dyslexia often struggle with sound-symbol correspondence, which is essential for writing. Students with dyslexia often have difficulty composing written pieces since they are spending a lot of time and mental energy on the physical act of writing rather than the development of a piece. To address this, it is essential to include explicit instruction in basic writing skills such as handwriting, capitalization, punctuation, and sentence structure as part of their intervention.

What Now?

While districts are encouraged to have an established, research-based intervention program, there are several evidence-based practices that can be used for districts that do not or as a supplement to what is already in place. Listed below are examples of instructional strategies that can be incorporated into intervention to ensure students are given meaningful practice opportunities, helping them to move from the acquisition phase of learning to generalization.

Table 26: K-2 Teaching Tips for Students Who Struggle with Word Recognition

Instructional Strategy	Targeted Support in:	Printable + Video Explainer
Decoding Strategy	**Word Recognition** • Sound-Symbol Correspondence • Phonics • Decoding	Printable Video Explainer
Alphabet Arc	**Word Recognition** • Letter Identification • Sequencing • Directionality	Printable Video Explainer
Visual Drills	**Word Recognition** • Sound-Symbol Correspondence • Phonics	Printable Video Explainer

	• Letter-Sound Fluency	
Elkonin Boxes	**Phonological Awareness** **Word Recognition** **Writing** • Phonemic Awareness • Decoding • Encoding • Handwriting	Printable Video Explainer
Spelling Dictation Procedure	**Phonological Awareness** **Word Recognition** **Writing** • Phonemic Awareness • Decoding • Encoding • Handwriting • Writing	Printable Video Explainer
Auditory Drills	**Phonological Awareness** **Word Recognition** • Sound-Symbol Correspondence • Phonics • Encoding	Printable Video Explainer
Word Chaining	**Phonological Awareness** **Word Recognition** • Phonemic Awareness • Letter Knowledge • Phonics • Encoding	Printable Video Explainer
Rapid Word Recognition Chart Generator	**Word Recognition** **Fluency** • Letter Knowledge • Phonics • Fluency	Printable Video Explainer
Handwriting Visual Cues	**Word Recognition** **Writing** • Letter Knowledge • Encoding • Handwriting	Printable Video Explainer
Cover-Copy-Compare	**Word Recognition** • Decoding	Printable Video Explainer

	• Encoding • Irregular Words	
Note: There are several additional resources that can be used to find evidence-based practices including, but not limited to Reading Rockets, Reading Universe, and Florida Center for Reading Research.		

Based on the results from the early literacy screener and diagnostic assessments, Students 3 and 6 will need an intervention targeting phonemic awareness, letter recognition, letter sounds, and foundational decoding and encoding skills. While Students 5 and 10 also require support in these foundational areas, their intervention will begin further along the scope and sequence. According to the data, Students 5 and 10 have already mastered most letter-sound correspondences, allowing them to start at a more advanced point in the skill sequence.

Stop and Think	**What type of progress monitoring should be done for each of the students?**
	In the case above, Students 3 and 6 were given weekly phoneme segmentation and nonsense word fluency probes with a long-term goal of moving them towards weekly oral reading fluency probes as the year progresses. Students 5 and 10 were given the same phoneme segmentation and nonsense word fluency progress monitoring assessments; however, since they were more advanced with letter-sound correspondences, the phoneme segmentation assessment was phased out as they mastered the skills in which they were once behind.

Progress Monitoring

As an intervention is being implemented, progress monitoring data needs to be collected in order to assess the intervention's effectiveness. Generally, having 7 to 10 data points will provide a clear picture of whether the intervention is achieving its intended outcomes. When students demonstrate skill deficits in K-2, intervention and progress monitoring needs to focus on each individual area to accurately measure growth. The tables and figures below outline student progress over 7 weeks of data collection.

Table 27: Students 3 and 6 Progress Monitoring Data[251]

	Student 3			**Student 6**		
	Phoneme Segmentation Fluency	Nonsense Word Fluency		Phoneme Segmentation Fluency	Nonsense Word Fluency	
		Correct Letter Sounds	Whole Words Read		Correct Letter Sounds	Whole Words Read
Week 1	5	10	0	14	19	2
Week 2	4	10	0	16	19	2
Week 3	6	9	0	20	22	3

[251] Acadience, Learning Inc., 2011, Acadience Assessment Manual

Week 4	5	8	0	25	22	3
Week 5	3	10	0	27	23	4
Week 6	2	7	1	27	25	5
Week 7	4	8	0	26	25	5

Figure 16: Students 3 and 6 Progress Monitoring

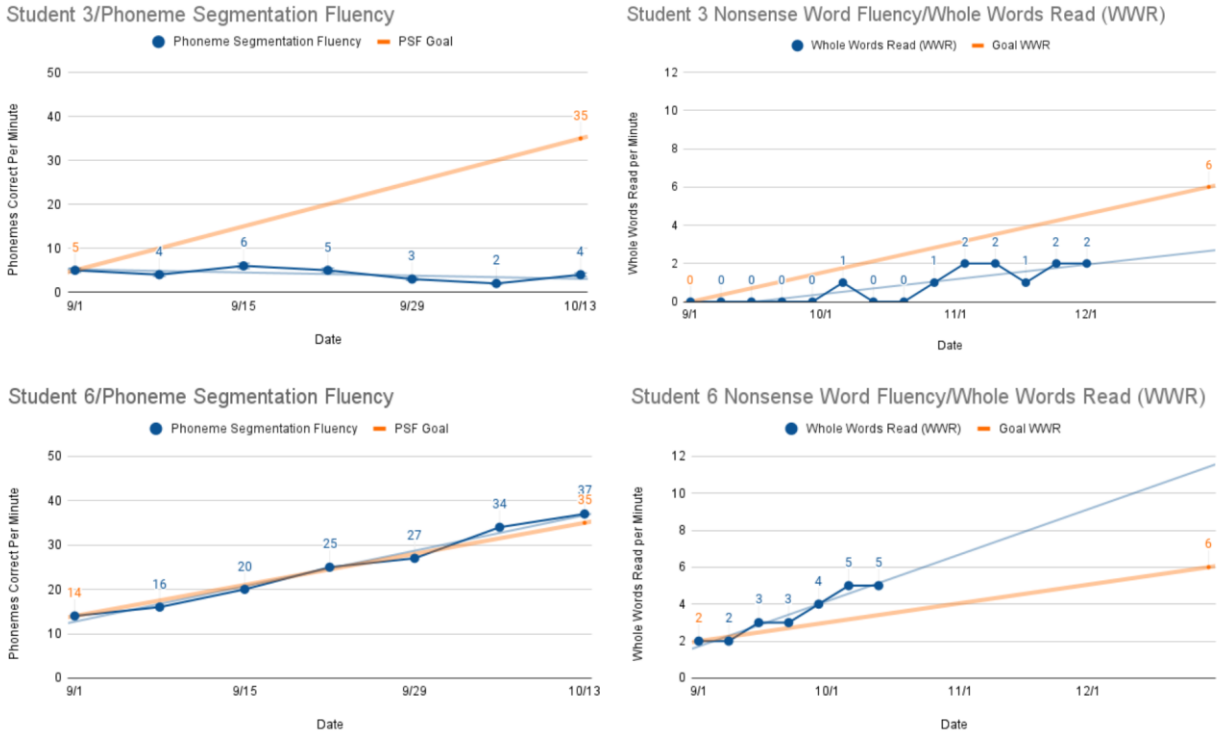
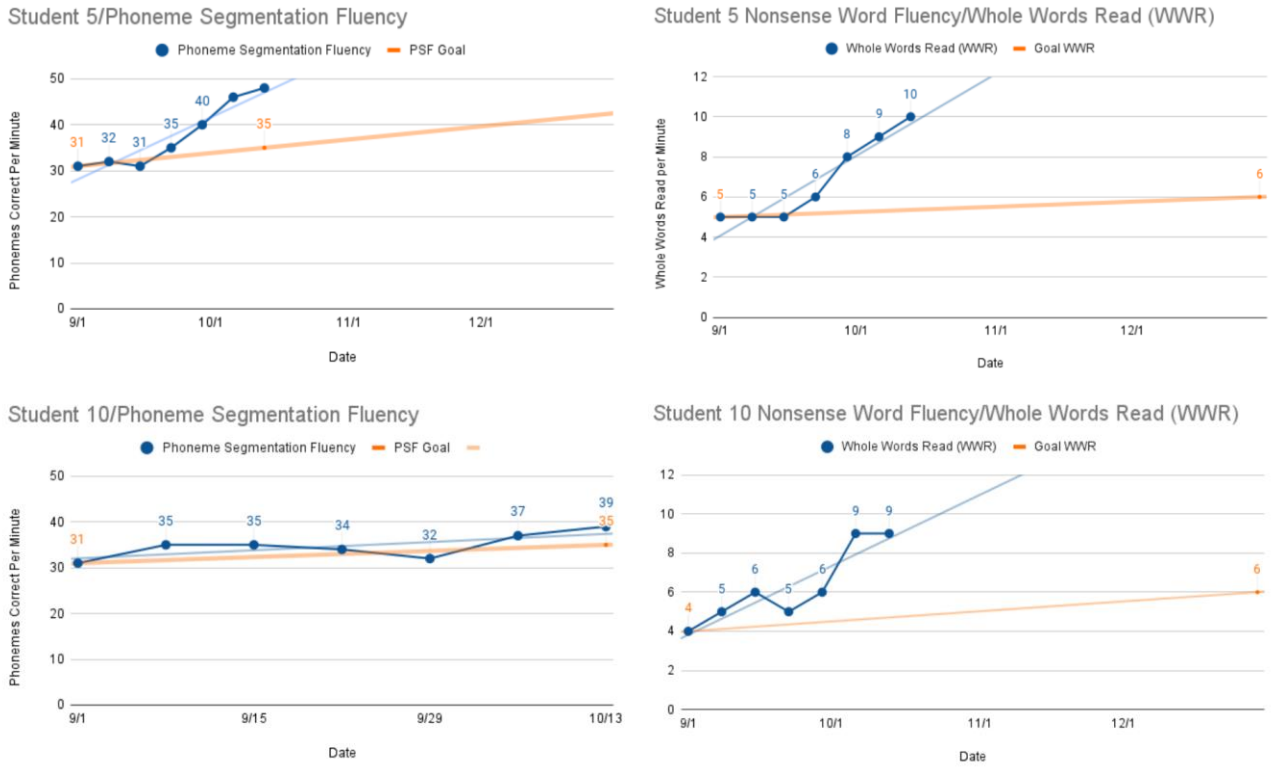


