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SECTION 1:

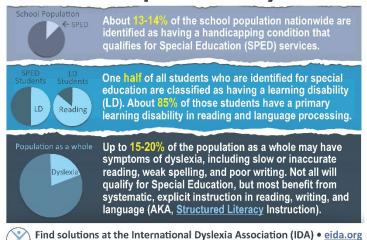
INTRODUCTION

Reading and reading difficulties are probably the most studied aspect of human psychology, and in the last few years, a solid consensus has developed around some key questions: How do children learn to read? What goes wrong when they struggle? What can we do about the problems? Informative research includes tens of thousands of scientifically conducted studies, analyses of studies, overview papers, and textbooks. This body of work, known as the "science of reading," is the basis for the guidance in the Idaho Comprehensive Literacy Plan (ICLP) and in this Dyslexia Handbook. Studies have shown that almost all children, even those with dyslexia, can learn to read – the essential first mission of schooling.

1.1 OVERVIEW OF PURPOSE

The purpose of this resource is to help educators, parents, state leaders, and the public to understand what dyslexia is, how it should be treated, and how to improve literacy outcomes for all students. In the spring of 2022, 28.7% of third grade students were not proficient on the state's early reading assessment, the Idaho Reading Indicator (IRI). On the state's more rigorous and comprehensive Idaho Standards Achievement Test in Language Arts (ISAT) administered in spring of 2022, about half were at basic or below basic at the end of third grade. The ISAT test requires students to read longer, more complex passages, answer questions related to research, and complete a writing task. This data reveals that the state has additional work to do to improve core literacy instruction.

How widespread is dyslexia?



Source: IDA Fact Sheet, "Dyslexia Basics" • Moats & Dakin (© 2016 Cowen For IDA)

Nationally, as much as 13-14% of all students are identified under special education guidelines. Students with specific learning disabilities (SLD) typically represent approximately of students in education.1 While over 19% of Idaho's special education students are identified as SLD, fewer than 3% of all students have been so identified.² Nevertheless, up to 20% students have characteristics of dyslexia.3 In Idaho, even fewer are identified as having specific learning disabilities, so the

needs of most students with milder symptoms of dyslexia are likely to be addressed outside of special education guidelines. All educators must know about and be prepared to teach students with dyslexia.

¹ Cowen, 2016

² Idaho State Department of Education, 2022

³ Wagner et al., 2020

While all reading difficulties are not the same and not all students who struggle are dyslexic, we can improve results for all students by implementing science-driven reading and language instruction in the regular classroom and in intervention settings. This instruction is delivered beginning in kindergarten so that the number of students who fall behind in the first place will be minimized and their problems will be less serious. The goal of minimizing reading difficulties is accomplished by screening all students when they enter a grade, identifying those who are not on track, and supplementing classroom instruction with evidence-based interventions that targets students' specific needs. Intervention can range from short term and less intensive to long term and very intensive. Determination of students' needs through strategic assessment, assignment of students to skills-based small groups, and careful monitoring of their progress, is the main goal. A school organization framework that makes sure children do not "fall through the cracks" is called a Multi-Tiered System of Support (MTSS). Idaho uses this tiered approach to identify students who are struggling with foundational reading skills and who need intervention.

Even though all students who are at risk should be assigned to intervention proactively, regardless of the cause of their difficulties, identification of dyslexia and educated use of the term is important for several reasons:

- First, there are many resources and much information to be accessed that will help parents, teachers, and students understand what the student is experiencing and why. Insight into the disorder and naming it is often a psychological relief to all involved.
- Second, there is a large community of children and people who experience the challenges of dyslexia, and it is important for students and families to know they are not alone.
- Third, attributing a reading and spelling difficulty to dyslexia may help individuals and their families understand that they are capable in other ways and that they are likely to succeed in life.
- Fourth, individuals with severe and complex problems have rights and protections if they are determined to have disabilities (called a handicapping condition under federal law). This information is elaborated in Section 4.

1.2 ALIGNMENT WITH THE IDAHO COMPREHENSIVE LITERACY PLAN

The information in this Handbook extends and elaborates information already in the <u>Idaho</u> <u>Comprehensive Literacy Plan</u> (ICLP), as updated in December 2020. This Handbook invokes more references and scientific research specific to dyslexia and other learning difficulties, but the essential content and practices of instruction in both the regular classroom and the intervention setting should be aligned.

The ICLP calls for teachers to "have the ability to implement systematic, explicit instruction in word recognition and language comprehension (as shown in the Simple View of Reading and Scarborough's Rope in *Section II: Developing Literacy*)." The content of explicit, structured language lessons, as elaborated in both the ICLP and this document, will include phonemic awareness, phonics for reading and spelling, word and passage reading fluency, vocabulary and

comprehension, plus oral language and written expression. Beyond this content, there is no additional magic or mystery to teaching students with dyslexia. They usually improve with carefully designed, deliberate, step-by-step practice with essential language-based skills in lessons taught by a trained person.

Both the ICLP and this Handbook stress the importance of early intervention. With skilled and sustained effort on the part of teachers and students, achievement gaps can be narrowed significantly, ⁴ especially with early screening and intervention that begins in kindergarten.

The ICLP and this Handbook refer to The International Dyslexia Association (IDA)'s Knowledge and Practice Standards for Teachers of Reading. In addition, Idaho has updated its Comprehensive Literacy Standards for Educator Preparation (which are included in the Standards for Initial Certification). These standards outline what teachers must know and do to implement effective reading instruction that will prevent and reduce reading difficulties. When the IDA Standards and the Idaho Standards are compared to typical classroom practices,⁵ it is clear the teaching profession still has work to do to turn away from ineffective ideas and practices of the past – even though they may be popular – and replace them with the deep knowledge required for professional expertise. Both teacher preparation programs and professional development efforts will be needed to ensure that licensed teachers are able to meet those standards.

⁴ Torgesen, 2004a

⁵ EdWeek Research Center, 2020

SECTION 2:

DEFINING & RECOGNIZING DYSLEXIA

2.1 DEFINING DYSLEXIA

The term *dyslexia*, most simply, is a descriptive label for a word reading and spelling problem that originates with specific language processes, most often those involving the brain's system for identifying, remembering, thinking about, and manipulating elements of speech (phonemes). These terms are used in the formal definition of Idaho law, which in turn echoes most of the provisions of the definition adopted by the International Dyslexia Association.

2.1.1 Definitions and Differences

Idaho Statute, Section 33-1802, as amended in 2022, defines dyslexia as follows:

"Dyslexia means a specific learning challenge that is neurological in origin. It is characterized by difficulties with accurate or fluent, or both, word recognition and by poor spelling and decoding abilities, which 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."

The definition of dyslexia adopted by the Board of Directors of the International Dyslexia Association (IDA) in 2002,⁶ is slightly different and states that:

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

Key Differences in the Definitions

Idaho law recognizes that dyslexia may occur in children who do not qualify for special education services under the category Specific Learning Disabilities but who nevertheless require preventive and remedial structured literacy instruction. Thus, the term "learning challenge" is used rather than "specific learning disability." The IDA definition recognizes that dyslexia often has secondary consequences; when an individual has trouble reading the words, they read less, and thus may have less exposure to the vocabulary, background knowledge, and language found in books. Although dyslexia primarily affects word recognition, students' reading comprehension may suffer because they are inaccurate, slow, and lack reading experience. In addition, they may also have trouble with aspects of language comprehension, beyond the basic word reading problem.

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⁶ Lyon, Shaywitz & Shaywitz, 2003

2.1.2 Explanation of Important Terms in Idaho Statutory Definition

- A. "Neurological in origin" People with dyslexia have been shown to have differences in the development, organization, structure, and functioning of the very specific brain systems necessary for reading. While the neurological origin of dyslexia in an individual is presumed, it is not necessary to require medical assessments including neurological, neuropsychological, or neuroimaging to identify dyslexia. Additional information is provided in section 2.3.
- B. "Accurate or fluent, or both, word recognition and by poor spelling and decoding abilities"

 The inclusion of fluency (speed of word recognition), spelling and decoding in this definition captures the difficulties experienced by many older students with dyslexia who may eventually become accurate word readers but continue to be very slow readers and poor spellers.
- C. "Typically result from a deficit in the phonological component of language" -- The core language difficulty in dyslexia resides within the phonological processing system of the brain, which supports the ability to recognize individual speech sounds in spoken words efficiently and accurately, and then to associate those sounds with letter symbols used for reading and spelling. Phonological processing difficulties are expressed in other ways as well, including problems remembering and repeating new words or confusing words that sound alike.
- D. "That is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction" Dyslexia occurs throughout the range of cognitive and intellectual abilities. In order to be identified, a student must have had a reasonable opportunity to learn through effective instruction that has been successful for most students. The term "unexpected" means that the student may struggle inordinately, demonstrate unusual confusions, and/or have prominent difficulties associating and remembering written symbols, while at the same time being able to learn other subject matter in and outside of school with relatively more ease.

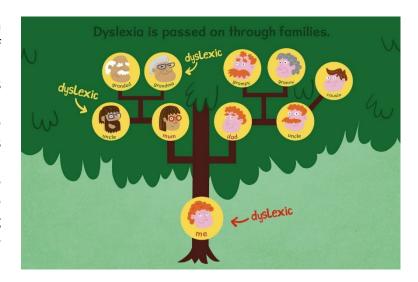
2.2 OTHER ATTRIBUTES OF DYSLEXIA ESTABLISHED BY RESEARCH

Dyslexia often runs in families. Geneticists have found several genes associated with a higher risk of developing dyslexia. Students with a parent or sibling with a reading disability have about a 50% greater chance of also having a reading disability than students whose families do not have that history⁷. Higher genetic risk, as with many aspects of human development, does not necessarily mean that the student will experience a reading and spelling disability.

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⁷ Elliott & Grigorenko, 2014

It does mean that if a family reports a history of dyslexia, school personnel should watch the child's response to instruction carefully and intervene proactively if symptoms begin to develop. In all cases, early and proactive intervention has the greatest chance of being effective in reducing the impact of the disorder.8



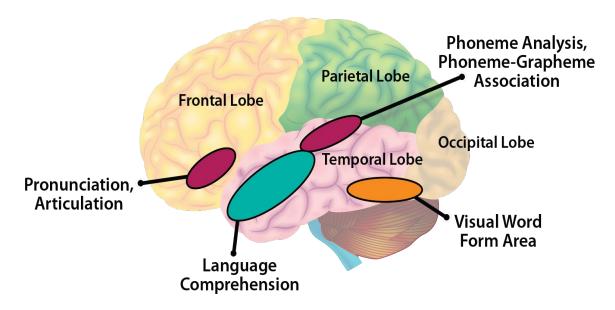
- Dyslexia often occurs with other learning and behavioral disorders. Dyslexia may co-occur with problems in language (Specific Language Impairment), speech (Specific Speech Disorder), attention (Attention Deficit Hyperactivity Disorder), math calculation (Dyscalculia), and the motor skills necessary for writing (Dysgraphia). When more than one developmental disorder occurs in the same child, the conditions are said to be comorbid.
- Students with dyslexia often experience <u>higher levels of anxiety, frustration, and depression</u> than students who learn to read without such difficulty. Emotional support, counseling, and relief from excessive stress and frustration may be needed in treatment plans for students.
- Dyslexia occurs through the range of intellectual ability. Although dyslexia by definition is "unexpected" because the student has an easier time with some aspects of learning, the condition is not caused by lack of intellectual ability and is not defined by a wide difference between an IQ test score and a score on a reading test. Students in the low average range of intellectual ability can also experience dyslexia.
- Dyslexia is a life-long condition. A person with dyslexia can overcome the most limiting aspects of the problem with appropriate instruction -- and learn to read. However, the condition itself remains part of the individual's biological make-up. The symptoms and challenges facing the dyslexic person change over time. It is important for parents and teachers who are planning an individual's support to anticipate the shifting nature of dyslexia as students make their way through schooling and life.

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⁸ Nessy, n.d.

2.3 READING AND THE BRAIN

The illustration below of the left hemisphere of the human brain⁹ depicts the major language systems that must be developed and connected to support fluent reading. The neural systems and pathways necessary to enable reading are not already wired into the developing human brain like those that support the development of spoken language. Rather, those systems and connecting pathways must be constructed from explicit instruction, practice and reading experience. When the brain learns to read, it recruits, adapts, and creates neural pathways to support this unnatural, acquired skill called reading.



When the eye looks at print, the images are carried to the occipital lobe where the shapes of the letter forms and letter patterns can be recognized. A lower region of the occipital-temporal area, known as the brain's letter box or visual word form area, over time becomes the place where images of known printed words are stored in memory. However, the learning and storage of familiar printed words occurs after and as a consequence of the printed letters being associated with speech sounds (phonemes and syllables). Recognition, pronunciation and articulation of speech sounds, necessary for developing phoneme awareness, depend on activity in the frontal lobe, which is anatomically distant from the visual word form area. The sounds of spoken language must be connected to the images of letters and letter combinations (graphemes) for words to be recognized. This critical association process takes place in the parietal-temporal area, also known as the angular gyrus. Linking of phonemes (sounds) and graphemes (letters) is necessary for words to become "sight" words or instantly recognized words. Associations between speech and print occur as the brain constructs an information highway (white matter pathway) linking the back and the front of the brain. Once a word in print is associated with phonemes and syllables in speech and is pronounced, association to its meaning is quickly triggered.

⁹ Moats & Tolman, 2019, LETRS (Lexia Learning), based on Dehaene, 2009, and Fletcher et al., 2019.

Students with dyslexia, as a group, show much less activation in the angular gyrus area where phonemes and graphemes become linked, and consequently, less activation in the visual word form area because they have not developed automatic recognition of many words. However, with intensive remediation, activation patterns in those critical areas can become normalized in many students with dyslexia. ¹⁰

2.4 HOW SYMPTOMS OF DYSLEXIA CHANGE AND EVOLVE WITH DEVELOPMENT

The following lists of "typical" symptoms of dyslexia or word level reading problems at each grade level are given as a guide, with the caution that an individual may have some but not all of these indicators.



Preschool: Getting Ready to Read

- Is late in learning to talk.
- Is slow to learn new words.
- Mixes up pronunciations of words much more or much longer than other children (e.g., says *aminal* for animal, *pusgetti* for spaghetti) even after multiple corrections.
- Has persistent trouble producing difficult speech sounds, such as /th/, /r/, /l/, and /w/.
- May not enjoy looking at or following print in books when read aloud.

Kindergarten and First Grade: Beginning Reading Instruction

- Exhibits difficulty remembering names of letters and recalling them quickly.
- Struggles to recall sounds that letters represent.
- Has trouble breaking a simple word such as zoo or cheese into its separate speech sounds
 (i.e., /z/ /ū/; /ch/ /ē/ /z/).
- Is slow to developing automatic recognition of some common words (e.g., family names, common labels, the most common words used in writing).
- Does not spell the sounds of words in a way that allows the reader to recognize the words.

Second and Third Grade

- Is unable to recognize important and common words by sight, or instantly, without having to laboriously sound them out.
- Falters during the sounding out or letter-sound association (decoding) process and recalls the wrong sounds for the letters and letter patterns.