Table 28: Students 5 and 10 Progress Monitoring Data

	Student 5			Student 10		
	Phoneme Segmentation Fluency	Nonsense Word Fluency		Phoneme Segmentation Fluency	Nonsense Word Fluency	
		Correct Letter Sounds (CLS)	Words Read Correctly (WRC)		Correct Letter Sounds (CLS)	Words Read Correctly (WRC)
Week 1	31	25	5	31	25	4
Week 2	35	27	5	35	27	5
Week 3	35	30	5	35	30	6
Week 4	34	29	6	34	29	5
Week 5	32	33	8	32	33	6
Week 6	37	38	9	37	38	9
Week 7	39	38	10	39	38	9

Figure 17: Students 5 and 10 Progress Monitoring Data Chart



Stop and Think	**Look at the progress monitoring graphs above. Which student(s) need more intensive intervention? Why?**
	After analyzing the student's progress monitoring data, it appears that Students 6, 5, and 10 are responding well to the intervention; however, Student 3 is not making adequate progress towards their goal. Looking at the figures above, Student 3's data falls below the goal line, while the other three students are trending at or above their goal lines, resulting in Student 3 requiring more intensive intervention.

Monitoring and Intensification

Referring back to the K-2 Reading Assessment Protocol, the next step is to monitor and intensify the intervention as needed (step 5). When students respond positively to intervention, as in the cases of students 6, 5, and 10, a decision should be made by a team as to whether or not intervention is still necessary. If the team analyzes student data and ultimately decides that intervention is still necessary, then it should continue either as is or as appropriate to the student's needs. If the team decides that intervention is no longer warranted and that the gap has been closed, then the student in question should have their intervention faded away while continuing to be monitored in the Tier 1 setting to ensure that they maintain their progress. In this case study, Students 6, 5, and 10 successfully closed the gap and had their intervention faded; however, they should still be closely watched to ensure that their progress remains steady.

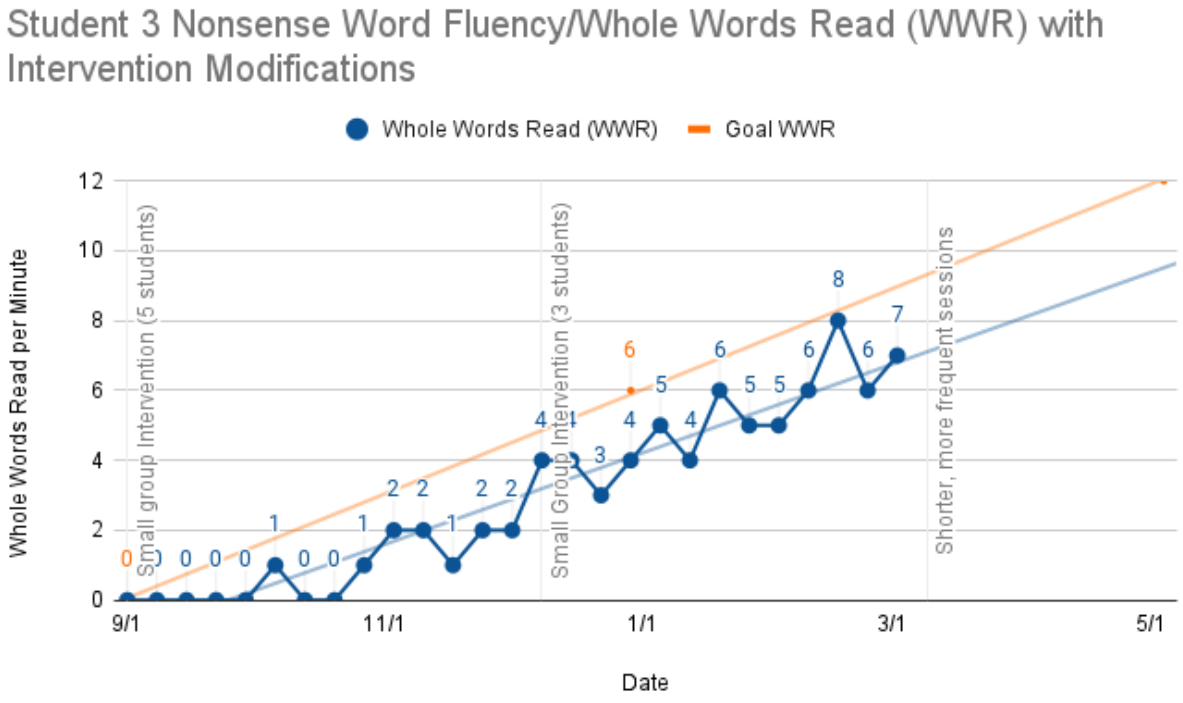
Student 3 did not respond to the intervention, so their intervention needs to be intensified. As mentioned earlier in this chapter and in Chapter 5, there are many ways to intensify interventions: *dosage*, *alignment*, *attention to transfer*, *comprehensiveness*, and *behavior*, among others. The decision to intensify intervention should be made based on student data and observation. The specialist working with Student 3 noted in their log that the student frequently socializes with other students in the group and that the socialization with peers takes priority over the curriculum. Additionally, it is noted that when the other students are not present, Student 3 tends to be more focused and more engaged. While the other students are making adequate progress, Student 3 is not, and the specialist believes that it is partially due to the social environment in which they are currently receiving intervention.