¹⁰ Fletcher et al., 2019; Simos et al., 2002

- Is a poor speller, with speech sounds omitted, wrong letters for sounds used, and poor recall for even the most common "little" words (e.g., when, went, they, their, been, to, does, said, what).
- Reads too slowly and lacks appropriate expression, marked by many decoding or word recognition errors.
- Loses the gist or meaning of the passage when reading is slow and/or inaccurate.
- Guesses at unknown words from pictures, story theme, or one or two letters in a word.
- Has inordinate difficulty with writing or completing written work.

Transition to "Reading to Learn"

- Is easily overwhelmed by reading and writing demands.
- Misreads directions or word problems.
- Struggles to keep up, taking unfinished classwork home in addition to regular homework.
- Remains a poor speller and struggles to produce written work

Intermediate Grades (Fourth to Sixth Grade)

- Needs extra time on timed oral and silent reading tests.
- Will typically do poorly when asked to read lists of single, common words that are taken
 out of the context.
- Spelling remains poor.
- Appears to have a comprehension problem on a reading test, but when comprehension is measured through tests that do not require reading, it is often much better than the reading test would suggest.

Middle School and Beyond

- May avoid reading and writing as much as possible and report feeling distressed by the effort of reading.
- Reads slowly, fatigues easily, and has trouble managing reading assignments.
- May continue to misread words, especially longer and unfamiliar names.
- Struggles to produce written assignments.
- Spells poorly.
- Usually needs organizational and study strategies and assistive technology to manage classwork, test taking, and homework.

2.5 CORRECTING COMMON MISCONCEPTIONS ABOUT DYSLEXIA

Table 1: Dyslexia – Myth vs. Fact

Misconception or Myth	Fact
Dyslexia is a rare disorder.	Between 5% and 10% of all students are estimated to have severe dyslexia that requires intensive and expert instruction, and up to 20% are estimated to have some of the symptoms of dyslexia.
The main symptom of dyslexia is making reversals or seeing things backwards.	Letter reversals, writing words backwards, and sequencing problems are not the hallmarks of this condition. Initial confusions about the direction or sequence of letters in words are typical of many beginning readers. When and if these problems persist, they are the result of a language-based problem associating speech and language with printed symbols.
Dyslexia is a problem with vision, visual-spatial reasoning, and/or visual memory for words.	Learning to identify letter shapes and letter sequences is more closely associated with language abilities than visual abilities. There is no research evidence to support vision therapies or visual-spatial therapies in the treatment of dyslexia. ¹¹ There is no evidence that colored overlays on print or colored lenses in glasses will help students learn to read, although some students may experience relief from eye strain with these aids. ¹²
Boys are much more likely to be dyslexic than girls.	The prevalence rates of dyslexia in boys and girls are only slightly different. Boys are affected somewhat more often, but the ratio is about 1.4 to 1. ¹³ Some studies suggest that schools and clinics tend to identify boys more frequently than girls, but that may be because they are more likely to have attention and behavior problems.
Dyslexia is a "gift" and people with dyslexia are unusually creative, artistic, and entrepreneurial.	It is not true that dyslexia is associated with giftedness. ¹⁴ All individuals, including those with dyslexia, may have relative strengths or relative weaknesses in art, social leadership, athletics, and everything else. However, for the student with dyslexia, developing strengths and interests beyond academic learning is a very important way to build confidence, competence, a sense of belonging, and future paths to success in life.

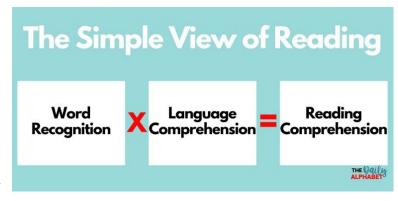
 $^{^{11}}$ American Academy of Ophthalmology, 2014 12 Kilpatrick, 2015 $\,$

¹³ Fletcher et al., 2019; Elliott & Grigorenko, 2014

¹⁴ Elliott & Grigorenko, 2014; Seidenberg, 2017

2.6 SUBTYPES OF DYSLEXIA

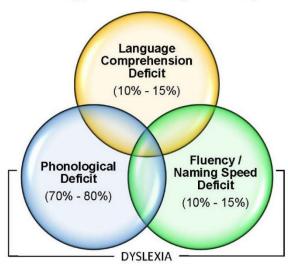
The "Simple View of Reading," a theoretical framework that is described in the ICLP, states that reading comprehension depends on the product of competence in two skill domains: word recognition and language comprehension. 15 Word recognition is the ability to read individual printed words accurately and fluently, out of



context. Language comprehension is the ability to understand the words, sentences, and overall intended meanings of language that is spoken or read aloud.

Reading difficulties can arise in both areas or in one of them. Among all English-speaking students in the lowest 25% of reading ability, at least 80% have trouble with accurate and fluent word recognition that originates with weaknesses in phonological processing or the ability to analyze and mentally manipulate the segments of speech. Students with dyslexia are in this group. However, as stated previously, word recognition difficulties often co-occur with fluency and comprehension problems. Therefore, intervention programs may need to address both word reading and language comprehension.

Subtypes of Reading Disability*



*Adapted from Moats & Tolman, 2009

It is important to recognize that not all students with dyslexia are alike and there is no standard or "classic" diagnostic profile for dyslexia beyond the core problem with word recognition and spelling.¹⁷ Although the majority will be weak on tests of phoneme awareness, not all will. Some students have a more prominent problem establishing automatic or fluent word recognition ("sight" word recognition) than learning to recognize speech sounds in spoken words. Those students often score low on measures of Rapid Automatic Naming (RAN). These students sound out words even after seeing them many times and tend to spell phonetically but not accurately. This subgroup generally has milder difficulties with reading than students with more serious impairments of phonological processing. 18

¹⁵ Hoover & Tunmer, 2020; Image: Griffith, n.d.

¹⁶ Dehaene, 2009; Fletcher et al., 2019

¹⁷ Fletcher et al., 2019; Spear-Swerling, 2015

¹⁸ Dehaene, 2009; Elliott & Grigorenko, 2014

2.7 READING PROBLEMS THAT ARE NOT DYSLEXIA

Genetic, environmental, and instructional factors all contribute to the growth of reading skill. Some children come to school without the kind of experiences that support the development of literacy. Some students have general cognitive and learning difficulties across all areas. An increasing number of students are learning English as a second language. Some children fall behind, even though they are capable of learning, simply because their instruction has been insufficient and/or they have not regularly attended school.

About 10–15 percent of all poor readers appear to decode and read individual words better than they can comprehend the meanings of passages. ¹⁹ These poor readers are distinguished from students with dyslexia because they can read words accurately and quickly and they can spell. Their problems are linked with difficulties in social reasoning, abstract verbal reasoning (including inference-making), and/or general language comprehension. In addition, some students on the autism spectrum and some students with specific language impairment are in this subgroup. English Learners (ELs) with reading problems often appear to fit this profile of better word reading than reading comprehension because they have yet to build their knowledge of vocabulary and academic language. Table 1 summarizes the main types of reading problems.

Table 2: Main Profiles of Struggling Readers

Category	Characteristics	Likely Emphasis of Instruction
Specific word recognition and spelling difficulties • With weak phoneme awareness, and/or • With dysfluency – very slow and non-automatic	-Word reading inaccurate and/or slow, real and nonsense words -Spelling very problematic -Oral language comprehension a strength	-phoneme awareness -phonics and decoding -spelling and written expression -establishing automatic word reading and building fluency
Specific language and reading comprehension difficulties	-word recognition and phonics a relative strength -low vocabulary -weakness understanding sentences, text structure, pragmatics, making inferences	-listening comprehension focused on understanding and producing words, sentences, retelling, summaries -teacher-led, guided reading that supports making inferences, improving selfmonitoring, using strategies to understand

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¹⁹ Fletcher et al., 2019; Oakhill, Cain, & Elbro, 2015

Category	Characteristics	Likely Emphasis of Instruction
Mixed reading difficulties	-both domains (WR and LC) are challenging -fluency will be reduced because of those weaknesses -spelling and written composition probably the most challenging	-a comprehensive approach that systematically addresses all aspects of oral and written language
Lack of opportunity to learn	-should respond steadily to appropriate instruction	-supportive intervention with comprehensive approach

Distinguishing the cause of a reading or writing problem is not always simple or straightforward. We should not delay instruction if we are unsure of the origin of a student's difficulties or the proper classification of the problem. We should develop a working hypothesis about the cause (e.g., whether it is primarily a learning disability like dyslexia, primarily an environmentally caused problem, or something else), but the most productive course of action when we find a student who is at risk is to teach them. Often, in the process of observing the student's response to instruction, we can refine our hypothesis, but we should not delay intervention until we have a definitive identification or diagnosis. Early intervention is extremely important.²⁰

²⁰ Fletcher et al., 2019; National Reading Panel, 2000

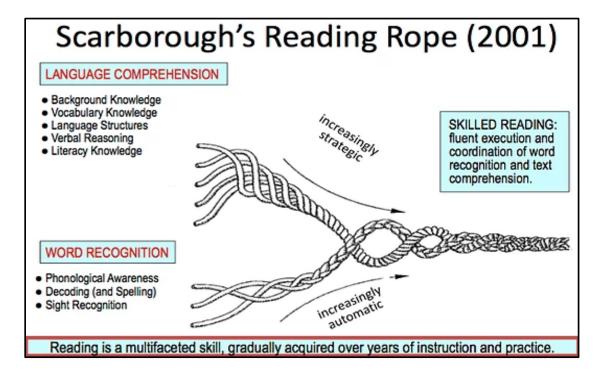
SECTION 3:

STRUCTURED LITERACY INTERVENTIONS

3.1 SYSTEMATIC INTERVENTIONS ARE CRITICAL FOR STUDENTS WITH DYSLEXIA

The importance of explicitly teaching foundational reading skills to all students in the regular classroom has been established by meta-analyses and expert reviews over several decades.²¹ As students learn to read the words, their language arts curriculums also must build background knowledge, vocabulary, and familiarity with the language and forms of challenging text.

Students with dyslexia, however, must be systematically – and sometimes painstakingly – taught how to read the words and how to spell. As the Reading Rope image below shows, ²² the critical strands of instruction that enable such students to accelerate their progress are a) phoneme awareness, b) phonics and decoding skills and c) building memory for "sight" words. "Sight" words are not just irregular words; they are all words that are automatically and efficiently recognized.



This section discusses what the students should be taught and how the instruction is enhanced within a systematic, explicit, multi-sensory approach.

²¹ Adams, 1990; Foorman et al., 2016; National Reading Panel, 2000; Petscher et al., 2020

²² Scarborough, 2001

3.2 THE CONTENT OF STRUCTURED LITERACY

Intervention for students with reading difficulties, especially those with dyslexia, builds knowledge of the elements of language that are represented in the English writing system (or any other language system being taught). This content includes the following.

The phoneme system, including vowel and consonant speech sounds.

A **phoneme** is the smallest element of speech from which words in a language are built. English has 15-18 vowel sounds and 25 consonant sounds. Some of these are not represented by single letters. Some have no unique spellings. Some are easily confused with others because they are very similar (/f/, /v/; /m/ /n/ /ng/; /s/ /z/, etc.). Before being asked to match a grapheme or spelling to a sound, the student should identify, remember, and pronounce the sound. Instruction should call attention to how phonemes are articulated as well as how they sound to the ear, and give students practice discriminating sounds that are confusable. Table 2 shows the consonant phonemes and Figure 1 shows the vowel phonemes. Phonemes are written between slashes.

Table 3: The Consonant Phonemes of English, by Place and Manner of Articulation ²³

	Bilabial (Lips Together)	Labiodental (Teeth on Lip)	Interdental (Tongue between Teeth)	Alveolar (Tongue on Ridge behind Teeth)	Palatal (Tongue Pulled Back on Roof of Mouth)	Velar (Back of Mouth)	Glottal (In the throat)
Stops Unvoiced Voiced	/p/ /b/			/t/ /d/		/k/ /g/	
Nasals	/m/			/n/		/ng/	
Fricatives Unvoiced Voiced		/f/ /v/	/th/ / <u>th</u> /	/s/ /z/	/sh/ /zh/		/h/
Affricates Unvoiced Voiced					/ch/ /j/		
Glides Unvoiced Voiced	/wh/ /w/				/y/		
Liquids				/١/	/r/		

²³ Moats, 2020

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Figure 2: The Vowel Sounds of English, by Order of Articulation²⁴

```
Front, High (Smiley)
                                                                     Back, High
/ē/ (equal)
                                                                           /y//ū/ (unicorn)
  /ĭ/ (itch)
                                  [ə] (b<u>a</u>nan<u>a</u>)
                                                                  /ū/ (moon)
       /ā/ (apron)
                                                          /ŏŏ/ (book)
               /ě/ (edge)
                                                      /ō/ (open)
                                                                        (Rounded)
                       /ă/ (apple)
                                                 /aw/ (saw)
                              /ī/ (ice)
                                              /ŭ/ (up)
                                     /ŏ/ (octopus)
                                  Middle / Low
                                     (Open)
                                                                     /er/ (bird)
/oi/ (boy)
                                                                     /ar/ (star)
/ow/ (cow)
                                                                     /or/ (door)
```

The alphabet and how letters are formed.

The 26 letters of the Roman alphabet, both upper and lower case, must be visually recognized, matched, and produced by hand. Knowing the alphabet in order will be essential for alphabetizing. A plain, consistent font for learning will be helpful to beginning students, as some letters (a, g, q) vary widely in appearance in print.

Phoneme-grapheme (letter-sound and sound-letter) correspondences.

A **grapheme** is a letter or letter combination that represents a phoneme. Some graphemes are single letters, but many graphemes in English are letter combinations (e.g., th, ch, oa, igh, eigh). About 75-80 common phoneme-grapheme correspondences are usually taught explicitly in a structured literacy program, over several years. Tables 3 and 4 list the types of graphemes that English uses for its consonant and vowel phonemes and that can be explicitly taught.

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²⁴ Moats, 2020

Table 4: Types of Consonant Graphemes in English

Consonant Grapheme Type	Definition	Examples	
Single letters	A single consonant letter represents a single consonant phoneme.	b, d, f, g, h, j, k, l, m, n, p, r, s, t, v, w, y, z	
Doublets	A double letter that represents one phoneme.	ff, II, ss, zz	
Digraphs	A two (di) letter combination that stands for one phoneme; no letter acts alone to represent the sound.	th, sh, ch, wh ph, ng (sing) gh (cough) [ck is a guest in this category]	
Trigraphs	A three (tri) letter combination that stands for one phoneme; no letter acts alone to represent the sound.	-tch -dge	
Consonants in blends	A blend contains two or three graphemes because the consonant sounds are separate and identifiable. A blend is not "one sound."	s-c-r (scrape) th-r (thrush) c-l (clean) f-t (sift) l-k (milk) s-t (most) and many more	
Silent letter combinations	One or more letters that do not represent the phoneme are combined with a letter that does represent the phoneme. Most of these are from Anglo-Saxon or Greek.	kn (knock), wr (wrestle), gn (gnarl), ps (psychology), rh (rhythm), -lm (palm), -lk (folk), -mn (hymn), -st (listen)	
Odd letter X	X is the only letter that stands for two phonemes, /k/ and /s/, and occasionally, /g/ and /z/.	bo <u>x,</u> e <u>x</u> it e <u>x</u> act, e <u>x</u> ist	
Combination qu	These two letters, always together, stand for two sounds, /k//w/. They do not stand for "one sound."	<u>qu</u> ickly	

Table 5: Types of Vowel Graphemes Used in English

Vowel Grapheme Type	Definition	Example
Single letters	A single vowel letter stands for a vowel sound.	(short vowels) cap, hit, gem, clod, muss (long vowels) m <u>e</u> , n <u>o</u> , m <u>u</u> sic
Vowel teams	A combination of two, three, or four letters stands for a vowel.	(short vowels) head, hook (long vowels) b <u>oa</u> t, s <u>igh</u> , w <u>eigh</u> (diphthongs) t <u>oi</u> l, b <u>ou</u> t
Vowel-r combinations	A vowel, followed by r, works in combination with /r/ to make a unique vowel sound.	c <u>ar</u> , sp <u>or</u> t, h <u>er</u> , b <u>ur</u> n, f <u>ir</u> st
Vowel-consonant-e (VCe)	A common pattern for spelling a long vowel sound.	gate, mete, rude, hope, five

Common spelling patterns

English orthography (the writing system) has many patterns governing the order of letters, the use of certain graphemes for sounds occurring in specific positions in words, and the rules for adding endings or suffixes to base words. For example, ai can be used for long a if it is followed by a consonant (bail, stain, paid), but ay can be used when long a ends a word (bay, stay, pay). The sound /k/ is spelled with 'c' before a, o, and u, and with the letter 'k' before e, i and y.