For intervention *intensification*, the decision is made by the team to decrease the current group size for Student 3. The student is moved into a group of only three students rather than five. Based on the K-2 Reading Protocol, data collection continues with the intensified intervention. Table 29 and Figure 17 outline another 7 points of data collection.

Table 29: Student 3 Data After Intensification

Student 3			
	Phoneme Segmentation Fluency	Nonsense Word Fluency	
		Correct Letter Sounds (CLS)	Whole Words Read (WWR)
Week 8	5	10	0
Week 9	10	11	1
Week 10	15	12	2
Week 11	18	15	2
Week 12	20	18	1
Week 13	25	16	2
Week 14	35	19	2

Figure 18: Student 3 after intensification



Looking at Figure 18, data shows that Student 3, while making progress, is not making adequate enough progress to reach their goal. Since Student 3 is still not on track to meet their goal, intervention will need to go through the intensification process a second time. Remember, the K-2 Reading Assessment Protocol is a cycle that does not end until students reach their goal. In this case, the team decided to provide shorter, more frequent sessions.

It is not uncommon for students to go through multiple cycles of progress monitoring and changes to their plan in order to find the combination that works best. Interventions should be highly individualized and always based in research. Student 3's team will continue to regularly progress monitor and adapt the plan based on the student's needs. Eventually, the goal is that Student 3 will no longer require intervention and will be successful in the Tier I classroom independently. When a student is not making adequate progress, the focus should be on intensifying the support they receive.

Let's Reflect	
	**Are you currently implementing each step of the K-2 Reading Assessment Protocol? What areas do you think need to be more developed in your school or district?**

From Assessment to Intervention in 3rd-12th Grade

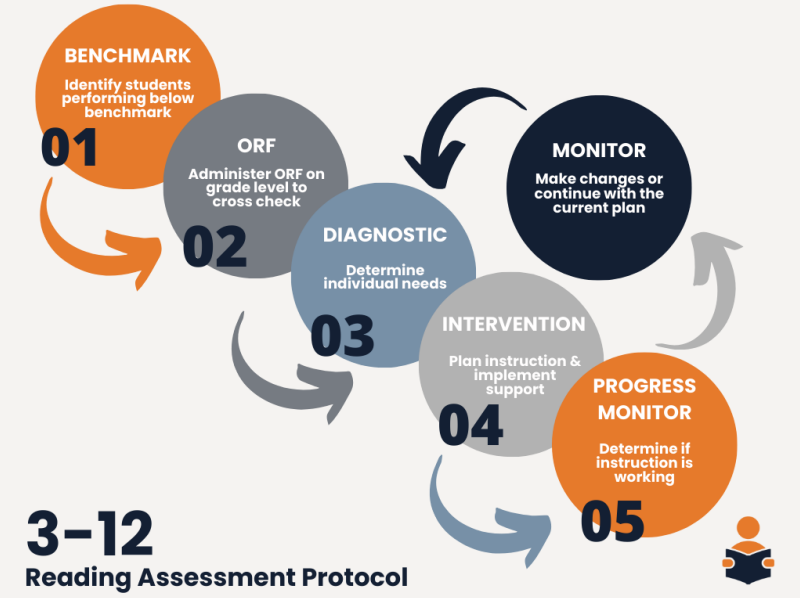
For students in the older grades to be successful readers, they must be able to adequately decode words, attend to vocabulary, draw on background knowledge, and comprehend various text structures.[252] [253] If an older student is struggling, it is imperative to identify the skill deficit in order to provide the correct intervention. An effective assessment plan, such as the 3-12 Reading Assessment Protocol seen in Figure 19, is crucial in order to provide intervention for older students. While districts and schools may use different screeners and progress monitoring assessments, the following information can serve as a guide for educators to interpret their data effectively.

As outlined in Figure 19, the 3-12 Reading Assessment Protocol outlines each step of identifying students at risk of reading failure, implementing interventions, monitoring student progress, and adjusting interventions as needed to ensure student success.

[252] Biancarosa & Snow, 2006, Reading Next

[253] Snow, 2006, Reading for Understanding Toward an R&D Program in Reading Comprehension

Figure 19: 3-12 Reading Assessment Protocol



Benchmark Assessment

A benchmark assessment is the first step in the 3-12 Reading Assessment Protocol (Figure 18). While a benchmark assessment, typically given three times a year, will allow educators to see if a student is struggling with overall literacy skill development, it does not pinpoint specific skill deficit areas. At the beginning of each school year, educators and support staff should review initial data to identify students who are falling below benchmark. If a student does fall below benchmark, additional historical data sources including past benchmark assessment scores, progress monitoring, etc. should be consulted for confirmation. It is important to consult historical data to truly determine whether or not a student may be at risk for reading failure; decisions should not be made regarding intervention using a single data point alone. Additionally, it is important to note that if the majority of students in a class fall "below benchmark", then there is likely a Tier 1 issue that needs to be addressed.

Table 30 below is an example of benchmark assessment results from a 4th grade class. This sample data will act as the starting point for the case study that follows.

Table 30: Student Beginning of the Year Benchmark Assessment Composite Scores

Student	Grade	BOY Composite Score
1	4th	3rd percentile
2	4th	10th percentile
3	4th	75th percentile
4	4th	60th percentile
5	4th	25th percentile

6	4th	70th percentile
7	4th	22nd percentile
8	4th	55th percentile
9	4th	80th percentile
10	4th	2nd percentile

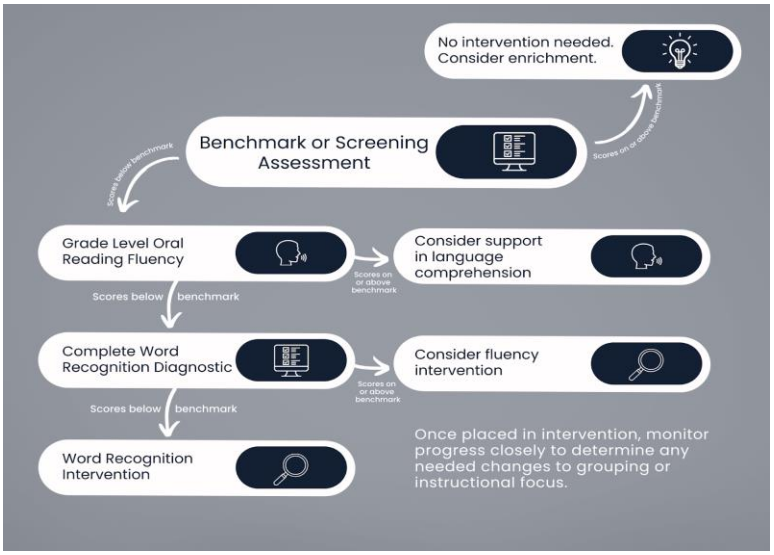
Stop and Think	Which students should be pulled for further assessment?
	When analyzing the above beginning of the year benchmark data (Table 30), it is apparent that students 1, 2, and 10 are performing well below benchmark, while students 5 and 7 are performing slightly below benchmark. Rather than using this benchmark data alone, the teacher would then look into benchmark data from the previous school year and other historical data to confirm or deny if there is, in fact, an issue. If the answer is yes, then a one-minute grade level ORF probe should be given.

Oral Reading Fluency

Once it can be concluded that the student is potentially at risk, the second step of the 3-12 Reading Assessment Protocol is to administer a one-minute *Oral Reading Fluency (ORF)* probe at grade level to serve as a quick assessment to confirm or rule out word-level reading issues like dyslexia. This probe is administered to all students identified as "below benchmark" based on benchmark assessments and historical data.

An ORF probe can also provide insight regarding the type of support that a student needs. If students perform at benchmark on a grade level ORF probe, language comprehension support such as working with vocabulary, syntax, and reading comprehension should be considered. If a student does not perform at benchmark on their ORF probe, then further data should be collected through a diagnostic assessment to aid in determining next steps. Figure 20 below provides an overview of this process.

Figure 20: Assessment Flowchart



When analyzing ORF data, many assessment systems provide their own national *norms*, which should be used when available. If system-specific norms are not provided, the Hasbrouck & Tindal (2017) norms are a reliable alternative to guide instruction. When analyzing grade-level ORF data, it is important to look not only at words correct per minute (WCPM), but also the accuracy percentage. This allows the educator to understand the percent of words read accurately, which leads to a better understanding regarding the potential of an issue at the word reading level. Ideally, the accuracy percentage should fall between 93-97% to ensure that comprehension is not adversely affected.[254] It is also essential to consider ORF norms when evaluating ORF WCPM scores, as these norms vary by grade level and time of year in which the assessment is given. See Hasbrouck & Tindal Oral Reading Fluency Norms (2017), Table 31.

Table 31: 4th Grade ORF Norms

	Percentile	Fall WCPM
4th Grade Fall ORF Norms (Hasbrouck & Tindal, 2017)	90	168
	75	125
	50	94
	25	75
	10	60

Since students 1, 2, 10, 5, and 7 scored below benchmark on the beginning of the year benchmark assessment and their historic data suggested that they are at-risk, they were each administered a grade level ORF probe; Table 32 lists their accuracy, words correct per minute, and their percentile.

[254] Burns, et. al., 2015, Accuracy of Student Performance

Table 32: ORF Benchmark on Grade Level (4th Grade)

Student	ORF Accuracy %	ORF WCPM	ORF Norm Percentile
1	60%	13	<10th percentile
2	90%	95	>50th percentile
10	64%	20	<10th percentile
5	70%	100	>50th percentile
7	99%	130	75th percentile

Stop and Think	What does the ORF data reveal about the students who were flagged during their benchmark assessment?
	As seen in Table 32, Student 1 read 13 words correct per minute (WCPM) which according to the 4th grade Hasbrouck & Tindal ORF norms, would be below the benchmark. This would suggest the need for additional assessment through a diagnostic word recognition assessment. Student 2 is reading 95 WCPM with 90% accuracy, which would place them at about the 51st percentile. For students in grades 2nd-8th, a score that falls within 10 words above or below the 50th percentile on Oral Reading Fluency (ORF) assessments should be interpreted as the normal and expected range.[255] Even though Student 2 scored in a manner that would suggest they may not necessarily need intervention, it is important to look at the whole picture rather than a single piece of data; the combination of benchmarking data, ORF data, and teacher observation and capacity led to them being pulled for further assessment.[256] Student 10 is reading 20 WCPM which is below the 10th percentile, while student 5 is reading 100 WCPM around the 50th percentile. Finally, student 7 is reading 130 WCPM, which puts them around the 75% percentile. Based on this ORF data, the only student who would not necessarily need a word recognition diagnostic assessment would be student 7 because based on their ORF assessment, they are within the 75% percentile. For this student, fluency or language comprehension support would be considered. Any student scoring around or below the 50th percentile on their ORF assessment should be administered a word recognition diagnostic assessment to pinpoint the specific deficit.

Diagnostic Assessments

After administering necessary ORF probes, the next part of the 3-12 Reading Assessment Protocol is to give individual diagnostic assessments to those who demonstrated deficiencies on their ORF assessment. A diagnostic assessment will help an educator to pinpoint specific deficit areas to target intervention instruction. Through the use of diagnostic assessments, an educator will be able to identify if a student has a word-level reading problem, and specifically which sound-symbol correspondences are not mastered. When analyzing diagnostic data, it is important to determine both student strengths and

[255] Hasbrouck & Tindal, 2011, Oral Reading Fluency Norms
[256] Hasbrouck & Tindal, 2006, Oral Reading Fluency Norms

deficits. This information will allow the educator to know exactly what concepts to target for instruction during intervention.

Students 1, 2, 10, and 5 were all pulled for a diagnostic assessment based on their benchmark, historic data, and ORF probe; both students who scored slightly below benchmark or significantly below benchmark were pulled for a diagnostic assessment. Whenever capacity allows, comprehensive data on students who are performing below benchmark need to be collected. Table 33 outlines the diagnostic results for each of the students assessed.

Table 33: Student Diagnostic Data

	Student 1	**Student 2**	**Student 10**	**Student 5**
Total Letter Names and Sounds	74/83	80/83	70/83	81/83
Short Vowels in CVC Words	13/15	15/15	12/15	13/15
Consonant Blends with Short Vowels	13/15	15/15	10/15	13/15
Short Vowels, Digraphs, and -tch Trigraph	10/15	14/15	5/15	12/15
R Controlled Vowels	8/15	15/15		11/15
Long Vowel Spellings		15/15		11/15
Variant Vowels		12/15		10/15
Low Frequency Vowel & Consonant Spellings		12/15		12/15
Multisyllabic Words		10/24		19/24

Stop and Think	What does the diagnostic data tell us about the word recognition skills of each student?
	Students 1, 2, and 10 performed below benchmark on the benchmark assessment; however, when looking at their word-recognition diagnostic data, you will see that both Students 1 and 10 have significant word-level reading difficulties, while Student 2 seems to struggle more with more advanced phonics concepts and Student 5 seems to have some foundational gaps such as short vowel sounds that could be impacting their ability to read words with more advanced phonics concepts including multisyllabic words. Using the information from the diagnostic word recognition assessment (Table 33) allows educators and interventionists to identify where they need to begin instruction with their students. If students do not know specific sound-symbol correspondences, then instruction should start there with word reading and spelling.

High School

The assessment protocol for students in 9-12 looks similar; however, if no benchmark assessment is in place for students in high school, educators will want to begin by administering a fluency assessment with grade level classroom materials such as Graded Passages to identify if students can read and comprehend grade level text. If a student is performing below the target range, which is typically around 150-160 words per minute, then educators would administer diagnostic(s) assessments to those students to pinpoint instructional needs.[257] [258] 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.[259]

Stop and Think	Where should instruction begin for students 1, 2, 10, and 5?
	Once diagnostic assessments are completed for students performing below benchmark, group students based on skills for intervention. For example, Students 1 and 10 could be grouped together based on their need for intense word recognition support, beginning with letter sounds and cvc words, while Students 2 and 5 could be grouped together to work on more advanced phonics concepts.

Intervention

For students with word recognition difficulties in grades 3-12, this lesson plan template can be used to guide instruction. For educators or interventionists working with older students, identifying specific skill deficits is imperative. If a 5th grader still struggles with sound-symbol correspondences or word-level reading, the intervention must be precisely targeted to address those gaps. At the same time, it is vital to tailor instruction to the whole child, taking into account their interests, motivations, and personal preferences. For older students, educators should incorporate multisyllabic word work, content-specific texts, and social-emotional elements into the instruction while also considering accommodations that enable them to function effectively in general education classes.