Spelling patterns for basic syllable types

Every syllable has a vowel phoneme and a vowel grapheme. English uses six basic patterns for spelling syllables that can help a student recognize how the vowel sounds in an unknown word and that can help students understand aspects of spelling, such as why some letters are doubled. These syllable types are more useful for explaining words with two syllables than words with many syllables. Nevertheless, some acquaintance with these syllable spelling patterns is a helpful step in learning to read and write words with more than one syllable. Table 5 illustrates the six syllable types usually taught in a structured literacy program.

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²⁵ Kearns, 2020

Table 6: Six Written Syllable Types in English

Syllable Type	Examples	Definition
Closed	dap-ple hos-tel bev-erage	A syllable with a short vowel spelled with a single vowel letter ending in one or more consonants.
Vowel-Consonant-e ("Magic e")	com <u>pete</u> des <u>pite</u>	A syllable with a long vowel spelled with one vowel + one consonant + silent <i>e</i> .
Open	<u>pro</u> gram <u>ta</u> ble <u>re</u> cent	A syllable that ends with a long vowel sound, spelled with a single vowel letter.
Vowel Team	awe-some train-er con-geal spoil-age	Syllables with long, short, or diphthong vowel spellings that use two to four letters to spell the vowel. Diphthongs <i>ou/ow</i> and <i>oi/oy</i> are included in this category.
Vowel-r (r-controlled)	in- <u>iur-</u> ious con- <u>sort</u> <u>char-ter</u>	A syllable with er, ir, or, ar , or ur . Vowel pronunciation often changes before /r/.
Consonant-le	drib <u>ble</u> bea <u>gle</u> lit <u>tle</u>	An unaccented final syllable containing a consonant before /l/ followed by a silent e.
Leftovers: Odd and Schwa syllables	dam- <u>age</u> act- <u>ive</u> na- <u>tion</u>	Usually final, unaccented syllables with odd spellings.

• Morphemes or meaningful parts of words

Many words in English are made up of morphemes or meaningful word parts, including prefixes, roots, and suffixes. Inflectional suffixes, or those common endings that do not change the part of speech to which they are added (-s, -es, -ed, -ing, -er, -est) must be learned first because they are so common. Parts of compound words (doghouse, butterfly, schoolyard) are often taught next. Common prefixes (e.g., un, re, mis, pre) and derivational suffixes that do change a word's part of speech (e.g., -ly, -ment, -ous, -less) are next. When students start working with common Latin roots (e.g., port, tract, ject, fer), they can realize how many words are created from these building blocks. Studying morphology helps with reading, spelling, and vocabulary, and is shown to be particularly effective in interventions for students with dyslexia. ²⁶ Tables 6 and 7 list some common affixes and roots in English.

²⁶ Arbak & Elbro, 2010; Berninger, et.al, 2010; Bowers, Kirby & Deacon, 2010

Table 7: The Most Common Prefixes and Suffixes in Printed School English²⁷

Rank	Prefix Prefixed Words		Suffix	Percentage of All
		Prefixed Words		Suffixed Words
1.	un-	26	-s, -es	31
2.	re-	14	-ed	20
3.	im-, in-, il-, ir-	11	-ing	14
4.	dis-	7	-ly	7
5.	en, em	4	-er, -or (agent)	4
6.	non-	4	-ion, -ation, -ition, -	4
			tion	
7.	in-, im- (in)	4	-able, -ible	2
8.	over-	3	-al, -ial	1
9.	mis-	3	-у	1
10.	sub-	3	-ness	1
11.	pre-	3	-ity, -ty	1
12.	inter-	3	-ment	1
13.	fore-	3	-ic	1
14.	de-	2	-ous, -ious, eous	1
15.	trans-	2	-en	1
16.	super-	1	-er (comparative)	1
17.	semi-	1	-ive, -tive, -ative	1
18.	anti-	1	-ful	1
19.	mid-	1	-less	1
20.	under- (too	1	-est	1
	little)			
All		3		7
others		J		/

Table 8: Common Latin and Greek Roots in English

Latin Root	Meaning	Greek Combining Form	Meaning
amo	love	aero	air
annum	year	anthropo	human
aqua	water	biblio	books
aud	hear, listen	bio	life
cede	yield	chron	time
cess	go, move	cosm	universe
cide, cise	cut, kill	crat	rule
cred	belief	dem	people
dic, dict	say, speak	gen	birth
duc	lead	geo	earth
fer	bear, carry	graph	write, record

²⁷ White, Sowell, & Yanagihara, 1989

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Latin Root	Meaning	Greek Combining Form	Meaning
flect	bend	logo, logy	study of
form	shape	mech	machine
grat	pleasing	path	feeling
jud, jur, jus	law	phon	sound (language)
mis, mit	send	photo	light
nat	born	poly	city
rupt	break	psych	mind
scribe, script	write	scop	see
tract	pull	therm	heat
vid, vis	see		

Basics of word origin (etymology)

The history of a word or its etymology is often useful in explaining the relationship between its sound, spelling, and meaning. The historical layers of English – mainly Anglo-Saxon, French, Latin, and Greek – explain some important aspects of word structure and spelling. For example, the word "character" uses ch to spell /k/ because it comes from Greek, but the word machine uses ch to spell /sh/ because it came to English through French. Table 8 shows how the English spelling system is influenced by the language from which a word originated.

Table 9: Spelling Patterns in English by Language of Origin

HISTORICAL LAYERS OF ENGLISH	Phoneme- Grapheme Correspondence	Syllable Patterns	Morphemes
Anglo-Saxon Layer	consonants -single -digraphs -blends vowels -single short/long -long VCe -vowel team -vowel-r patterns	closed (short V) open (long V) VCe (long V) vowel-r vowel team consonant-le (oddities)	compounds (daylight) inflections (-ed, -s, -es, -er/ est, -ing) base words suffixes (en, hood, ly, ward) odd, high frequency words (said, does)
Latin (Romance Layer)			prefixes (pre, inter) roots (gress, ject, vis) suffixes (ment, ity) Latin plurals (alumni, minutiae, curricula)

HISTORICAL LAYERS OF ENGLISH	Phoneme-Grapheme Correspondence	Syllable Patterns	Morphemes
Greek Layer (Grades 6-8)	ph for /f/ (graph) ch for /k/ (chorus) y for /i/ (gym, gyrate)		Combining forms: (neuro, psych, ology, lex, chloro, photo, graph) Greek Plurals:(crises, parentheses, metamorphoses)

Syntax or sentence structure

Reading comprehension and written expression require students to understand how sentences work. At a minimum, the differences between simple, compound, and complex structures are taught, along with manipulation of phrases and clauses – both dependent and independent – in building sentences that clearly convey ideas.²⁸

Word meaning and meaning relationships (vocabulary)

Building the mental dictionary, or knowledge of word meanings and their connections, is an on-going goal in structured literacy. Even in a lesson focused on decoding skills, there should be exercises focused on the meanings of the words being read and their use in context. Words prioritized for in-depth instruction should be those that are central to understanding a topic or a text reading that the student is undertaking.

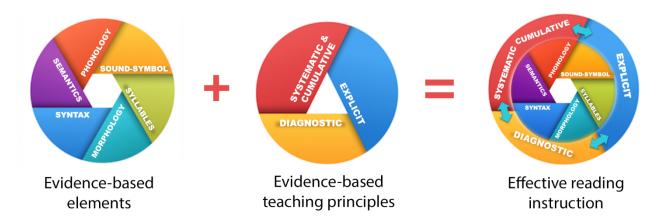
How paragraphs and text selections are organized

Students can be shown, through diagrams (graphic organizers), how main ideas and details are typically organized in paragraphs. In addition, they should learn the characteristics of various genres, especially typical story structure and various types of informational texts. Insight into text organization helps students know what to expect when they begin to read, to better track whether the text is making sense, and to remember the content.

²⁸ Jennings & Haynes, 2021

Structured literacy

Explicit teaching of systematic word identification and decoding strategies



Source: © 2016 Cowen for International Dyslexia Association https://app.box.com/s/2yqu2ke21mxs0hz9l77owdlorgvtesyq

3.3 KEY ELEMENTS OF A STRUCTURED LITERACY LESSON DESIGNED TO ACCELERATE PROGRESS

3.3.1 Elements of the Lesson Format

The goal of work on basic or foundational language skills is to improve the ability to read for meaning and write to be understood. The goal is also to accelerate a student's rate of progress so that they gain in relative standing, as measured by standard scores. Thus, the structured literacy lesson framework has the following elements²⁹ and addresses all essential language components from phoneme awareness to reading and writing meaningful text.

Word Recognition (15-25 minutes)

- Review
- Phoneme or speech awareness focused on listening to, speaking, and manipulating the speech sound(s) taught in the lesson
- Instruction in new sound-symbol association (with phonemes, syllables, or morphemes)
- Decoding and/or spelling strategies applied to words
 - o Pattern-based words
 - Exception words
- Guided practice with immediate feedback that corrects mistakes quickly

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²⁹ Spear-Swerling, 2022; Moats & Tolman, 2018

Building Fluency and Automaticity (5-10 minutes)

- Quick (1 minute) speed drills with words/patterns that have been taught
- 2-4 timed repeated readings of a text
- Phrase-cued reading; partner reading; alternate oral reading; choral reading

Text Reading Comprehension (Instructional Level) (10-25 minutes)

- Use of instructional level text, often a decodable, that student can read at a 90-95% correct level
- Explicit teaching of a few important word meanings (vocabulary)
- Teacher-guided questioning, clarification, summarization as text is read
- Partner talk: What was this about?

Language Comprehension (Listening) (10-15 minutes)

- Use of grade-level text or "stretch" text for teacher to read aloud
- Teacher-led discussion of several important vocabulary words, using vocabulary routine
- Explanation of confusing or challenging syntax
- Summarizing, graphing, illustrating, discussing, debating important meanings in the text

Writing (15 minutes)

- Writing of words, phrases, and/or sentences with the pattern(s) being taught
- Composing sentences using sentence builders or sentence combining
- Editing/rewriting simple sentences to combine or elaborate
- Writing in response to reading; combining sentences into paragraphs

Generally, it is not possible to address all these lesson components in one small group instructional period, and the whole lesson sequence will need to stretch over two or more instructional sessions.

3.3.2 Teaching Phoneme Awareness

The biggest gains for students with moderate to severe reading disabilities have occurred in studies that include explicit practice on phoneme identity and manipulation, beyond simple phoneme segmentation or tapping out sounds.³⁰ The phoneme awareness part of the lesson is brief but targeted at a level the student can handle and uses the sounds the student is working on for reading and spelling. The range of tasks, from easy to more complex, is shown in Table 10 below.



³⁰ The effectiveness of various approaches is reviewed in detail by Kilpatrick, 2015.

Table 10: Typical Phoneme Awareness Tasks, from Early to Complex

Level of Difficulty	Description of Task	Example of Task
Easiest	Match words that begin or end	Which words start with the
	with the same sound.	same sound? (milk, table, moon)
	Separate a first sound from the rest	Say the first sound in zoo (/z/).
	of a simple syllable (with no	
	blends).	
	Say the separate sounds in a simple	Say each sound in "show" (/sh/
	syllable with 2-3 phonemes.	/o/).
Basic (Words	Delete a first sound from a single,	Say "feet." Now say "feet" but
without Blends)	simple syllable and say what's left.	don't say /f/. (eat)
	Change the beginning sound	Say "done." Now say "done,"
	(onset) and keep what's left (the	but instead of /d/ say /r/. (run)
	rime) to make a new word.	
	Delete a beginning phoneme from	"Say <i>sleep.</i> Now say <i>sleep</i> but
	a word that begins with a blend.	don't say /s/." (leap)
	Delete a final phoneme.	Say <i>sheet</i> . Now say sheet but
		don't say /t/." (she)
More Complex	Substitute a medial vowel in a one-	"Say <i>ran</i> . Now say <i>ran</i> but
(Vowels and Words	syllable word.	instead of /a/ say /u/." (run)
with Blends)		
	Delete the second phoneme in an	"Say <i>bread.</i> Now say <i>bread</i> but
	initial blend.	don't say /r/." (bed)
	Substitute the second phoneme in	"Say <i>crew</i> . Now say <i>crew</i> but
	a blend.	instead of /r/ say /l/." (clue)
	Substitute a final phoneme.	"Say some. Now say some but
		instead of /m/ say /n/." (sun)
Most Complex	Delete the internal phoneme in a	"Say <i>ghost.</i> Now say <i>ghost</i> but
	final blend.	don't say /s/." (goat)
	Substitute the internal phoneme in	"Say west. Now say west but
	a final blend.	instead of /s/ say /n/." (went)

As they are learning to read and spell, students' skills will be bolstered by direct practice mapping sequences of written graphemes to the phonemes in the spoken word – the essential underpinning for anchoring a word in memory. Being able to complete more advanced phoneme awareness tasks with fluency supports fluent recognition of "sight" words.³¹

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³¹ Kilpatrick, 2015

3.3.3 Teaching Phonics and Decoding

Following a scope and sequence that systematically addresses the major elements described in section 3.1 is essential. Phoneme-grapheme correspondences are taught gradually, one at a time, in an "I do, we do, you do" sequence. The sound is introduced, a grapheme or grapheme pattern that represents it is presented, and then students practice identifying the correspondence in isolation and in the context of words they decode and write.

Here is a sample of an introductory dialogue:

Teacher:

"Today we will study another Vowel-Consonant-e or VCe pattern, this one for /ī/ or "long i." We've already learned the VCe pattern for /ā/ as in cake, safe, and tape.

"First, let's listen for the sound. If you hear /ī/ in the word I say, put thumbs up. (*ride, hike, made, fit, bite*, etc.) Look in the mirror as you say the vowel /ī/. What is your mouth doing?

"A letter pattern that represents long vowels is VCe: one vowel letter, a single consonant, and a silent **e** at the end.

"Let's say the sounds in the word *side*. /s//i//d/." Teacher models writing three line or moves blocks into three sound boxes as students say the three sounds, raising a finger for each sound or moving tokens into boxes.

Teacher writes the word *side* on the lines or in the boxes. "Look at the word *side*. How many letters are there?" (Four.) "How many sounds? (Three.)