[257] Hasbrouck, 2024, Is She on Level?

[258] Rasinski, et. al., 2022, Oral Reading Fluency of College Graduates

[259] Honig, Diamond, & Gutlohn, 2013, Teaching Reading Sourcebook

Older students often need more intensive interventions to make progress. Just as a 3rd grader might struggle with reading and spelling CVC words, middle and high school students can face similar challenges. Regardless of grade level or expected competencies, educators must identify and address the foundational deficits to close the learning gap.

Foundational Skills

While foundational skills like letter-sound knowledge and basic decoding and encoding are typically taught in the early elementary years, these skills should still be addressed with older students, including those in secondary grades who have gaps in their understanding and application.[260] First and foremost, based on assessment data, those providing intervention will need to explicitly teach letter-sound correspondences.[261] This includes letter-sound review, blending practice, reading and writing words, introducing a new concept, and reading a connected text.[262] Moreover, spelling instruction should be embedded throughout the intervention lesson. 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 students' understanding and retention.[263]

Multisyllabic Word Reading

Multisyllabic words can be daunting. It is essential for teachers to offer targeted interventions in multisyllabic word reading since students encounter over 200,000 multisyllabic words, many of which are key for understanding the meaning of the text.[264] Teach students a systematic routine for decoding these words. Through *affix* learning, students can break down complex words into manageable segments.

Fluency Building

Boosting reading fluency is a key component in becoming a skilled reader.[265] The educator must incorporate purposeful fluency-building activities into reading intervention lessons. This can include repeated readings of the same text or *reader's theater*.[266] These exercises will support students in reading more smoothly, expressively, and with greater comprehension. Moreover, reading accuracy and automaticity are essential 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 *assisted cloze reading*. This will build their accuracy, automaticity, and confidence. Furthermore, teachers should select texts that align with topics students are exploring in their content area classes whenever possible.

Comprehension-Building Practices

Integrate comprehension-building practices so students can make sense of text effectively. Emphasize the importance of vocabulary through explicit instruction and teaching morphology, background knowledge, asking and answering questions, and monitoring comprehension as students read.[267]

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[260] Toste, et al., 2023, The Next Generation of Quality Indicators
[261] National Center for Education Evaluation, 2022, Providing Reading Interventions
[262] Toste, et al., 2023, The Next Generation of Quality Indicators
[263] National Center for Education Evaluation, 2022, Providing Reading Interventions
[264] Toste, et al., 2023, The Next Generation of Quality Indicators
[265] National Reading Panel, Teaching Children to Read
[266] Mastrothanasis, et. al., 2023, A Systematic Review and Meta-analysis of Readers' Theatre
[267] Swanson, et. al., 2017, Enhancing Adolescents' Comprehension

Writing

Written expression is a complex task that students often struggle with. When planning for writing instruction, it should be tailored to the developmental stages and specific needs of students.[268] In some cases, even as students get older they may need to focus on foundational skills such as transcription, spelling, sentence construction, or paragraph formation. Ensure that lessons are structured and interactive, requiring students to write daily.[269] Instruction might also focus on organizing ideas, using evidence, and refining voice as students become more confident with foundational skills.

What Now?

Though districts are expected to have an established, research-based intervention program, there are also several evidence-based practices that can be used as a supplement to what is already in place. Listed below are examples of instructional strategies that can be incorporated into intervention to ensure students are given meaningful practice opportunities, helping them to move from the acquisition phase of learning to generalization.

Table 34: 3-12 Teaching Tips for Students Who Struggle with Word Recognition

Instructional Strategy	Targeted Support in:	Printable + Video Explainer
Visual Drills	**Word Recognition** • Sound-Symbol Correspondence • Phonics • Letter-Sound Fluency	Printable Video Explainer
Elkonin Boxes	**Word Recognition** **Phonological Awareness** **Writing** • Phonemic Awareness • Decoding • Encoding • Handwriting	Printable Video Explainer
Spelling Dictation Procedure	**Word Recognition** **Phonological Awareness** **Writing** • Phonemic Awareness • Decoding • Encoding • Handwriting	Printable Video Explainer
Auditory Drills	**Word Recognition** **Phonological Awareness** **Writing** • Sound-Symbol Correspondence	Printable Video Explainer

[268] Gillespie, Rouse & Gomez, 2022, Writing Interventions for Students with Learning Disabilities
[269] Graham & Harris, 2018, Evidence-Based Writing Practices

	• Phonics • Encoding	
Word Chaining	**Word Recognition** **Phonological Awareness** **Writing** • Phonemic Awareness • Letter Knowledge • Phonics • Encoding	Printable Video Explainer
Spelling Dictation Procedure	**Phonological Awareness** **Word Recognition** **Writing** • Phonemic Awareness • Decoding • Encoding • Handwriting • Writing	Printable Video Explainer
Rapid Word Recognition Chart Generator	**Word Recognition** **Fluency** • Letter Knowledge • Phonics	Printable Video Explainer
Multisyllabic Word Decoding Procedure	**Word Recognition** • Letter Knowledge	Printable Video Explainer
Cover-Copy-Compare	**Word Recognition** • Decoding • Encoding • Irregular Words	Printable Video Explainer
Repeated Reading	**Fluency** • Accuracy • Automaticity • Prosody	Printable Video Explainer
Morpheme Building	**Word Recognition Vocabulary** • Morphology	Printable Video Explainer
Note: There are several additional resources that can be used to find evidence-based practices including, but not limited to Reading Rockets, Reading Universe, AdLit, and Florida Center for Reading Research.		

Stop and Think	What type of progress monitoring should be done for each of the students?
	Students 1 and 10 would need to be assessed using a Survey Level Assessment to determine the *instructional level* of text in which the student is challenged, yet capable of making progress when provided with sufficient instruction.[270] For example, Student 10's Survey Level Assessment identified that text at the 2nd grade instructional level was challenging yet could still be used to achieve progress. This was identified by starting ORF assessments at grade level and going back one grade at a time until the instructional level was achieved. This is typically determined by the proportion of words read correctly.[271] The program used for Oral Reading Fluency (ORF) assessment may provide guidance on the appropriate percentage of words read correctly. If not, the highest grade level text in which the student demonstrates an accuracy of approximately 91-97% is generally considered their instructional level. This means the student is likely making no more than one error for every ten words. Maintaining this level of accuracy serves as an ideal range for fostering reading growth. [272]

Progress Monitoring

For any student receiving intervention, instructional progress must be monitored to ensure instruction is making a positive impact. Generally, 7-10 data points should be collected to determine whether or not an intervention is working. When implementing progress monitoring, it's essential to use a Curriculum-Based Measure (CBM). Using a CBM is crucial due to its efficiency, alignment with grade level and/or instructional level curriculum as appropriate, and overall usefulness in effective progress monitoring. Both general and special education teachers can and should use CBM data to assess the effectiveness of intervention instruction. By regularly analyzing this data, the educator providing the intervention can determine if and how the instruction needs to be adjusted. CBMs monitor the effectiveness of an intervention by consistently assessing the same skills over time, enabling educators to observe trends in student learning and make necessary instructional adjustments.

For older students with word recognition deficits such as dyslexia, ORF (Oral Reading Fluency) or OPR (Oral Passage Reading) should be utilized as a progress monitoring tool. ORF or OPR can serve as a proxy for assessing key reading skills including the ability to decode at the word level.[273] When progress monitoring, the educator may need to assess previous levels of ORF materials to determine the ideal starting point for monitoring. This is typically done through the Survey-Level Assessment (SLA) process. Older students who lack foundational skills will require targeted instruction in those areas, along with progress monitoring using materials that are below their current grade level.

When students are progress monitored with material that is too challenging, their growth may not be immediately apparent, leading to the mistaken belief that the intervention is ineffective. For older students with word recognition deficits, using grade-level materials for progress monitoring often fails to capture improvements because the assessment is not sensitive enough to reflect gains in foundational skills. This gap between what is taught and what is measured highlights the importance of utilizing Survey Level Assessment to identify the appropriate progress monitoring level.

[270] Shapiro & Clemens, 2023, Academic Skills Problems
[271] Shapiro & Clemens, 2023, Academic Skills Problems
[272] Shapiro & Clemens, 2023, Academic Skills Problems
[273] Hosp, Hosp, & Howell, 2016, The ABCs of CBM

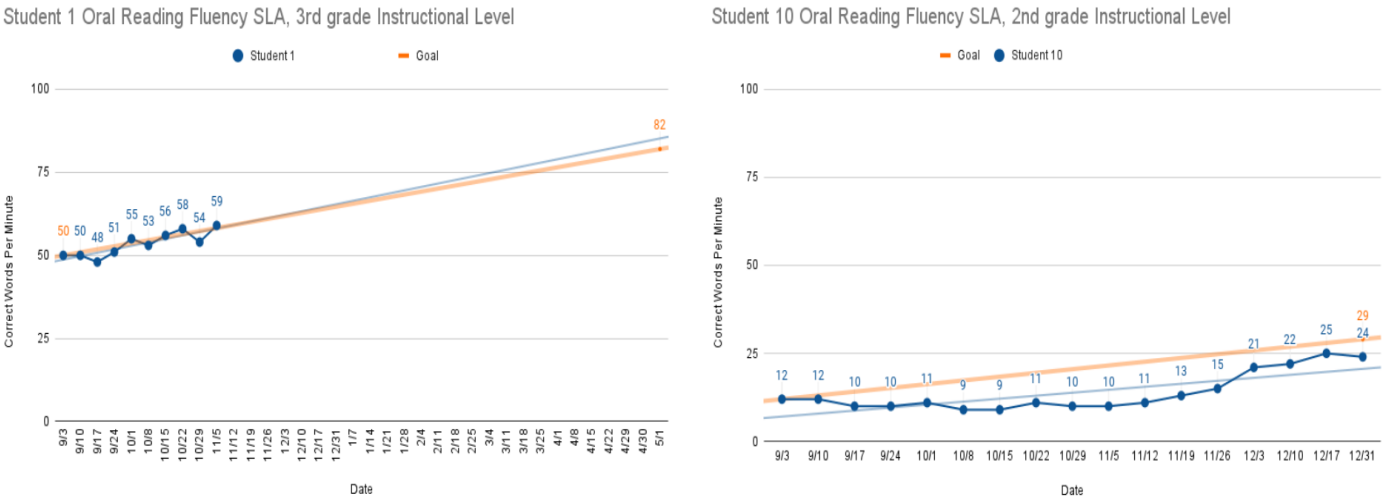
The educator providing the intervention needs to analyze the student progress monitoring data to determine if the student is making adequate progress regularly. For students receiving intensive intervention, progress monitoring should be completed one time per week in order to make informed decisions about whether the intervention is working or needs to be intensified. For example, in Table 35, there are 10 data points across a 10-week time span.

An *aimline* provides a visual target for the rate of progress the student needs to make to meet the goal on time. The aimline is drawn from the student's current or initial skill level (which is often the most recent benchmark assessment score) to the goal. Progress monitoring scores can then be plotted over time and examined to determine whether the student is making adequate progress in comparison to the aimline.

Table 35: ORF Progress Monitoring

Oral Reading Fluency Progress Monitoring Data		
	Student 1 3rd Grade Instructional Level	**Student 10** 2nd Grade Instructional Level
September 3	50	12
September 10	50	12
September 17	48	10
September 24	51	10
October 1	55	11
October 8	53	9
October 15	56	9
October 22	58	11
October 29	54	10
November 5	59	10

Figure 21: Student ORF Progress



Stop and Think	**Look at the progress monitoring graphs above. Which student(s) need more intensive intervention? Why?**
	From the above data, it is apparent that Student 1 is making adequate progress and is on track to meet their goal, while Student 10 is not. Referring back to Figure 20, because Student 10 is not making adequate progress, the educator that is providing the intervention needs to make adjustments.

Monitoring and Intensification

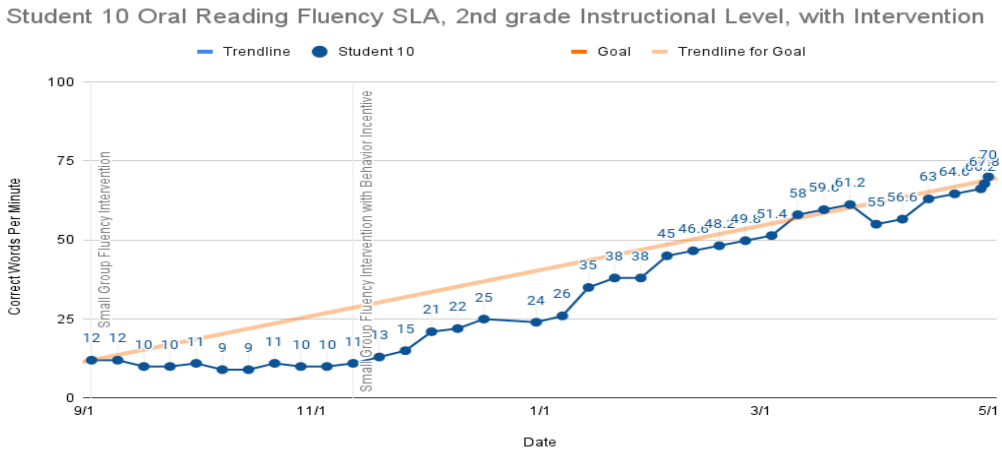
It is necessary to monitor progress as students are receiving intervention to determine if the intervention in place is working. As outlined in the data-based decision-making process, there are several avenues one can take in order to intensify the intervention. These avenues include dosage, alignment, attention to transfer, comprehensiveness, and behavior, among others.

In the case study provided, the educator working with Student 10 noted that there are several behavior concerns including defiance. For intervention intensification, the decision is made to provide Student 10 with a behavior incentive. Based on the 3-12 Reading Protocol, data collection continues with the intensified intervention. The educator providing the intervention continues to progress monitor one time per week. Table 36 outlines another 7 points of data collection.

Table 36: Student 10 ORF Data with Changed Intervention with Behavior Incentive

Student 10 Oral Reading Fluency Data - Changed Intervention 2nd Grade Instructional Level	
November 12	11
November 19	13
November 26	15
December 3	21
December 10	22
December 17	25
January 7	24
January 14	26

Figure 22: Student 10 ORF Progress



Stop and Think	**Is the adjustment to the intervention working?**
	Looking at Figure 22, the intensified intervention is working. Student 10 is beginning to make progress and is on track to meet their goal.

While in this scenario the intervention just had to be intensified once, this is not always the case. It is not uncommon for students to go through multiple cycles of progress monitoring and changes to their plan in order to find the combination that works best. Interventions should be highly individualized and always based in research. Student 10's team will continue to regularly progress monitor and adapt the plan based on the student's needs. It is important to recognize that when delivering interventions to

older students, progress tends to be slower compared to younger students, especially when the learning gap is significant. It is not uncommon for older students to require significant amounts of intervention; therefore, one quarter or semester may not be enough.

Let's Reflect	
	**Are you currently implementing each step of the 3-12 Reading Assessment Protocol? What areas do you think need to be more developed in your school or district?**

More on Middle and High School Students

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 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.[274]

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.