"Which letter represents no sound by itself? (e). The letter e does not get its own box [or its own line] because it does not represent a vowel sound by itself. Its job is to reach back over the consonant, tap the vowel and make it say its own name. (Teacher draws arrow from the silent e back to the sounded vowel letter.)

Many forms of practice can be used as the new correspondence pattern is applied to word reading and spelling. They include activities such as:

- phoneme-grapheme mapping,
- sound-by-sound blending,
- finding targeted words in a list,
- word sorting, and
- word building using letter tiles.

Although all well-designed and effective programs progress from easy to difficult and from wide contrasts to narrow contrasts of phonemes and graphemes, and all progress from simple correspondences to multi-syllable words to longer words with several morphemes, there is no single scope and sequence that all effective programs follow. An example of one scope and sequence for teaching word recognition and spelling is in Appendix B.

3.3.4 Developing Automatic "Sight" Word Reading

Learning phonics is not enough. Words must be read automatically, by sight — a result of many opportunities to read them accurately both in and out of context. Whatever is taught in the phonics and decoding part of the lesson must be applied and practiced in reading words, phrases, and meaningful stories that use the words. While a typically developing student may remember a word after one to four exposures, a student with dyslexia may need ten to two hundred exposures to record that word in memory so that it is recognized automatically. Practice with decodable text is essential, but decodable text is only appropriate if it has a high proportion of words with patterns that have been systematically taught. Thus, commercially advertised books that claim to be decodable may not fit the scope and sequence of the program the teacher is using and may not be helpful.

High frequency irregular words or exceptions (such as *they, said, of, do, done*) are also learned through a sound-symbol mapping process, but the student must remember an unusual letter pattern for a sound pattern. The irregular part of a word can be identified but the sounds must still be mapped to print. There is no such thing as "using the eye like a camera" to memorize irregular words.

Techniques for studying these words include:

- a) Creating a "spelling pronunciation" to map speech to print, such as /w//ă//s/ for was.
- b) Marking the irregular grapheme with a heart because it must be learned "by heart" and then constructing the word with letter tiles before writing it several times.³²
- c) Learning related words as a pattern: *go, gone;* do, done; where, there, here
- d) Looking at the word's history and meaning to make sense of its spelling: said = say + ed.



3.4 INTENSITY OF INSTRUCTION

Within a MTSS framework, students who are at risk, after additional assessment has occurred (see Section 4), are quickly assigned to small groups of students with similar needs and given instruction designed to accelerate their growth. The size of a group will depend on several factors, but evidence suggests that groups should be no more than 1:4 students if accelerated progress is be achieved with needier students.³³ If students are not making meaningful progress after a few weeks, the intensity of instruction can be changed, including but not limited to:

Reducing the intervention group size to 1-1 or 1-2

³² Image: Winter, 2021

³³ Kilpatrick, 2015; Wanzek & Vaughn, 2007

- Increasing the frequency and duration of lessons
- Improving implementation of the approach or program by providing the teacher or tutor with expert coaching (or changing the teacher / tutor if needed)
- Placing greater emphasis on developing the student's proficiency with phoneme awareness, retention and application of decoding skills, and opportunities to practice

Idaho statute <u>Section 33-1807</u> requires students in kindergarten through third grade who do not score proficient on the fall IRI to receive 30 or 60 hours of literacy intervention (depending on their score). However, some students may need more hours, which could be addressed in their individual reading improvement plan (<u>Section 33-1805</u>). Several gold standard research studies have reported lasting and significant gains when students who are below the 30th percentile in grades K-2 receive 75-120 hours of intervention with lessons that are 30-40 minutes in length.³⁴ The requirement for 60 total hours may not be sufficient to get some students on track for normalized reading growth.

3.5 TEACHING PRINCIPLES: EXPLICIT, SYSTEMATIC, AND MULTI-SENSORY

Explicit

The term "explicit" means that the teacher explains and illustrates a new concept directly, without relying on students to discover it themselves or pick it up from some incidental examples. Initial instruction is followed by planned practice and application to meaningful reading and writing.³⁵

Systematic and Cumulative

The term "systematic" means that concepts are presented within a defined scope and sequence in which more complex ideas or patterns build up from easier ones. (For example, vowel teams are studied after short vowels and the more common vowel-consonant-e (VCe) long vowel patterns.) Cumulative means that review of previously learned material is frequent and each new element builds on earlier learning. The process has been compared to building a foundation wall, brick by brick.

Multi-modal or Multi-sensory Learning

Practitioners have traditionally used the term "multi-sensory" to describe a basic tenet of intervention for students with dyslexia.³⁶ "Multi-modal" has also been suggested as a descriptor.³⁷ Both terms mean that students will stay engaged, pay attention, and remember better if they link spoken language, the visual stimuli of print, and touch or pencil movement

³⁴ Foorman & Al Otaiba, 2009

³⁵ Archer & Hughes, 2011

³⁶ Birsh & Carreker, 2018

³⁷ Fletcher et al., 2019

together. There are many ways that this principle can be applied during lessons. Here are a few examples.

- A) To practice sound-symbol association, in the original Orton-Gillingham method, the student looks at a grapheme, says the sound it represents, says the letter name, and then traces or writes the letter(s) while associating the sound with a key word. This activity is known as "V-A-K" for "visual, auditory, and kinesthetic." The order of associations is then changed to A-V-K; the student hears a phoneme, says or identifies the grapheme and keyword associated with it, and writes the letter(s).
- B) To segment the sounds of spoken words, the student moves colored tokens into boxes as the sounds are spoken. The colored tokens may then be replaced with movable letters or letter tiles.
- C) To learn to form or write letters, the student writes large in a sand tray or rough board before tracing and writing letters on paper.
- D) To spell, the student moves letter tiles onto lines on a magnetic board, then checks the word back by touching the tiles while he/she says the sounds and the blends whole word.
- E) To group words into phrases and phrases into sentences, the student works with a partner and moves word cards on a large surface.
- F) While identifying pronoun references in a text, the student uses colored pencils, drawing arrows between words that refer to one another.

Touch, movement, and linking of visual symbols with spoken language are fundamental to effective instruction.

SECTION 4:

SCREENING & TESTING FOR DYSLEXIA

4.1 OVERVIEW OF THE SCREENING, INTERVENTION, AND PROGRESS MONITORING PROCESS

Screening and testing for dyslexia can be conducted in three phases, each one requiring more time and professional expertise. In addition, progress monitoring for students receiving intervention through an individual reading plan should be ongoing. Again, the educational needs of each student must be the focus, even if a definitive diagnosis of a problem is not yet determined. The image below outlines the full process, from screening, to ongoing progress monitoring and intervention services.

Screening, Intervention, and Progress Monitoring Cycle

STEP 1: Tier I Screening

- IRI for grades K-3
- LEA chosen for 4-5)



STEP 3: Diagnostic Measures

 Give Student-Specific Diagnostics Aligned to Areas of Concern



STEP 5: Implement Interventions

- Tier 1: Strong core instruction for all students
- Tier 2: Targeted supports for flagged (at-risk) students
- Tier 3: Intensive supports for flagged students with significant risk



STEP 7: Data Review 3

- Review Progress Monitoring Data
- Adjust Tier Supports / Interventions as needed



1 2 3 4 5 5 6 7 8

REFERRAL FOR SPECIAL EDUCATION EVALUATION CAN HAPPEN AT ANY TIME



STEP 2: Data Review 1

- Review Screening Data
- Flag At-Risk Students
- Identify Areas of Concern



STEP 4: Data Review 2

- Review Diagnostics Data
- Plan Interventions in Individual Student Reading Plans



STEP 6: Progress Monitoring

 Administer Formative or Interim Assessments to gauge student progress



STEP 8: Ongoing Monitoring & Interventions

- Continue Progress Monitoring (Step 6) & Data Reviews (Step 7)
- Adjust and implement interventions

4.2 TIER I SCREENING USING THE IDAHO READING INDICATOR (IRI)

Idaho statute <u>Section 33-1811</u> requires schools to use the Idaho Reading Indicator (IRI) for Tier I screening to identify students in kindergarten through grade three who are at risk for reading difficulties, including characteristics of dyslexia. Students in grades four and five are given a Tier I screener as chosen by their LEA. The purpose of the Tier I screening is to flag students who are not progressing well enough with regular classroom instruction and who may fall further behind without additional intervention or support. It is not to provide detailed information about the student's academic learning needs or to formally diagnose the student's difficulty.

Tier 1 screening in the primary grades may provide preliminary evidence that the student is struggling with the foundational skills that are typically weak in dyslexia: phoneme awareness, letter knowledge, phonic decoding, spelling, processing speed, and text reading fluency. The most common "red flags" in students in the intermediate grades will be low scores in text reading fluency, including word reading and passage reading fluency, and spelling.

For grades K through 3, the IRI reports composite and subtest scores for individual students. Whether a student is At Grade Level/Proficient should *not* be used to determine if the school team will administer Tier II Diagnostic Measure(s) to the student for characteristics of dyslexia. Rather, the subtest scores should be reviewed for patterns of at-risk reading according to the guidance from Idaho's IRI current vendor, Istation, as provided in Appendix A: Guide to Screening and Diagnostic Measures. Tier I screening guidance for grades four and five is also provided in Appendix A.

4.3 TIER II DIAGNOSTIC MEASURES TO INFORM INSTRUCTION

Idaho statute requires schools to administer one or more diagnostic measures if a student's Tier I screening appears to indicate the student may have characteristics of dyslexia. The diagnostic measures required by law are not intended to diagnose a student with dyslexia or any specific learning disability. Rather, the aim of the diagnostic measures is to identify where, in a sequence of skill development, a student's instruction should begin and where it should aim. This could be focused on characteristics of dyslexia or could address broader reading challenges.

Depending on a student's individual screening results and needs, Tier II diagnostic measures should include some or all of the following:

- <u>Vision and hearing screening.</u> Occasionally, students have previously undetected hearing or vision loss that can be treated with hearing aids or glasses.
- Review of school records for attendance, prior reports. Teams should know about any previous documentation of a student's learning challenges.
- <u>Conversation with parents</u> about their concerns. Often, parents have observed their child's learning differences well before formal schooling begins.
- A diagnostic survey of phoneme awareness. The survey involves oral language tasks and does not involve print. It should include items that are sequenced for difficulty, according to research on phoneme awareness development, and span both basic skills such as phoneme matching and more complex skills such as phoneme substitution and deletion. The survey should be administered in person by a qualified teacher or specialist because students' oral responses are important to observe and record. Some of the most sensitive tests of phoneme awareness also time the students' responses to measure the student's proficiency with the tasks.³⁸
- <u>Phonics, decoding, and word reading survey</u>. This inventory is given to show where, in a scope and sequence, the student's instruction should focus. It should assess the student's

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³⁸ Kilpatrick, 2015

knowledge of letter names; knowledge of individual sound-symbol (phoneme-grapheme) correspondences; recognition of the syllables in longer words; recognition of common morphemes or meaningful word parts such as prefixes, roots, and suffixes; ability to decode novel or unfamiliar words; and ability to read real words out of context. Most importantly, it should correspond to the scope and sequence of the instructional program in use.

- Oral reading for fluency and accuracy. Timed reading of short passages, with comprehension questions, is a common and important way of assessing reading fluency. Several well-validated curriculum-based assessments provide short passages that progress in difficulty, and that allow calculation of words correct per minute in one-minute timed readings. These scores can be compared to the fluency norms that were updated by Hasbrouck and Tindal in 2017.³⁹
- Written spelling, diagnostic inventory. Measurement of spelling should include a standardized test of dictated words to determine a student's spelling standard score and percentile rank, which will clarify the severity of the spelling issues. In addition, a diagnostic inventory will help identify the specific spelling patterns the student knows or needs to learn (e.g., short vowels, consonant blends, vowel teams, etc.).
- Writing and classwork samples. Observation of a student's responses to classwork and written assignments should be made to determine the kind of support that might be necessary for the student to complete tasks successfully.
- <u>Vocabulary and language comprehension</u>. Additional assessment in these areas may be necessary, depending on the results of the Tier I screening. A first step in assessing language comprehension can be reading passages aloud to students to see if they can retell or answer questions that they could not answer by reading alone. If a student's language comprehension and expression appear to be problematic, referral to a Speech-Language Therapist may be indicated.

The diagnostic measures can be conducted by qualified teachers and interventionists on the school's staff who have been trained to give and score the assessments. Appendix A provides additional information regarding how to use students' Tier I data to guide which diagnostic measures are administered (including specific diagnostic measures LEAs can use).

School teams should use the results of the diagnostic measures to develop the specific intervention services that should be outlined in students' individual reading plans, as required by Idaho statute.

4.4 ANALYZING THE DATA: QUALITATIVE INDICATORS

What is different or distinctive about the picture that a student with dyslexia presents? There is no clear-cut answer in many cases, as students may exhibit only some of the following difficulties

³⁹ Hasbrouck & Tindal, 2017

or may present with less severe reading and writing problems that still require intervention. Some of the most important indicators are described below.

Family history of reading/spelling difficulties

Whenever a family shares this history, the student's progress should be carefully monitored because the student has a 50% chance of also experiencing dyslexia.

Letter naming

The student may persistently confuse letter forms and letter names, especially those that sound the same (such as g, j; m, n) or those whose names do not have the sounds the letters represent (such as y, w, h).

Phoneme awareness

The student cannot efficiently take sounds in words apart, blend them together, or substitute them to make new words.

Letter-sound correspondence

The student has poor memory for the sounds that letters represent, within a lesson or from lesson to lesson.

Word and nonword reading accuracy and fluency

The student attempts word reading without systematic decoding and relies on guessing without analyzing the letters and sounds in a word. When trying to apply phonics skills that have been taught, is inaccurate and/or very slow.

Spelling

The student's spelling shows an inability to represent the sounds in words that are written, especially omission of sounds and confusion of similar sounds (/f/, /v/; /r/ /w/). If the student can spell words phonetically, by representing sounds in a plausible way, they have taken an important step forward.

Passage reading rate or fluency

Some students are very slow and inaccurate; others slow but accurate; and others fast and inaccurate. It will be important to improve accuracy before emphasizing speed or fluency during reading lessons.

Vocabulary

Some students with dyslexia confuse similar sounding words and names (e.g., Benedetti/Benintendi; syllable/syllabus). Persistent confusions, even after correction and practice, can be a sign of a phonological memory problem – a core problem in dyslexia.

4.5 PROGRESS MONITORING

Student progress should be monitored regularly, about every two weeks of instruction, to see whether gaps in achievement are being narrowed by virtue of the extra intervention and support the students are receiving. Progress monitoring assessments are brief (no more than 5 minutes) and directly measure the student's retention of skills and concepts recently taught. Progress monitoring assessments, such as timed passage readings, should be reliable and validated for this purpose.

Progress is best monitored with curriculum-based measures (CBMs). These are short, usually timed, tests of oral passage reading fluency and accuracy, word reading, sound-symbol association, or other skills. It is important to use tasks that are validated for this purpose and that have multiple equivalent forms. In Idaho, it is also important that student progress is monitored using standardized, norm-referenced tools in the event that the problem-solving team suspects that a student may require special education and/or related services. Many teams choose to use these tools in addition to more targeted CBMs. Information about progress monitoring procedures can be found at the Center for Intensive Intervention, along with reviews of progress monitoring assessments such as those offered by Acadience Reading, AIMSweb, FastBridgeLearning, DIBELS-8, and EasyCBM.



Data from progress monitoring assessments will be the basis for subsequent decisions about whether the student's intervention plan needs to change. Not only should a student be making some progress with intervention, but everyone's goal should be to close or narrow the gap between student performance and grade level performance. In most cases, a student's response rate will be evident within the first 15-20 hours of instruction, and if that accelerated rate of progress continues, the intervention should likely be sustained.⁴⁰

If the student is not responding to instruction with gains toward grade level performance, intervention should be further intensified (Tier III), which could include the following options, as described in a previous section:

- Reduce the size of the intervention group
- Increase the frequency and duration of lessons
- Provide additional training or supervision to the teacher or tutor
- Change the program's focus, content, or procedures
- Obtain a more comprehensive professional evaluation
- Determine whether a referral to consider special education evaluation is necessary

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⁴⁰ Torgesen, 2004b

4.6 COMPREHENSIVE EVALUATION FOR SPECIAL EDUCATION ELIGIBILITY

General education aligned with the ICLP provides evidence-based literacy instruction to help students who experience reading difficulty through early and responsive support (MTSS tiered interventions). Many students who may have dyslexia can and should make effective progress with these general education supports. However, for students who may need special education services to make effective progress, timely and appropriate special education evaluation and eligibility determination is key.

4.6.1 Use of the Term Dyslexia in Schools

Both Federal and State guidance allow the use of the term dyslexia during evaluation, eligibility determinations, and IEP documents, when students meet the criteria as a student with dyslexia or exhibits characteristics of dyslexia. By specifying the nature of the students' specific learning disability, the team can formulate goals, make instructional decisions, and identify appropriate accommodations and modifications in a more strategic manner.

4.6.2 Referral to Consider a Special Education Evaluation

A student can be referred for special education evaluation in three ways. First, IDEA and Idaho law require public schools to proactively identify and evaluate all students aged 3-21 who are suspected of having a disability. This is known as Child Find. School districts must locate all students with disabilities living or attending school in the district, including English learners and students who are highly mobile or homeless, regardless of whether the students attend public or private schools or are home schooled. Second, young children already receiving services through the Infant Toddler Program (ITP) must be referred by ITP for a district evaluation as they approach their third birthday.

Finally, parents/guardians and school personnel can refer a student for an initial evaluation to determine whether the student needs special education or related services. For example, referrals can be initiated when a student does not respond to interventions within the MTSS model as evidenced by ongoing progress monitoring data (see Section 4.4). Another prompt for referral could occur when screening data reveals that a student has a significant risk for dyslexia. This referral can be made at any time when a student is suspected of having a disability that is causing an inability to progress effectively in the general education curriculum. The use of screening measures and/or tiered interventions may not be used to delay or deny a full and individualized evaluation of a student suspected of having a disability, but they could continue throughout the special education evaluation process.

The first step in a *Referral to Consider a Special Education Evaluation* process in Idaho will begin with assembling an evaluation team, of which the parent/guardian is a mandatory member, and *Procedural Safeguards* are initiated. As a team, school team members and parents together will review existing evidence, identify the student's specific area(s) of concern, and determine whether an evaluation for special education is warranted.

Specific Learning Disability (SLD) means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations, including conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, **dyslexia**, and developmental aphasia.

Specific Learning Disability does not include learning problems that are primarily the result of visual, hearing, or motor disabilities, of intellectual disability, of emotional behavioral disorder, or of environmental, cultural, or economic disadvantage.

Only a school age child may be identified as a student with a specific learning disability.

Idaho Special Education Manual, Chapter 4, Section B.8

The criteria for identifying a student with a specific learning disability are established by state and federal law. In Idaho, the criteria include a student's response to evidence-based intervention in targeted skill areas and measured by norm-referenced progress monitoring tools. Although eligibility for special education includes students with dyslexia, students with dyslexia must meet state criteria for a specific learning disability or another appropriate category in order to receive special education services.

In addition to demonstrating failure to respond to evidence-based interventions, Idaho requires the results of the evaluation to indicate low achievement in the area(s) of suspected disability as evidenced by a norm-referenced, standardized achievement assessment and a pattern of strengths and weaknesses in psychological processing skills that impact learning. The <u>Idaho Special Education Manual</u> outlines the specific evaluation procedures and evidence required for identifying SLD. Finally, students must meet the Three-Prong Test of Eligibility:

Prong 1: The student has a disability according to the established Idaho criteria

AND

Prong 2: The student's condition adversely affects educational performance

AND

Prong 3: The student needs specially designed instruction.

If an evaluation team suspects that a student may be a student with dyslexia, the evaluation may include assessment of the following:

- A thorough developmental, medical, and educational history, to include documentation of response to previous instruction
- Phonological and phonemic awareness
- Working memory for language, including sounds, syllables, words, and sentences
- Rapid Automatic Naming (RAN) speed of naming objects, colors, digits, or letters
- Receptive and expressive vocabulary understanding and use of spoken words
- Phonics and decoding, applied to real and nonsense words
- Oral and silent passage reading fluency, with comprehension questions
- Spelling and written expression

Special education interventions are considered the most intensive and are provided based on a student's eligibility and need for specialized instruction. The student will remain in the core instruction (Tier I) and will have access to tiered intervention within the general education curriculum to the greatest extent possible. Interventions will be tailored to the student in the area of identified disability (i.e., dyslexia-specific interventions when appropriate), and progress toward their Individualized Education Program (IEP) goals will be monitored according to the IEP. If students fail to respond to intervention provided through special education services, an IEP team will be reconvened.

4.6.3 Dyslexia in Federal Law

Three federal laws apply to students with disabilities, including students with dyslexia. Brief summaries of these laws' requirements and protections are summarized below.

Federal Laws Pertaining to Dyslexia and Other Learning Disabilities

The Individuals with Disabilities Education Act (IDEA)

The Individuals with Disabilities Education Act (IDEA), formerly called P.L. 94-142 or the Education for all Handicapped Children Act of 1975, requires public schools to make available to all eligible children with disabilities a free appropriate public education in the least restrictive environment appropriate to their individual needs. The law indicates 14 different categories to define students with a disability who should be guaranteed a free and appropriate public education. One of those 14 is the category of "specific learning disability," within which dyslexia is cited as an example.

Section 504 of the Rehabilitation Act of 1973

This law is frequently invoked in cases where students do not qualify for an IEP yet may require accommodations. The Rehabilitation Act prohibits discrimination on the basis of disability in programs conducted or funded by federal agencies and in employment by the federal government or its contractors. Under Section 504, an individual with a disability (also referred to as a student with a disability in the elementary and secondary education context) is defined as a person who: (1) has a physical or mental impairment that substantially limits a major life activity; (2) has a record of such an impairment; or (3) is regarded as having such an impairment. Reading is considered a major life activity under Section 504. Section 504 requires, among other things, that a student with a disability receive an equal opportunity to participate in general education, activities, and extracurricular activities, and to be free from bullying and harassment based on disability.⁴¹

Americans with Disabilities Act (ADA)

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

⁴¹ U.S. Department of Education, Office for Civil Rights, 2016

SECTION 5:

ROLE OF ASSISTIVE TECHNOLOGY, MODIFICATIONS & ACCOMMODATIONS

The goal of assistive technology, task modifications, and various accommodations is to level the playing field and give the student a fair opportunity to benefit from and successfully participate in the academic curriculum. These adaptations can provide a bridge or pathway to accessing a school's program and services. The extent to which any of these adaptations will be needed will depend on the context, the student, and the tasks being assigned.

5.1 ASSISTIVE TECHNOLOGY

Assistive technology is any item, piece of equipment, software, app, or extension that is used to support the individual functional needs of a student. Reading technology could include reading pens, text to speech, digital books. 42 Assistive technology to support writing might include speech to text, prediction, specialized writing devices, spelling checkers, editing software, or graphic organizers.

Some examples are provided in the image to the right⁴³, but it is important to note, these are not exhaustive lists.

Examples of Assistive Technology LOW TECH No Tech High Tech Pencil grip E-Readers Post-it-notes Portable word Touch screen devices Slanted surfaces Computerized testing Raised lined paper Talking Calculator Speech Recognition Software MP3 player Covered overlays Electronic organizers Word Processors Tactile letters Switches/Buzzers Text-to-Speech(TTS) Magnifying bars Lights Progress Monitoring Software weighted pencils

Additional information about the role of assistive technology can be found in the Assistive Technology in Schools Guide produced by Idaho Special Education Support and Technical Assistance (SESTA), available on the Assistive Technology page of the Idaho Training Clearinghouse.

While assistive technology can facilitate access to curricular materials and producing assignments by increasing, maintaining, or improving functional capabilities, it is not a replacement for explicit, direct instruction in the components discussed in Section 3.

5.2 TASK MODIFICATIONS

Task modifications include adjustments in the way a task is presented or the requirements for the student's response. For example, a task might be shortened, presented in a different modality (oral and written), or broken down into smaller steps. The student could be asked to respond in a different way to indicate understanding of a concept – for example, by answering questions orally. Or the student can be given more frequent feedback to ensure that he is understanding the task and practicing a skill correctly.

⁴² Digital books (ebooks) can be obtained from Bookshare at no cost, for students with qualifying disabilities.

⁴³ State of Connecticut, Department of Developmental Services, n.d.

In instances where the expectation for learning or demonstrating what the student has learned is different than their peers, it is important to know that this may result in invalid assessment results and/or results that cannot be compared to peers.

5.3 ACCOMMODATIONS

Accommodations usually involve changing the supports available to students so they can participate in a way that allows them to demonstrate their abilities rather than disabilities. For example, providing extended time for tests, grading on written content without penalizing a student for spelling of words in a written exam, or providing a quiet(er) space to work are commonly used accommodations for students with dyslexia. Other supports may include providing an outline or written summary of what is to be taught before a class begins, assigning a note-taker to share notes on the class lecture or discussion, or making proofreading assistance available when a written assignment is finalized. Accommodations may also include use of assistive technology (i.e., speech to text or audio books) to support the student in their learning.

These modifications and accommodations do not provide an unfair advantage to students who read very slowly, who struggle with spelling and writing, and who struggle with academic language. Rather, they enable students to use their strengths and to access knowledge in the content areas (science, social studies, history, math). They remove roadblocks to learning the content in subject matter courses. Use of modifications and accommodations should be individually determined and monitored for their impact on student performance.

SECTION 6:

GUIDELINES FOR PROGRAM SELECTION

6.1 CONSIDERATIONS FOR CHOOSING MATERIALS FOR INSTRUCTION AND INTERVENTION

Ultimately, it is the teacher's knowledge and expertise that determines the impact of intervention with dyslexic students. But good instructional materials will be necessary, even for well-prepared teachers, as teachers should not be expected to create from scratch the intricately planned lessons that are a hallmark of a sound, well-sequenced, integrated instructional program. There are many sources for well-designed instructional programs and materials that are aligned with, proven by, or theoretically supported by scientific reading research.

It has become increasingly clear from decades of research that many typical programs and practices are not optimally effective with students who struggle to learn to read although those approaches have been popular for decades. **Because these programs are not grounded in the science of reading, as required by state statute and the ICLP, they should not be used**. These include programs and approaches based on "cueing systems" or "meaning, syntax, and visual" (MSV), such as those detailed below.⁴⁴

Programs not recommended for use (due to inclusion of cueing or MSV systems):

- Whole language
- Balanced Literacy
- Reading Recovery
- Reading and Writing Workshop approach of Calkins.

These programs do not have systematic, explicit, cumulative lessons that build word reading accuracy and fluency, nor do they do an adequate job teaching spelling or knowledge of language structure.

Since there is no single, accepted list of "best" programs and approaches, educators must rely on good resources for guiding program selection and evaluation. These rubrics are recommended:

- The Reading League's Curriculum Evaluation Tool
- Florida Center for Reading Research, <u>Rubric for Evaluating Reading/Language Arts</u> Instructional Materials for Grades K-5

The federal Elementary and Secondary Education Act (ESEA), as reauthorized by the Every Student Succeeds Act (ESSA), promotes the use of evidence-based activities, strategies, and interventions in public schooling. Section 8101(21)(A) of the ESEA defines an evidence- based project component as being supported by four possible levels of evidence - strong evidence, moderate evidence, promising evidence, or evidence that demonstrates a rationale.

⁴⁴ Spear-Swerling, 2018

1. Strong evidence

To be supported by *strong evidence*, there must be at least one well-designed and well-implemented experimental study on the intervention.

2. Moderate evidence

To be supported by *moderate evidence*, there must be at least one well-designed and well-implemented quasi-experimental study on the intervention.

3. Promising evidence

To be supported by *promising evidence*, there must be at least one well-designed and well-implemented correlational study on the intervention.

4. Evidence that demonstrates a rationale

To demonstrate a rationale, the intervention should include a well-specified logic model that is informed by research or an evaluation that suggests how the intervention is likely to improve relevant outcomes. An effort to study the effects of the intervention must be planned or be underway.

These requirements, if applied to *programs*, are often unrealistic. Only a few published programs and materials have been subjected to controlled, gold standard research in which two or more programs have been compared over a year or more. This is because sophisticated, rigorous research on intervention programs is expensive and difficult to do, and many variables must be controlled or accounted for in analyzing results. Documenting exactly what kind of students were in the study requires access to personal information, time and money. Documenting what took place during the instructional time requires frequent observation and extensive record keeping. Perhaps the most challenging aspect of intervention research is that it should be "blind" to prevent bias on the part of the study participants and evaluators, and that condition is not easily met in authentic educational situations.

Therefore, educators should justify their choices of intervention programs and materials with reference to research that documents the value of specific content, activities, methods, strategies, or instructional principles in working with students with dyslexia. There are many options for materials that support well-conceived lessons, and they are not limited to those programs that claim they have research evidence to support them. Instructional components and practices that are aligned with research are the goal. Educators can review and select useful programs and instructional tools that address the requisite components, 45 that integrate those components into coherent lessons, 46 and that provide ample practice with application of skills to reading and writing. Programs and materials can be aligned with evidence by virtue of their content and design, even though the programs themselves have not been subjected to rigorous studies.

⁴⁵ Hoover & Tunmer, 2020; Petscher et al., 2020

⁴⁶ Spear-Swerling, 2022

Educators should avoid instructional practices that have been shown to be especially inappropriate for students with dyslexia. They are enumerated in The Reading League's Curriculum Evaluation Tool. They include context-based guessing at words in lieu of sounding them out, using "leveled" or phonically uncontrolled text for beginning instruction, outlining words to distinguish their shape, spelling inventively (without systematic instruction or correction), and memorizing lists of unrelated words on flash cards. Programs that only pay lipservice to decoding and that teach spelling with unrelated lists of words are inappropriate. Language comprehension programs that do not require continual back-and-forth, listening and speaking exchanges between teacher and students, will not be helpful. Writing "workshops" that de-emphasize systematic skill-building with sentences, paragraphs, and longer forms are not appropriate. Instructional time is precious, so all of it should be spent doing the activities that are most likely to support significant growth in dyslexic students.



6.2 RECOMMENDED PROGRAMS AND RESOURCES

A number of publishers and organizations have strong track records for writing, publishing, and supporting the use of intervention materials and programs for students with dyslexia. They include, but are not limited to:

- Collaborative Classroom
- Language Circle Enterprises
- Lindamood-Bell
- National Institute for Learning Development (NILD)
- Neuhaus Center of Houston
- Readsters
- Really Great Reading Company
- Scottish Rite Hospital in Dallas
- The Orton Gillingham Academy
- Tools4Reading
- Wilson Language
- Winsor Learning
- 95Percent Group

In addition, the organizations listed below provide guidance useful to teachers and other education professionals as they select their approaches to intervention.