Several schools and districts across the United States have achieved significant success by implementing interventions for middle and high school students through a range of innovative approaches. Here are some examples of innovative models:

- Creating a high school structured literacy course for English credit,
- Training middle school reading teachers to provide class-wide interventions and small group interventions during a flex period,
- Middle schools providing Tier 3 intensive reading intervention with a trained dyslexia interventionist, or
- Supplemental services provided by or contracted by the school, such as virtual dyslexia therapy.

[274] Honig, Diamond, & Gutlohn, 2013, Teaching Reading Sourcebook

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 and 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 and 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 and 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 and explicitly teach and practice deep breathing, squeezing all the muscles in their body. 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 37: 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.**

Providing Transition Services for Students with Dyslexia with IEPs and 504s

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. The transition plan focuses on skills that will prepare the student for life after high school, considering the student's individual post-secondary goals, such as employment, post-secondary education, military service, etc., and must be included in the first IEP in effect by the age of 14-and-a-half in Illinois, or earlier if determined appropriate by the IEP team.[275] A testing coordinator or case manager should apply for and secure appropriate accommodations (if needed) for any high-stakes testing that occurs while the student is still in high school. Documentation, including a description of the student's disability, reading and writing skills, and the accommodations used by the student, will be needed.

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 should prepare these students to advocate for themselves and reach out to disability services or other related agencies directly, such as the Department of Rehabilitation Services. It is important that students understand their reading and writing skills and challenges so that they are able to work with school professionals to determine appropriate accommodations. Specifically in higher education, this process must be initiated by the

[275] 105 ILCS 5/14-8.03(a-5)

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 so is acknowledging that it can be beneficial for this information to be disclosed by the individual so that the institution or workplace can better understand and support them.

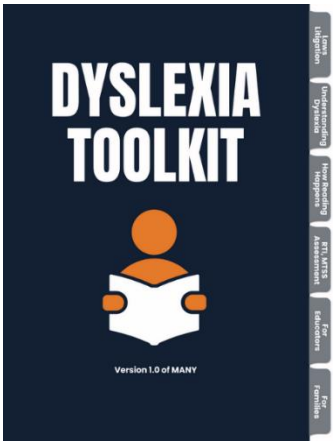
Bridge to Practice

Chapter 7 acts as a guide for transition from assessment to targeted intervention for students at risk of dyslexia or other reading disabilities. It is important that schools across all settings consider implementing the practices outlined in this chapter. Use one of the following workbooks as a resource to guide your own district through the process of moving through assessment to intervention.
Assessment to Intervention: K-2
Assessment to Intervention: 3-12

Click for Sample Workbooks

Expanded Exploration: Linked Resources

- **Explore:** The Reading Universe website for classroom examples and materials.
- **Listen:** To the Melissa and Lori Love Literacy Podcast to hear from experts translating research to practice.
- **Read:** The Ten Maxims by Reid Lyon to know what the research says about how children learn to read.



Discussion Questions

1. What are the stages of the instructional hierarchy and how do they guide the progression of literacy instruction for students with dyslexia?
2. What are the key differences between assessment for students in K-2nd grade versus those in 3rd-12th grade? Why are these differences significant?
3. How can educators, administrators, and related service professionals collaborate effectively to implement dyslexia interventions, and what role does each stakeholder play in ensuring successful outcomes?

Looking Forward

The information found in this guide aims to improve the knowledge of educators, school leaders, families, caregivers, and students about dyslexia; however, it is important to understand that information regarding dyslexia is constantly evolving. As a society, we are in a continual state of learning and growing, and our understanding of dyslexia, like many areas of education, will also continue to grow. In the past decade, advances in science and education have provided us with new insights into dyslexia. A decade from now, we will know even more, and with each new discovery, we will be able to offer better support to students with dyslexia.

This handbook is meant to be a living document that will be regularly revised as new research, best practices, and legislation emerge. It will be updated periodically to ensure that it remains a helpful and accurate resource for everyone who interacts with students with dyslexia.

By staying informed of the latest research, we can reduce the uncertainty around dyslexia and provide better support for those who are affected by it. Our goal is to empower educators, families, and students with the knowledge and tools they need. Together, we can make a meaningful difference in the lives of individuals with dyslexia, ensuring they have the opportunity to succeed academically and beyond.

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. Since 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. Additionally, since 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.

Chapter 4: For Caregivers – Supporting Children and Adolescents with Dyslexia

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.

Chapter 5: School-Based Identification and Systems of Service Provision for 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 ongoing 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.

Chapter 6: For Educators, Administrators, and Other School Personnel Supporting Students with Dyslexia: Research Findings

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. 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.

Chapter 7: For Educators, Administrators, and Other School Personnel Supporting Students with Dyslexia: Implementation in Action

Chapter 7 acts as a guide for transition from assessment to targeted intervention for students at risk of dyslexia or other reading disabilities. It is important that schools across all settings consider implementing the practices outlined in this chapter. Use one of the following workbooks as a resource to guide your own district through the process of moving through assessment to intervention.
Assessment to Intervention: K-2
Assessment to Intervention: 3-12

Examples of the workbook filled out with content from the IL Dyslexia Handbook can be found here:
Example Data – Assessment to Intervention: K-2
Example Data – Assessment to Intervention: 3-12

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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.
Accuracy	The ability to read written words correctly.
Acquisition Stage	One of the stages in the Instructional Hierarchy of Learning Development. In this stage, students do not know how to perform a targeted skill, and their abilities can be characterized by errors, delayed responses, and inconsistent responses.
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.
Aimline	A visual target for the rate of progress a student needs to make to meet a goal on time.
Alignment	How well an intervention matches the targeted skill deficit.
Alphabetic Principle	The basic code for written words; the system of correspondences between phonemes and graphemes (i.e. sounds and letters).
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 and Supramarginal Gyrus	The part of the brain that is used to connect letters to form words for reading aloud.
Assisted Cloze Reading	Teacher reads aloud from a passage while students follow along silently. Intermittently, the teacher pauses and the student(s) must read aloud the next word in the passage. The process continues until the entire passage has been read.
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 such as not being able to sit still, fidgeting, lack of focus, excessive talking or moving, and being impulsive.

Attention to Transfer	An intervention that is designed to support students in making connections between skills taught in the intervention and other contexts.
Auditory Drills	A teaching strategy that helps students to learn the association of sounds with letters.
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.
Behavior	When the intervention includes strategies addressing behavior that support students' overall ability to learn.
Benchmark Assessment	An assessment given 3x a year that will allow educators to see if a student is struggling with overall literacy skill development; it does not pinpoint specific skill deficit areas.
Bidialectal	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 needing frequent repetition, seeming to hear but not understand, history of ear infections, distractibility, speech and language problems, poor localizations skills, and problems in phonics, reading, spelling, and written language.
Choral Reading	Reading aloud in unison with a whole class or group of students to support fluency building, self-confidence, and motivation.
Cognates	A word that is from the same existing word as another; words from the same original word or root.
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.

Compensation	Strategies that are used to make up for their lack of skill in an area; examples may include guessing and memorizing.
Composite Score	A comprehensive score for each areas assessed.
Comprehension	Making sense of what we read. Comprehension depends on good word recognition, fluency, vocabulary, worldly knowledge, and language ability.
Comprehensiveness	The degree to which an intervention includes explicit instruction principles.
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.
Critical Thinking	The process of generating original ideas, independently, in an effective manner. Individuals who utilize critical thinking support their thinking with evidence and prioritize reason over emotion when making conclusions.
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.
Data-Based Decision Making	The process of using data (e.g., progress monitoring data) to make instructional decisions.
Decodable Text	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).
Deletion	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.
Diagnostic Literacy Assessment	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.