Table 11: Other Resources for Dyslexia Intervention Guidance

Organizations	Website	Notes
International Dyslexia Association	dyslexiaida.org/	
The Reading League	www.thereadingleague.org/decoda	Provides a list of
	<u>ble-text-sources/</u>	decodable texts and many
		other resources
The National Center on Improving	improvingliteracy.org	
Literacy		
Reading Rockets	www.readingrockets.org	
The Barksdale Institute's Reading	www.readinguniverse.org	
Universe		
Southwest Education	sedl.org/about/	Including Archives at the
Development Laboratory (SEDL)		American Institute for
		Research
The Florida Center for Reading	fcrr.org	
Research (FCRR)		
The University of Florida Literacy	ufli.education.ufl.edu/resources/dy	
Institute (UFLI), Dyslexia Hub	slexia/	
The University of Texas at	meadowscenter.org/	Offers access to research
Austin/Meadows Center for		and materials developed
Preventing Educational Risk:		at the center
Vaughn-Gross Center for Reading		
and Language Arts		

SECTION 7:

PROFESSIONAL DEVELOPMENT & TEACHER SUPPORT

7.1 THE NECESSITY OF DYSLEXIA TRAINING FOR ALL TEACHERS

All teachers in Idaho are likely to encounter and be responsible for teaching dyslexic students in their classrooms. If one out of five students will have at least some characteristics of dyslexia, four students out of twenty in an average class are likely to struggle with basic reading, spelling, and writing skills because of this condition. At the same time, training for teachers in specific practices, programs, and understandings pertaining to dyslexia is uncommon at the preservice level.⁴⁷ Most educators, once in the classroom, will require ongoing professional development, supervision, and support to carry out the structured literacy instruction described in this Handbook.⁴⁸



7.2 IDAHO STATUTORY REQUIREMENTS AND STATE RESOURCES

The "Dyslexia" section of the Idaho Literacy Achievement and Accountability Act (Section 33-1811) outlines specific requirements for professional development to ensure educators have the knowledge and resources they need to support students with characteristics of dyslexia. Statute specifies that the State Department of Education (the Department) must provide professional development in "multisensory structured literacy approaches." Additionally, the Department must create and maintain a list of courses that address the other professional development requirements outlined in the section. The Department has created an asynchronous, virtual training and released the course list on their website.

All educators, at a minimum, should have access to a short course that presents the definition, symptoms, and developmental course of dyslexia – a "Dyslexia 101." The dyslexia professional development required by statute should be designed to address, at a minimum, this level of training. Teachers who are responsible for teaching reading in the regular classroom (Tier 1) must be supported in understanding and applying the components of effective instruction that are described in the ICLP. Teachers responsible for implementing structured language and literacy interventions (Tiers 2 and 3 in a MTSS model) should be trained in the use of the specific programs and assessments that their school has adopted. In addition, they should participate in ongoing professional learning designed to deepen their understanding of how children learn to read, what can interfere with progress, and what to do to remove those roadblocks. Underlying these

⁴⁷ Moats, 2014

⁴⁸ Image: Cox, 2019

competencies must be a thorough grasp of the structure of language and the most important findings of research on teaching students with dyslexia.

7.3 OTHER TEACHER SUPPORT RESOURCES

The International Dyslexia Association accredits university and independent programs for teacher preparation and professional learning. The accreditation process is aligned with <u>IDA's Knowledge and Practice Standards for Teachers of Reading</u>. A summary of the IDA Standards is provided in Appendix C.

There are many organizations now accredited to provide professional development for teachers and specialists who will be working with dyslexic students. They include, but are not limited to:

- The Neuhaus Center of Houston
- Institute for Multisensory Education
- AIM Academy
- Keys to Literacy
- LETRS (Language Essentials for Teachers of Reading and Spelling), published by Lexia
- Literacy How
- Tools4Reading

The <u>Center for Effective Reading Instruction</u> (CERI), founded by the International Dyslexia Association and accessible online, sponsors an exam (the K-PEERI) and a certification review process for practitioners who wish to be certified as <u>qualified providers</u> of structured literacy instruction.

SECTION 8:

INFORMATION & RESOURCES FOR PARENTS

8.1 THE IMPACT OF PARENTS

Awareness of dyslexia and the successful passage of legislation and policies pertaining to dyslexia can be credited in large part to parents of children who have advocated relentlessly for their needs. Every state has now acknowledged the existence of dyslexia, the extensive research on dyslexia, and the importance of helping educators implement structured literacy interventions for students who are struggling as they learn to read and write.



The <u>Decoding Dyslexia</u> organization is a parent-led network of groups across the country who have been driving the campaign for state legislation and for public schools to provide much-needed services for their dyslexic children. Idaho has a <u>Decoding Dyslexia chapter</u> that all parents are welcome to join.

Several films documenting the critical role of parents in successful advocacy are available on the internet. "Our Dyslexic Children," for example, tells the story of a district in Ohio that changed its approach to identification and instruction as a consequence of parent advocacy — and successfully implemented changes that have benefited all children.

Parents are vital participants in the work of any child study team that is formulating literacy plans or Individual Educational Programs (IEPs) under IDEA. Parents have important insights into their children's early development and important observations about their children's social, emotional, behavioral, and academic needs. In addition, parental support for the efforts of educators can magnify the benefits of an intervention plan. Guidance for parents about constructive advocacy and parental participation can be found at The National Center for Improving Literacy's Parents and Families page. On this website you will find helpful information covering beginning reading, screening, and advocating for your child. In addition, the Wrightslaw website provides support in understanding federal laws governing parents' and students' rights to an appropriate education. The legal rights of parents as well as their obligations and responsibilities are also detailed in the Idaho Special Education Manual.

8.2 OTHER SOURCES OF INFORMATION FOR PARENTS

The <u>International Dyslexia Association</u> publishes a set of easily readable Fact Sheets written by experts in way that non-professionals can understand. In addition, IDA's annual conference includes workshops and information sessions designed primarily for parents.

Parents who wish to get involved in teaching phonics to their children at home can access a free, comprehensive set of lessons from Open Source Phonics (*opensourcephonics.org*). These lessons are designed specifically for children in grade 3 and up who have not learned to decode using knowledge of phonics.

The film-maker Harvey Hubbell's documentary on Diana Hanbury King, "One by One," shows the content and practices of a structured literacy tutorial. Ms. King was a leader of the Orton

Gillingham Academy and a widely revered teacher. Other videos in which skilled instruction is demonstrated are found on the <u>Reading Rockets website</u>.

A short but powerful autobiographical book that describes the experience of being a person with dyslexia is Philip Schultz's *My Dyslexia*. Mr. Schultz won the Pulitzer Prize for poetry and contrary to expectation, selected a profession in the literary arts. His narrative captures what reading is like for him and the anxiety that often accompanies the act of processing print. Another compelling life story is that of John Corcoran who learned to read in his late 40's. The John Corcoran Foundation website includes videos of the instruction he received from Patricia Lindamood to build his phoneme awareness.

Children who are struggling with dyslexia benefit from information that helps explain why they are having trouble learning something that appears so easy for their peers. An easily located "fact sheet" for kids is available on the Nemours Clinic Website. A number of good books have been written for children, including:

- Dyslexia: Talking It Through (2003), Althea Braithwaite
- Fish in a Tree (2017), Lynda Mullaly Hunt



- Hank Zipzer: The Greatest Underachiever (2005), a series by Henry Winkler and Lin Oliver
- Thank You, Mr. Falker (2012), Patricia Polacco

SECTION 9:

POSTSCRIPT

SUCCESS BEYOND WORDS

Equipped with accurate information, guidance, and opportunities to learn, most people with dyslexia succeed in life. Many examples can be cited of public figures who have accomplished notable achievements in spite of their dyslexia. Many more people with dyslexia, however, never become famous, but they do find a "niche" and make their way in the world as well as most of us. Sometimes the work they do involves a lot of reading and writing, often accomplished with various adaptations and technological supports. More often, the work they choose relies on other abilities and talents, such as political or social leadership, professional sports, creativity in the visual or performing arts, spatial and/or mechanical problem solving, or work in the outdoor environment.

Those individuals who succeed in spite of their problems with words often report that the keys to that success were several: 1) the unwavering support of an important adult, usually a parent or care-giver; 2) opportunities to develop an area of talent or competence that salvaged their sense of self-worth; 3) knowledge that they were part of a rather large community of people who faced the same challenges; and 4) the dedicated effort of at least one teacher who knew how to teach them to read.

If we work together, we can ensure that these are all part of our dyslexic children's life experience.

GLOSSARY

Academic language: Written or spoken language that is more stylistically formal than spoken, conversational language; language that is most often used in academic discourse and text.

Alphabetic principle: The principle that letters are used to represent individual phonemes in the spoken word; insight into this principle is critical for learning to read and spell.

Assessment Types:49

- Screener / Screening Assessment: Given before instruction to inform teachers where to begin teaching core instruction, to differentiate instruction, and to flag students who are at risk for developing reading difficulties and/or who need intervention support.
- **Diagnostic Assessment / Diagnostic Measures:** Given at any time, diagnostic assessments are designed to extract precise information about students' specific skills knowledge to inform instructional interventions.
- **Progress Monitoring:** Administered frequently throughout instruction and intervention to closely monitor student progression toward mastery of concepts, skills, and grade level content.
- Formative Assessment: Formative assessment is an intentional ongoing process not a single test. It describes feedback discussions between teachers and students, and students and their peers that happens during instruction. It's a deliberate process that is used to provide specific insight into student learning and allow for educators to adjust teaching strategies accordingly.
- **Interim Assessment**: Interim assessments are typically used to determine whether students are on track toward proficiency of the content standards. Interim assessments may be selected by teachers in the classroom to meet several instructional purposes, or administered after sufficient teaching and learning has occurred.
- **Summative Assessments**: Summative assessments are administered at the end of the year and designed to provide systems level information for state, district, and school decision making on an annual basis.

Consonant: A phoneme (speech sound) that is not a vowel and that is formed by obstructing the flow of air with the teeth, lips, or tongue; English has 25 consonant phonemes.

Curriculum-based measures: A type of progress monitoring conducted on a regular basis to assess student performance throughout an entire year's curriculum; teachers can use CBM to evaluate not only student progress, but also the effectiveness of their instructional methods.⁵⁰

⁴⁹ State Department of Education, 2020, Accountability and Assessment

⁵⁰ IRIS Center, n.d.

Decoding: The ability to translate a word from print to speech, usually by employing knowledge of sound-symbol correspondences.

Decodable text: Reading material made up of words with patterns that have already been taught in phonics lessons; created to provide practice applying decoding skills and building fluency with known patterns and words.

Digraph: A two-letter combination (e.g., th, ph) that stands for a single phoneme in which neither letter represents its usual sound.

Diphthongs: Single vowel phonemes that glide in the middle; the mouth position shifts during the production of the single vowel phoneme, especially the vowels spelled ou and oi.

Discourse: Written or spoken communication or exchange of information and ideas, usually longer than a sentence, between individuals or between writer and reader.

Discourse structure: Organizational conventions in longer segments of oral and written language.

Dysgraphia: The condition of impaired letter writing by hand, that is, disabled handwriting. Impaired handwriting can interfere with learning to spell words in writing and speed of writing. ⁵¹

Dyslexia: Dyslexia is a specific learning disability that is neurobiological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction.⁵²

English learners (ELs): Students who are unable to communicate fluently or learn effectively in English, who often come from non-English-speaking homes and backgrounds, and who typically require specialized or modified instruction in both the English language and in their academic courses.⁵³

Evidence-based Interventions (practice): Any of a wide number of discrete skills, techniques, or strategies which have been demonstrated through experimental research or large-scale field studies to be effective.⁵⁴

Morpheme: The smallest meaningful unit of language; it may be a word or a part of a word; it may be a single sound (plural /s/), one syllable (suffix –ful) or more syllables (prefix inter-).

Morphology: The study of meaningful units in a language and how the units are combined in word formation.

⁵¹ International Dyslexia Association, n.d, Understanding Dysgraphia

⁵² International Dyslexia Association, n.d., Definition of Dyslexia

⁵³ Glossary of Education Reform, 2013

⁵⁴ IRIS Center, n.d.

Multi-tiered system of supports (MTSS): Idaho Multi-Tiered System of Support (MTSS) is a prevention-based framework of team-driven, data-based decision -making for improving outcomes for all students. The five essential components of Idaho's MTSS include; leadership, assessment, data-based decision making, multi-tiered instruction, and family and community engagement.

Onset-rime: The natural division of a syllable into two parts; the onset coming before the vowel and the rime including the vowel and what follows after it, e.g., pl-an.

Orthography: A writing system for representing language.

Phoneme: A speech sound that combines with others in a language system to make words; English has 40 to 44 phonemes, according to various linguists.

Phonemic or phoneme awareness: The conscious awareness that words are made up of segments of our own speech that are represented with letters in an alphabetic orthography.

Phoneme-grapheme mapping: The matching of letters or letter groups (graphemes) with the individual sounds (phonemes) of the spoken word that they represent. A critical step in learning to read and spell an alphabetic writing system.

Phonetics: The study of the sounds of human speech; articulatory phonetics refers to the way the sounds are physically produced in the human vocal tract.

Phonics: The study of the relationships between letters and letter sequences and the sounds they represent; also used as a descriptor for code-based instruction.

Phonological awareness: The conscious awareness of *all* levels of the speech sound system, including word boundaries, stress patterns, syllables, onset-rime units, and phonemes.

Phonological processing: Multiple functions of speech and language perception and production, such as perceiving, interpreting, storing (remembering), recalling or retrieving, and generating the speech sound system of a language.

Phonological working memory: The "online" memory system that remembers speech long enough to extract meaning from it, or that holds onto words during writing; a function of the phonological processor.

Phonology: The rule system within a language by which phonemes can be sequenced, combined, and pronounced to make words.

Schwa: The empty vowel in an unaccented syllable, such as the last syllable in wagon or rebus.

Semantics: The study of word and phrase meanings and relationships.

Sight vocabulary: A student's pool of words that are instantly and effortlessly recognized; includes both regularly spelled and irregularly spelled words.

Specific learning disability (SLD): 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. Specific Learning Disability does not include learning problems that are primarily the result of visual, hearing, or motor disabilities, of intellectual disability, of emotional behavioral disorder, or of environmental, cultural, or economic disadvantage. 55

Syllable: The unit of pronunciation that is organized around a vowel; it may or may not have a consonant after the vowel.

Syntax: The system of rules governing permissible word order in sentences.

Systematic, explicit instruction: A structured, systematic, and effective methodology for teaching academic skills.⁵⁶ Explicit instruction happens when a teacher intentionally covers academic material, scaffolding on previous knowledge and ensuring students grasp new material.

The Five Essential Reading Components:⁵⁷

- Phonemic Awareness: Phonemic awareness is the highest level of phonological awareness and is the ability to hear, identify, and manipulate the individual sounds in spoken words.
- **Phonics:** The relationship between the sounds of spoken words and the individual letters or groups of letters that represent those sounds in written words
- **Fluency:** The ability to read text accurately and quickly and with expression and comprehension
- Vocabulary: The words we must know in order to communicate effectively.
- Comprehension: The ability to understand and gain meaning from what has been read

Trigraph: a three-letter combination that represents one phoneme, e.g., -tch in ditch and -dge in dodge.

Vowel: One of a set of 15 vowel phonemes in English, not including vowel-r combinations; an open phoneme that is the heart of every spoken syllable; classified by tongue position and height (e.g., high to low, and front to back).

⁵⁵ Idaho Department of Education, Special Education Manual, 2018

⁵⁶ Archer & Hughes, 2011

⁵⁷ National Reading Panel, 2000

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RESOURCES

LINKS TO RESOURCES

Idaho Specific Resources

- Idaho Comprehensive Literacy Plan
- Idaho Statute: <u>33-1802</u>, <u>33-1807</u>, <u>33-1811</u>
- Idaho State Department of Education Website: <u>Dyslexia Resources</u>; <u>SPED Manual</u>;
 <u>ID Content Standards</u> in English Language Arts / Literacy; Comprehensive Literacy
 Standards (for Educator Preparation, within the Standards for Initial Certification)
- Idaho Special Education Support and Technical Assistance (<u>SESTA</u>): <u>Idaho Training</u>
 <u>Clearinghouse</u>, including <u>Assistive Technology</u>

Other Information and Resources for Educators

- <u>International Dyslexia Association</u>; <u>IDA Knowledge and Practice Standards for</u>
 Teachers of Reading
- National Center on Improving Literacy
- <u>The Reading League</u>; The Reading League's <u>Curriculum Evaluation Tool</u>
- Center for Effective Reading Instruction
- Center for Intensive Intervention
- Florida Center for Reading Research; FCRR Rubric for Evaluating Reading Instructional Materials for K-5
- Southwest Educational Development Lab (SEDL)
- Barksdale Institute's Reading Universe
- Reading Rockets
- Meadows Center for Preventing Educational Risk

Other Resources for Parents

- Decoding Dyslexia, Idaho
- Wrightslaw
- John Corcoran Foundation
- Nemours Clinic
- Our Dyslexic Children
- One by One
- <u>Understood.org</u>

Federal Laws

- Individuals with Disabilities Educational Act (IDEA)
- Section 504 of the Rehabilitation Act
- Americans with Disabilities Act

APPENDICES

APPENDICES

- Appendix A: Guide to Screening and Diagnostic Measures
- Appendix B: Sample Scope and Sequence for Word Study, Reading, and Spelling
- Appendix C: Summary of IDA's Knowledge and Practice Standards for Teachers of Reading

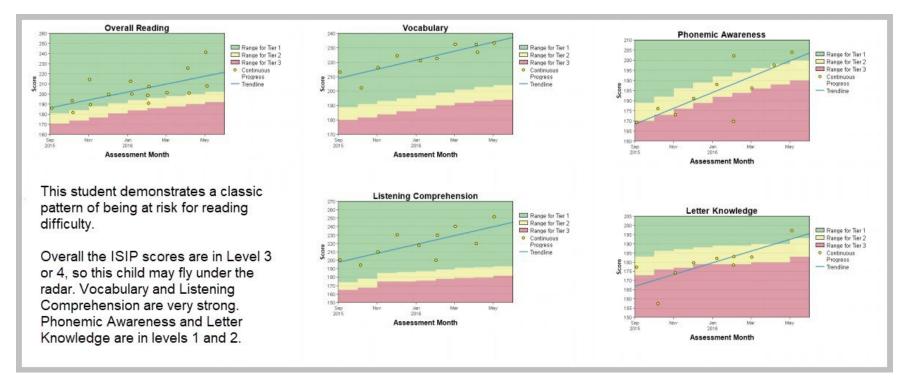
APPENDIX A: GUIDE TO SCREENING AND DIAGNOSTIC MEASURES

TIER I SCREENING, GRADES K-3

The Idaho Reading Indicator is the Tier I Screener for grades K-3. As the current IRI vendor, Istation offers the following guidance for school teams to use to review students' IRI Subtest data to identify students at risk for reading difficulty. Students whose IRI data show difficulties with accurate or fluent word recognition, poor spelling, and decoding abilities may be experiencing a deficit in the phonological component of language. These students may be demonstrating characteristics of dyslexia, and Tier II Diagnostic Measures should be administered.

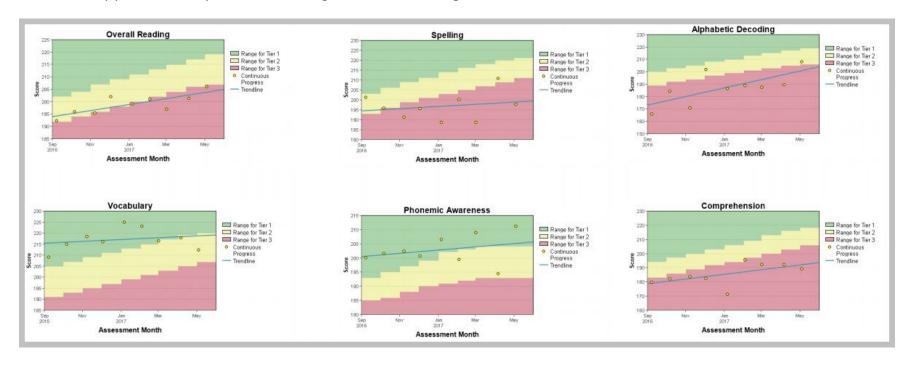
Kindergarten¹

- ♦ The student scores higher on Listening Comprehension than on Phonemic Awareness and Letter Knowledge
- ♦ The student scores poorly on Phonemic Awareness and Letter Knowledge compared to other sub-tests. This indicates unexpectedness in performance based upon skill development.
- ♦ Some students at risk of reading difficulties will do well on Vocabulary, depending on their home environment
- ♦ These students are at a higher risk of being held back as teachers may think they just need more time



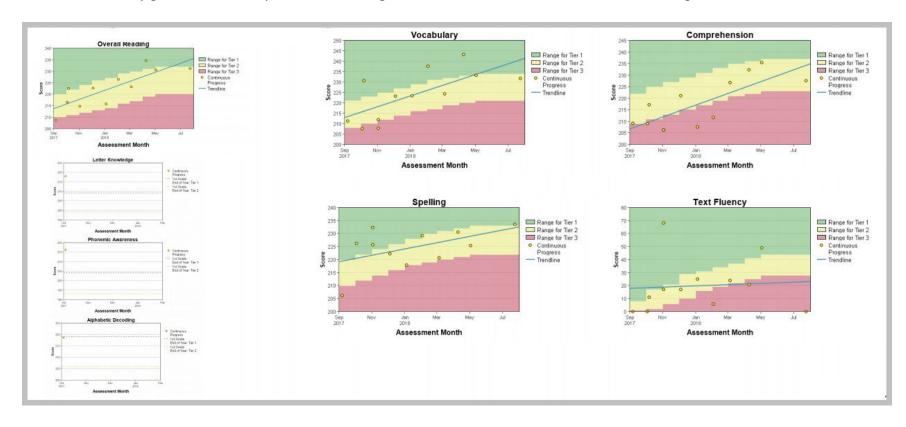
1st Grade1

- ♦ Student scores are low on 1 or 2 of the following sub-tests: Alphabetic Decoding, Phonemic Awareness, Spelling, and Comprehension but not in all sub-test areas. This indicates unexpectedness in performance.
 - Poor readers and students at risk of dyslexia will not gate out of Phonemic Awareness and Letter Knowledge by the winter benchmark
- ♦ Vocabulary percentile may be lower in first grade than in kindergarten



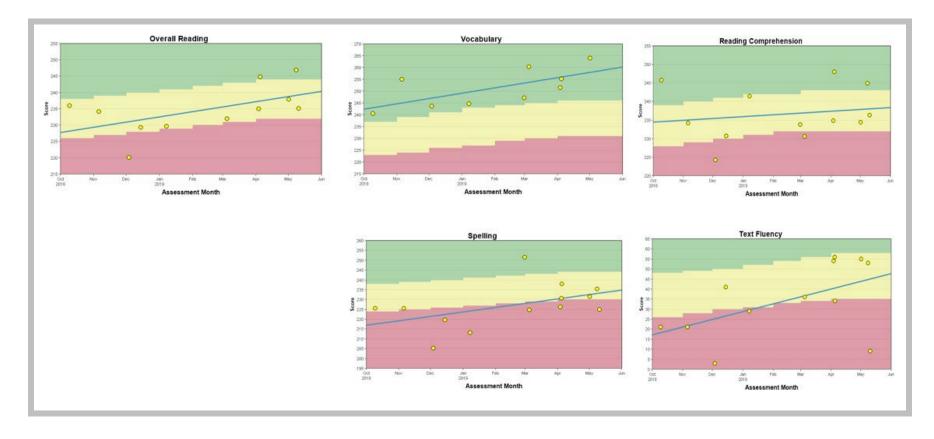
2nd Grade¹

- ♦ Student scores lower on Comprehension, Spelling, and Text Fluency in relation to other sub-tests, including overall reading and/or vocabulary.
- ♦ The student may gate down into Alphabetic Decoding, Phonemic Awareness and/or Letter Knowledge



3rd Grade¹

- ♦ Student scores lower on Comprehension, Spelling, and Text Fluency than in 2nd grade
- ♦ If Vocabulary was high in earlier grades, it may start to fall behind and slip in percentile rank. Vocabulary may continue to be an overall strength
- ♦ The student may gate down into Alphabetic Decoding, Phonemic Awareness and/or Letter Knowledge



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¹ IStation, 2022

TIER II DIAGNOSTIC MEASURES, GRADES K-3

The following table is designed to assist you in using students' IRI subtest data to determine appropriate diagnostic measures. To clarify the interventions that should be included in a student's individual reading plan, review the subtests where the student's score was low (or lower than other areas), identify one or more diagnostic measure from the recommended list to administer, and review the resulting data.

Using IRI Subtest Data to Identify Appropriate Diagnostics for Grades K-3

IRI Subtest	Expected Subtest Grades	Related Skill	Notes	Tier II Diagnostic Measures
Phonemic	K-1	Phonological /		AIMSweb & AIMSweb Plus PSF (K-1)
Awareness		Phonemic		DIBELS 6th and Next ISF (K)
		Awareness		DIBELS 6th and Next PSF (K-1)
				DIBELS 8th PSF (K-1)
				EasyCBM Phonemic Awareness (K-1)
				Acadience Reading Diagnostic PA & WRD
				• FAST (K-1)
				CORE Phonological Awareness
				 Phonological Awareness Skills Program - PASP (K-1)
				 Predictive Assessment of Reading – PAR (K)
				 Texas Primary Reading Inventory - TPRI (K-1)
				Phonological Awareness Screening Test - PAST (K-1)
				Phonological Awareness Skills Screener - PASS (K-1)
Letter	K-1	Letter Naming		AIMSweb & AIMSweb Plus LNF (K-1)
Knowledge		Fluency		DIBELS 6th and Next LNF (K -1)
				DIBELS 8th LNF (K-1)
				EasyCBM Letter Names (K-1)
				• FAST (K)
				CORE Phonics Surveys
Alphabetic	1	Phonics and		AIMSWeb & AIMSweb Plus LSF/NWF Assessment
Decoding		decoding		DIBELS 6th and Next NWF
				DIBELS 8th NWF

				 EasyCBM Letter Sounds Acadience Reading Diagnostic PA & WRD CORE Phonics Surveys FAST Predictive Assessment of Reading Reading A-ZA: Alphabet Naming Renaissance Phonics screener Really Great Reading Decoding Survey 95% Group PSI: Phonics Screener for Intervention
Spelling	1-3			 LETRS Diagnostic Spelling Survey Test of Written Spelling (1-3)
Comprehension	1-3		Note: Students' listening comprehension will likely be higher than their reading comprehension; they may be able to retell stories told orally but not retell what they have read themselves.	 AIMSweb and AIMSwebPlus (1-3) AIMSweb Maze (3) DIBELS 8th (1-3) DIBELS Next Daze (3) MAZE (1) Renaissance STAR Early Literacy (1-3) Easy CBM, Reading Comprehension (2-3)
Text Fluency	1-3	Oral reading fluency		 AIMSweb Plus (1-3) DIBELS 8th WRF & ORF (1-3) DIBELS 6 and NEXT ORF (2-3) EasyCBM Word Fluency/Passage Fluency (1-3) FAST (1) Renaissance STAR Early Literacy (1-2)
N/A	K-3	Rapid Automatic Naming	Note: K students may have difficulty in easily remembering the names of letters, digits, colors, or objects. By Grade 2, students will demonstrate issues remembering words.	 AIMSweb Plus PRO-ED RAN/RAS Acadience RAN

Note: Guidance regarding additional diagnostic measures to be given based on the IRI Vocabulary Subtest are not included, as it is common for students with characteristics of dyslexia to score higher in vocabulary than other subtests. Thus, it is not likely that students will need additional diagnostic measures in vocabulary either to determine if they are demonstrating characteristics of dyslexia or to plan interventions.

TIER I SCREENING, GRADES 4 & 5

At this time, Idaho does not have an identified state administered assessment to be used for Tier I screening for grades four and five. Thus, local education agencies (LEAs) should identify and use the tool they feel is most appropriate. Suggested resources are below.

Suggested Tier I Screening Resources for Grades 4 & 5

Screener	Phonological Awareness (PA)	Phonemic Decoding Efficiency	Encoding Ability	Sight Word Reading Efficiency	Admin Time	Print or Digital
Acadience Reading (formerly DIBELS Next)	х	x	x	х	2-9 min	Both
FastBridge CBMreading	х	Х	Х	Х	20-35 min	Digital
mCLASS: Amplify Reading	х	х	х	х	5 min	Digital
STAR CBM	Х	Х	х	x	5-6 min total	Both
Phonological Awareness Literacy Screening-Plus (PALS Plus)	х	х	х	х	2-3 min tasks	Both
Istation Advanced Reading (4-8)			x		<30 min	Digital
PAST	х				1-20 min	Print

TIER II DIAGNOSTIC MEASURES, GRADES 4 & 5

The following table is designed to assist you in using students' screening data to determine appropriate diagnostic measures. To clarify the interventions that an individual student should receive, review the subtests where the student's score was low (or lower than other areas) on the screener, identify one or more diagnostic measures from the recommended list to administer, and review the resulting data.