Differentiated Instruction	A method of teaching where instruction is adjusted to meet the needs of all students.
Discourse	Discourse refers to the ability to use and understand language in extended contexts, such as in conversations, stories, and narratives.
Domain	Area(s) in which students can have strengths and/or weaknesses (i.e. academics, functional performance, communication, health, etc.).
Dosage	The number of opportunities a student has to respond and receive feedback from the teacher.
Double Deficit	Both a deficit in phonological awareness and naming speed.
Dyscalculia	Dyscalculia is a learning disorder 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.
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.
Dyslexia	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.
Dyspraxia	Dyspraxia is a learning disorder in 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.
Echo Reading	When the teacher reads aloud a line of text by modeling appropriate fluency and the students echo back the line of text while following along.
Eligibility Determination	A meeting to decide if the child is eligible to receive special education supports and services.
Elkonin Sound Boxes	Also referred to as sound boxes; these are an instructional tool used to help students break words into phonemes.

Encoding	The process of breaking a spoken word into each of its individual sounds when writing or spelling it.
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.
Evidence-Based	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.
Externalized Behaviors	Behaviors that can be observed by others; examples may include avoidance, anger, or aggression.
Floor Effect	The result of conducting screening early in the school year for kindergarteners, which may lead to many children scoring at the lower end of the scale due to lack of experience or developmental maturity.
Fluency	Reading words at an adequate rate with a high level of accuracy, appropriate expression and understanding.
Fluency Stage	One of the stages in the Instructional Hierarchy of Learning Development. In this stage, students have an understanding of the targeted skill, yet lack automaticity and fluency.

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.
Generalization Stage	One of the stages in the Instructional Hierarchy of Learning Development. In this stage, students tend to make few to no errors, demonstrating a high level of accuracy and automaticity in their responses.
Grammar	The system and arrangement of words, phrases, and clauses that make up a sentence.
Grapheme	Written letter or letter combination.
Gullah	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.
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 explaines 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 “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 documents.
Instructional Hierarchy of Learning Development	A model that represents the stages of learning that students go through when acquiring new skills.
Instructional Level	The reading level at which a student requires some assistance, but still has enough knowledge to make progress.
Intensification	Increasing the depth of an intervention using a variety of methods including strength, dosage, alignment, attention to transfer, elements of explicit instruction, behavior, engagement, and motivation.
Internalized Behaviors	Thoughts and emotions that individuals may exhibit in order to cope with challenges; some examples may include fear of public performance, depression, or anxiety.
Irregular Words	Words that do not follow the typical letter-sound correspondences.
Language Comprehension	Making meaning of something that is heard.
Language Domains	Morphology, syntax, semantics, phonology, and pragmatics
Language Variation	A version of a language spoken by a group of people distinguished by characteristics such as culture, race, ethnicity, religion, and/or geographic region. Language variations are systematic, rule-governed variations of a language with different rules for expressing the same form, content, and use of a language.
Learning Disorder	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. There's a gap between their expected skills, based on age and intelligence, and how they do in school.
Letter Naming Fluency	Screening measure where the student is presented with a sheet of letters and asked to name the letters in 1 minute.
Metacognitive	Being aware of and understanding one's own thoughts and thought processes.
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.
Modification	A modification is a change to what a student is taught or expected to do in school.
Morpheme	The smallest meaningful linguistic unit.
Morphological Awareness	The awareness that words are made up of meaningful units.
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 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.
Multidialectal	Individuals who speak more than one variety of a given language.
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.
Nonsense Word Fluency	Screening measure where the student is presented with a list of VC and CVC nonsense words and are asked to read the words within one minute.
Norms	The typical scores that would be expected of a student on an assessment when compared to their peers.

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.
Opportunities to Respond	A strategy used in teaching that elicits student feedback through questioning and commenting techniques.
Oracy	The skill of effective communication through rich vocabulary, complex syntax, and comprehension through dialogue.
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 Conventions	The rules for writing a language.
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.
Orthographic Processing	The ability to recognize, store, and retrieve the visual representation in written words.
Orthography	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.
Paragraph Shrinking	An instructional strategy that is often paired with partner reading. This instructional strategy allows students to monitor their own comprehension while they read, focus on the main idea of each paragraph, pay attention to important details, and elaborate on content.
Parietal-Temporal Region	The part of the brain that is used in breaking down written words into sounds (word analysis).

Partner Reading	A cooperative learning strategy in which two students work together to read an assigned text.
Phoneme	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.
Phoneme Segmentation	The process of breaking down words into their individual sounds.
Phoneme Segmentation Fluency	A one-minute screening measure where the teacher or assessor says words and the student says the individual sounds in each word.
Phonics	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 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.
Pragmatics	Set of rules that dictates behavior to communicative intentions in a particular context and the rules of conversation or discourse.
Prefix	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.
Prosody	The ability to read with expression.

Rapid Automatic Naming (RAN)	A speed naming task, most often administered to pre-readers, in which the individual is asked to quickly name a series of printed letters, numbers, or blocks of color repeated in random order.
Rate	The number of words that a person can read correctly per minute.
Reader's Theater	A collaborative strategy for developing oral reading fluency through reading parts in scripts.
Receptive Language	Listening and reading.
Remediation	A teaching method that helps struggling readers improve their reading skills through targeted instruction.
Repeated Reading	A strategy where students read a text at least three times to develop reading fluency.
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.
Scaffolding	A teaching technique where educators provide temporary support to students as they learn a new skill or concept that is then removed as students become more independent.
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 thus students struggling in those areas would be protected if their challenges substantially limit major life activities.
Segmentation	Taking apart the sounds in spoken words.
Semantics	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.
Somatization	Experiencing problems that are psychological in a physical way, for example as pain or tiredness.
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.
Special Factors	Specific areas that are required to be considered in the development of an IEP including: behavior, limited English proficiency, blindness or visual impairment, communication needs/Deafness, and assistive technology.
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 and mathematics.
Standard American English	Also known as General 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. Standard American English is not associated with any particular region or dialect and is often used as a reference point for teaching English pronunciation.
Stress	Accented syllable articulated with greater loudness, duration, or pitch.
Stress Patterns	The emphasis on syllables in a word or sentence.
Structured Literacy (SL)	A comprehensive, integrated approach to reading and writing instruction that directly and systematically builds on and develops oral language while explicitly teaching the structure of written language.
Suffix	A morpheme attached to the end of a base word that creates a word with a different form, use, or meaning.
Summarization	An instructional strategy that requires students to identify key ideas, synthesize information, and articulate concise statements.

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.
Syntactic Awareness	The ability to understand and manipulate the order of words in a sentence.
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).
Syntax	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.
Text Structure	The way an author organizes information to achieve a purpose.
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.
Translation Skills	A set of skills in writing including grammar, morphology, sentence structure, syntax, the writing process, audience awareness, and text structure.
True Peers	A student who shares a similar language proficiency, culture, and experiential background, is of a similar age and has spent a similar amount of time in the United States, has a similar input (exposure) and output

	(use) of L1 and L2 at home, school, and in the community, and has a similar education experience and services.
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.
Visual Drills	A reading and spelling activity that helps students learn to associate letters with sounds.
Vocabulary	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 Chaining	An instructional strategy that supports phonemic awareness, as well as decoding and encoding skills.
Word Reading Fluency	Screening measure in which students are presented with high-frequency words both with irregular pronunciations and words with regular pronunciations. The student is asked to read as many words as possible within 1 minute.
Word Recognition	The ability to read written words accurately and effortlessly.
Words Correct Per Minute	The measure of a reader's ability to read words quickly and accurately.
Working Memory	The process of holding onto and manipulating information (i.e., short-term memory).