Suggested Diagnostic Measures by Reading Skill for Grades 4 & 5

Reading Skill	Diagnostic Measures
Phonological / Phonemic	Phonological Awareness Skills Program - PASP (4-5)
Awareness	Phonological Awareness Skills Screener - PASS (4-12)
	Phonological Awareness Skills Test - PAST (4-12)
	 Cool Tools/FAIR Informal Reading Assessments: Florida Center for Reading Research, FCRR (4-5)
	Acadience Reading Diagnostic PA & WRD (4-6)
	CORE Phoneme Segmentation Test (4-8)
Phonics / Decoding /	Really Great Reading Decoding Survey (4-12)
Word Recognition	CORE Phonics Survey (4-12)
	95% Group PSI: Phonics Screener for Intervention (4-8)
	Cool Tools/FAIR Informal Reading Assessments: FCRR (4-5)
	Basic Reading Inventory (BRI), Jerry Johns (4-12)
	Renaissance Phonics Survey
Spelling	Words Their Way (4-12)
	LETRS Diagnostic Spelling Survey
	Test of Written Spelling (4-5)
Comprehension	AIMSWeb Maze (4-12)
	AIMSweb Plus (4-12)
	DIBELS Next Daze (4-6)
	DIBELS 8th Maze (4-8)
	EasyCBM Passage Fluency (4-6)
	Cool Tools/FAIR Informal Reading Assessments: FCRR (4-12)
	Curriculum Based Measures (4-5)
	Basic Reading Inventory, Jerry Johns (4-12)

Text Fluency	AIMSweb R-CBM Oral Reading Passage (4-12)
	AIMSweb Plus (4-12)
	DIBELS 6th and Next ORF (4-6)
	• DIBELS 8th (4-8)
	EasyCBM Passage Fluency (4-6)
	 Cool Tools/FAIR Informal Reading Assessments: Florida Center for Reading Research (4-5)
	Basic Reading Inventory, Jerry Johns (4-12)

APPENDIX B: SAMPLE SCOPE AND SEQUENCE FOR WORD STUDY, READING, AND SPELLING

Louisa Moats and Carol Tolman¹

Note: This chart is based on customary placement in reading and spelling curricula. There is no one accepted scope and sequence in the field. Grade levels for reading and spelling are approximate and will vary in appropriateness, according to the achievement levels of the students. The progression is intended to move gradually from simple to more complex linguistic constructions.

Consistent Phoneme-Grapheme Correspondences					
Grapheme Type	For Reading	For Spelling	Examples		
Predictable consonants: <i>m</i> , <i>s</i> , <i>t</i> , <i>l</i> ; <i>p</i> , <i>f</i> , <i>c</i> (/k/), <i>n</i> ; <i>b</i> , <i>r</i> , <i>j</i> , <i>k</i> ; <i>v</i> , <i>g</i> (/g/), <i>w</i> , <i>d</i> ; <i>h</i> , <i>y</i> , <i>z</i> , <i>x</i>	К	К	him, napkin		
Predictable short vowels: /ă/, /ĭ/, /ŏ/, /ŭ/, /ĕ/ spelled with a, i, o, u, e	К	K-1	wet, picnic		
Long vowel sounds associated with single letters <i>a</i> , <i>e</i> , <i>i</i> , <i>o</i> , <i>u</i> ; open syllables in one-syllable words	К	K-1	me, he, we, be, so, no, hi		
Consonant digraphs: sh, ch, wh, th, ng	K-1	1	chin, fish, then		
Two-consonant blends: qu, st, sm, sn, - st, -ft, -lp; sr, sl, cr, cl, tr, dr, etc.	1	1–2	dragon, slaps		
Three-consonant blends and blends with digraphs: squ, str, scr, thr, shr	2	2–3	strong, scrape		

¹ Also published in L.C. Moats & C. Tolman (2018). *Language Essentials for Teachers of Reading and Spelling, 3rd Edition*. Lexia Learning.

Variable, More Challenging Phoneme-Grapheme Correspondences					
Grapheme Type	For Reading	For Spelling	Examples		
Single consonants: $/s/ = c$, s ; $/z/ = s$, z ; $/k/ = k$, c , $-ck$ after a short vowel; $/g/ = j$, g	1	1–2	re <u>s</u> ult, <u>c</u> ent, ro <u>ck</u>		
Hard and soft c and g alternation, across a larger body of words	1	2–3	carry, center; girl, gentle		
Final consonant blends with nasals: nt, nd, mp, nk	1	2–3	sink, sank, sunk; dump, tent		
VCe long vowel pattern in single-syllable words	1	1	wage, theme, fine, doze, cute/rude		
Vowel teams for long vowel sounds, most common: ee, ea; ai, ay; oa, ow, oe; igh	1	2	seek, meat, snow, boat, toe, stay, mail, fight		
Vowel-r combinations, single syllables: <i>er</i> , <i>ar</i> , <i>or</i> , <i>ir</i> , <i>ur</i>	1	2	port, bird, turn, her		
Digraphs <i>ph</i> (/f/), <i>gh</i> (/f/), <i>ch</i> (/k/ and /sh/)	2	2–3	<u>ph</u> one, cou <u>gh</u> , s <u>ch</u> ool, ma <u>ch</u> ine		
Other vowel-r combinations: are, air, our, ore, ear, eer, ure, etc.	2	2–3	hare, hair, for, four, fore, bear, heart		
Diphthongs and vowels /aw/ and /oo/: oi, oy; ou, ow; au, aw; oo, u	1–2	2–3	toil, boyfriend, bout, tower, audio, claws, took, put		
All jobs of y (as consonant /y/; as /ī/ on ends of one-syllable words like cry; as /ē/ on ends of multisyllabic words like baby; as /ĭ/ in a few words like gym, myth)	1	2	yellow, try, candy, gym		
Silent letter combinations, Anglo-Saxon words	2	3	knew, calm, comb, ghost, write		
The -ild, -ost, -old, -olt, -ind pattern	2	2	wild, most, cold, find		
Irregular spellings of high-frequency words	K-3	K-3	they, enough, of, been, were, said, there		

Six Syllable Types and	Oddities in Multisyllable Words
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Syllable Type	For Reading	For Spelling	Examples		
Closed: short vowel ending with consonant	1	2	sister, <u>Sep</u> – <u>tem</u> ber		
Open: long vowel, no consonant ending	1	2	<u>ro</u> bot, <u>be</u> hind, <u>mu</u> sic		
Vowel-consonant-e (VCe), long vowel sound	2	2	com <u>pete</u> , sup <u>pose</u>		
Vowel-r combinations	2	2	<u>por</u> – <u>ter</u> , <u>hur</u> dle		
Vowel teams, long, short, and diphthong vowels	2	3	meatloaf, <u>neigh</u> bor, Toyland		
Consonant-le (Cle), final syllables	2	3	eagle, stub <u>ble</u>		
Multisyllabic word construction and division principles: VC/CV, V/CV, VC/V, CV/VC	2–3	3	com – mit – ment, e – vent, ev – er – y, po – et		
Oddities and schwa	2	3+	act <u>ive</u> , atom <u>ic</u> , na <u>tion</u>		

Orthographic Rules and Generalizations

Rule/Principle	For Reading	For Spelling	Examples
No word ends in <i>v</i> or <i>j</i>	1	2–3	have, love, move; wage, huge, ridge, dodge
Floss rule (f, I, s doubling)	1	1	stuff, well, miss, jazz
Consonant doubling rule for suffix addition	1	2–3	beginning
Drop silent e for suffix addition	1	2–3	scared, likable
Change y to i for suffix addition	1	2–3	studying, cried, candied

Other Aspects of Orthography						
Morpheme Construction	For Reading	For Spelling	Examples			
Homophones	2	2–3	to, two, too			
Contractions with am, is, has, not	1	2	I'm, he's, she's, isn't, don't			
Contractions with have, would, will	2	3	I've, he'd, they'll			
Possessives and plurals	1–3	1–3+	house's, houses, houses'; it's, its; hers, theirs			

Basic Morphology (Anglo-Saxon and Latin)

Morpheme Construction	For Reading	For Spelling	Examples
Compounds	1	2	sunshine, breakfast, fifty- one
Inflectional suffixes: inflectional suffix on single-syllable base words with no spelling change (e.g., help, helps, helped, helping)	1	1–2	walks, walking, walked, wanted, dogs, wishes; redder, reddest
Inflectional suffixes: inflectional suffix on single-syllable base words with spelling change	1–2	2–3	caring, loved, cries
Irregular past tense and plurals	1–3	1–3	ran, went, bent, left, sold; wolf, wolves; shelf, shelves
Common prefixes	1	2	un-, dis-, in-, re-, pre-, mis-, non-, ex-
Less common prefixes	2	3+	fore-, pro-, intra-, inter-, trans-, non-, over-, sub-, super-, semi-, anti-, mid-, ex-, post-
Common derivational suffixes	2	2–3	-y, -ly, -ful, -ment, -hood, - less, -ness, -er, -or , -en
Common Latin roots	3	3+	port, form, ject, spect, dict, tend, fer

APPENDIX C: SUMMARY OF IDA'S KNOWLEDGE AND PRACTICE STANDARDS FOR TEACHERS OF READING

STANDARD 1: FOUNDATIONS OF LITERACY ACQUISITION

- 1.1 Understand the (5) language processing requirements of proficient reading and writing: phonological, orthographic, semantic, syntactic, discourse.
- 1.2 Understand that learning to read, for most people, requires explicit instruction.
- 1.3 Understand the reciprocal relationships among phonemic awareness, decoding, word recognition, spelling, and vocabulary knowledge.
- 1.4 Identify and explain aspects of cognition and behavior that affect reading and writing development.
- 1.5 Identify (and explain how) environmental, cultural, and social factors contribute to literacy development.
- 1.6 Explain major research findings regarding the contribution of linguistic and cognitive factors to the prediction of literacy outcomes.
- 1.7 Understand the most common intrinsic differences between good and poor readers (i.e., linguistic, cognitive, and neurobiological).
- 1.8 Know phases in the typical developmental progression of oral language, phoneme awareness, decoding skills, printed word recognition, spelling, reading fluency, reading comprehension, and written expression.
- 1.9 Understand the changing relationships among the major components of literacy development in accounting for reading achievement.

STANDARD 2: KNOWLEDGE OF DIVERSE READING PROFILES, INCLUDING DYSLEXIA

- 2.1 Recognize the tenets of the (2003) IDA definition of dyslexia, or any accepted revisions thereof.
- 2.2 Know fundamental provisions of federal and state laws that pertain to learning disabilities, including dyslexia and other reading and language disability subtypes.
- 2.3 Identify the distinguishing characteristics of dyslexia.

- 2.4 Understand how reading disabilities vary in presentation and degree.
- 2.5 Understand how and why symptoms of reading difficulty are likely to change over time in response to development and instruction.

STANDARD 3: ASSESSMENT

- 3.1 Understand the differences among and purposes for screening, progress-monitoring, diagnostic, and outcome assessments.
- 3.2 Understand basic principles of test construction and formats (e.g., reliability, validity, criterion, normed).
- 3.3 Interpret basic statistics commonly utilized in formal and informal assessment.
- 3.4 Know and utilize in practice well-validated screening tests designed to identify students at risk for reading difficulties.
- 3.5 Understand/apply the principles of progress-monitoring and reporting with Curriculum-Based Measures (CBMs), including graphing techniques.
- 3.6 Know and utilize in practice informal diagnostic surveys of phonological and phoneme awareness, decoding skills, oral reading fluency, comprehension, spelling, and writing.
- 3.7 Know how to read and interpret the most common diagnostic tests used by psychologists, speech-language professionals, and educational evaluators.
- 3.8 Integrate, summarize, and communicate (orally and in writing) the meaning of educational assessment data for sharing with students, parents, and other teachers.

STANDARD 4: STRUCTURED LITERACY INSTRUCTION

Substandard A: Essential Principles and Practices of Structured Literacy Instruction

- 4A.1 Understand/apply in practice the general principles and practices of structured language and literacy teaching, including explicit, systematic, cumulative, teacher-directed instruction.
- 4A.2 Understand/apply in practice the rationale for multisensory and multimodal language-learning techniques.
- 4A.3 Understand rationale for/Adapt instruction to accommodate individual differences in cognitive, linguistic, sociocultural, and behavioral aspects of learning.

Substandard B: Phonological and Phonemic Awareness

- 4B.1 Understand rationale for/identify, pronounce, classify, and compare all the consonant phonemes and all the vowel phonemes of English.
- 4B.2 Understand/apply in practice considerations for levels of phonological sensitivity.
- 4B.3 Understand/apply in practice considerations for phonemic-awareness difficulties.
- 4B.4 Know/apply in practice consideration for the progression of phonemic-awareness skill development, across age and grade.
- 4B.5 Know/apply in practice considerations for the general and specific goals of phonemic-awareness instruction.
- 4B.6 Know/apply in practice considerations for the principles of phonemic-awareness instruction: brief, multisensory, conceptual, articulatory, auditory-verbal.
- 4B.7 Know/apply in practice considerations for the utility of print and online resources for obtaining information about languages other than English.

Substandard C: Phonics and Word Recognition

- 4C.1 Know/apply in practice considerations for the structure of English orthography and the patterns and rules that inform the teaching of single- and multisyllabic regular word reading.
- 4C.2 Know/apply in practice considerations for systematically, cumulatively, and explicitly teaching basic decoding and spelling skills.
- 4C.3 Know/apply in practice considerations for organizing word recognition and spelling lessons by following a structured phonics lesson plan.
- 4C.4 Know/apply in practice considerations for using multisensory routines to enhance student engagement and memory.
- 4C.5 Know/apply in practice considerations for adapting instruction for students with weaknesses in working memory, attention, executive function, or processing speed.
- 4C.6 Know/apply in practice considerations for teaching irregular words in small increments using special techniques.
- 4C.7 Know/apply in practice considerations for systematically teaching the decoding of multisyllabic words.

4C.8 Know/apply in practice considerations for the different types and purposes of texts, with emphasis on the role of decodable texts in teaching beginning readers.

Substandard D: Automatic, Fluent Reading of Text

- 4D.1 Know/apply in practice considerations for the role of fluent word-level skills in automatic word reading, oral reading fluency, reading comprehension, and motivation to read.
- 4D.2 Know/apply in practice considerations for varied techniques and methods for building reading fluency.
- 4D.3 Know/apply in practice considerations for text reading fluency as an achievement of normal reading development that can be advanced through informed instruction and progress-monitoring practices.
- 4D.4 Know/apply in practice considerations for appropriate uses of assistive technology for students with serious limitations in reading fluency.

Substandard E: Vocabulary

- 4E.1 Know/apply in practice considerations for the role of vocabulary development and vocabulary knowledge in oral and written language comprehension.
- 4E.2 Know/apply in practice considerations for the sources of wide differences in students' vocabularies.
- 4E.3 Know/apply in practice considerations for the role and characteristics of indirect (contextual) methods of vocabulary instruction.
- 4E.4 Know/apply in practice considerations for the role and characteristics of direct, explicit methods of vocabulary instruction.

Substandard F: Listening and Reading Comprehension

- 4F.1 Know/apply in practice considerations for factors that contribute to deep comprehension.
- 4F.2 Know/apply in practice considerations for instructional routines appropriate for each major genre: informational text, narrative text, and argumentation.
- 4F.3 Know/apply in practice considerations for the role of sentence comprehension in listening and reading comprehension.

STANDARD 5: PROFESSIONAL DISPOSITIONS AND PRACTICES

- 5.1 Strive to do no harm and to act in the best interests of struggling readers and readers with dyslexia and other reading disorders.
- 5.2 Maintain the public trust by providing accurate information about currently accepted and scientifically supported best practices in the field.
- 5.3 Avoid misrepresentation of the efficacy of educational or other treatments or the proof for or against those treatments.
- 5.4 Respect objectivity by reporting assessment and treatment results accurately, and truthfully.
- 5.5 Avoid making unfounded claims of any kind regarding the training, experience, credentials, affiliations, and degrees of those providing services.
- 5.6 Respect the training requirements of established credentialing and accreditation organizations supported by CERI and IDA.
- 5.7 Avoid conflicts of interest when possible and acknowledge conflicts of interest when they occur.
- 5.8 Support just treatment of individuals with dyslexia and related learning difficulties.
- 5.9 Respect confidentiality of students or clients.
- 5.10 Respect the intellectual property of others.