

# THE DYSLEXIA HANDBOOK IN SOUTH DAKOTA

AVAILABLE ONLINE AT HTTP://DOE.SD.GOV/SECRETARY/DYSLEXIA.ASPX

South Dakota Department of Education, Pierre SD, March 2009 Revised November 2010, March 2017, and April 2021

#### Background

The purpose of this guide is to provide parents and educators a resource where they can learn more about Dyslexia. This guide is a starting point and has additional resources listed for teachers to access when they suspect a student may have Dyslexia.

The South Dakota Department of Education (SDDOE) recognizes Dyslexia as a type of specific learning disability that affects students nationwide. Students may demonstrate early reading difficulties characterized by struggles with reading acquisition skills. These difficulties may become more apparent as language and learning demands increase, despite the provision of effective classroom instruction. Students with Dyslexia demonstrate a unique pattern of characteristics that may explain these reading difficulties.

The SDDOE assembled a task force in response to a Bill brought forth during the 2016 South Dakota Legislative session. This task force was composed of parents, educators, legislators, and DOE staff. The task force developed a five-year plan to develop guidelines and tools to help school districts respond to the needs of all students struggling with characteristics of Dyslexia. The Dyslexia Handbook continues to be revised as part of the five-year plan, which is available here: <u>https://doe.sd.gov/Dyslexia/</u>

In developing this Dyslexia Handbook, a diverse group of individuals with unique skills, expertise, and experiences in specific learning disabilities were brought together. We would like to acknowledge the following members of this Dyslexia task force over time:

# Acknowledgements

List of Members (2021)

Dr. Daniel Hajovsky-Division Chair, Counseling and Psychology in Education, University of South Dakota

Dr. Kari Oyen- Program Director, School Psychology Program, University of South Dakota

Dr. Ted Williams-Nationally Certified School Psychologist, Redfield, SD

Shelly Bayer Member, IDA-UMB Executive Board

Rebecca Cain, Department of Education

# List of Members (2017)

Steve Bayer- Parent and school board member

Tara Boechler- HB1198 and HB1133 Dyslexia Parent, Advocate and Tutor. Elementary Literacy Specialist

Angie Brown- MA CCC SLP Outreach Coordinator/Instructor

Rebecca Cain-South Dakota Department of Education

Sue Hegland- Board of Directors International Dyslexia Association-Upper Midwest Branch

Valerie Johnson- Nationally Certified School Psychologist

Kristi Kafka – Nationally Certified School Psychologist

Karin Merkle- Certified teacher, Dyslexia specialist

Deb Muilenburg-Wilson- Sioux Falls South Dakota Special Services Director

Katharine Thomas- RCA school board member '15-18 & parent of 4 dyslexic children

Marsha Weiland-Decoding Dyslexia-SD Leader, parent, certified teacher

List of Initial Members (2010)

Sandy Arseneault, President, South Dakota Education Association

Joyce Anderson, School Psychologist

Rebecca Cain, State Special Education Programs Representative

Sandra Ellenbolt, Training Coordinator South Dakota Parent Connection

James A. Huff, Director of Outreach, Learning Disabilities Association of South Dakota Robert Kean, South Dakota Advocacy Services

Ann Larsen, South Dakota State Director of Special Education

David J. Larson, Attorney

Penny McCormick-Gilles, Special Education Director Mid-Central Educational Cooperative

Diane Olson, Education Specialist, ESA 3

Chrissy Peterson, Special Services Director, Meade School District

Rita Pettigrew, Director, North Central Special Education Cooperative

Michelle Powers, Special Services Director, Brookings School District

Lisa Sanderson, Family to Family Coordinator, South Dakota Parent Connection

Stephanie Spaan, Director of Excel Achievement Center

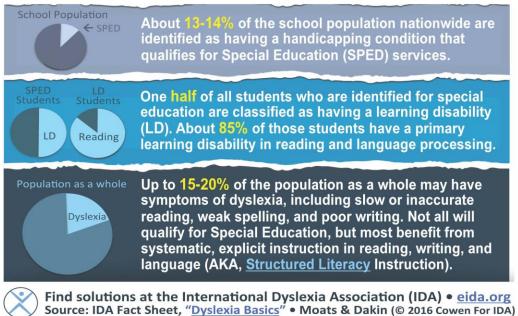
#### TABLE OF CONTENTS

Background	2
Acknowledgements	3
Definition of Dyslexia	6
Common Myths Regarding Dyslexia	7
Characteristics of Students with Dyslexia	
Risk Factors of Dyslexia	
Evaluation Considerations for Comprehensive Dyslexia Assessment	10
Typical Academic Deficits for Students with Dyslexia	11
Typical Strengths for Students with Dyslexia	12
Other Possible Related Concerns/Co-morbid Conditions:	13
Ineffective Intervention Strategies	14
Effective Intervention Strategies for Children with Dyslexia (Kilpatrick, 2015)	15
Areas to Consider for Evaluation	15
The Phonological-Core Deficit of Dyslexia	
Special Education and Dyslexia	
Advocating for Your Dyslexic Learner	
Accommodations	21
Resources for Interventions	22
Student Rights	23
People First Language	24
Resources	25
References	27

# **Definition of Dyslexia**

"Dyslexia is a specific learning disability that is neurobiological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede growth of vocabulary and background knowledge." The International Dyslexia Association (IDA, 2002)

# How widespread is dyslexia?





# **Common Myths Regarding Dyslexia**

# Myth 1: If you just give them enough time, children will outgrow Dyslexia.

**Fact:** There is evidence to suggest that children with developmental dyslexia show a persistent deficit in reading and continue to experience reading problems into adolescence and adulthood (Fletcher, 2009; Shaywitz & Shaywitz, 2003). Evidence suggests that intensive instruction in advanced phonemic awareness can help remediate these reading difficulties (Kilpatrick, 2015).

# Myth 2: Writing letters and words backwards are the only symptoms of Dyslexia.

**Fact:** Writing letters and words backwards are common in the early stages of learning to read and write among all children (before the age of nine). It is a sign that orthographic representations (i.e., letter forms and spellings of words) have not been firmly established, not that a child necessarily has a reading disability (Proctor et al., 2017).

# Myth 3: More boys than girls have Dyslexia.

**Fact:** There is a higher identification of Dyslexia for boys relative to girls, with a ratio of about 1.5:1 (Pennington, 2009, p. 45; Rutter et al., 2004). However, it is hypothesized that the reason that the rates are higher for boys than girls is that boys are often flagged for assessment and intervention through school identification methods at a higher rate than girls (Shaywitz, 2003).

# Myth 4: Dyslexia only affects people who speak English.

**Fact:** Dyslexia appears in all cultures and languages in the world with written language, including those that do not use an alphabetic script such as Korean and Hebrew. In English, the primary difficulty is accurate decoding of unknown words. In consistent orthographies such as German or Italian, Dyslexia appears more often as a problem with fluent reading – readers may be accurate, but very slow (Kilpatrick, 2015; Ziegler & Goswami, 2005).

# Myth 5: A person with Dyslexia can never learn to read.

**Fact:** This is simply not true. Evidence suggests that when children who struggle with reading are provided explicit, direct instruction in basic and advanced phonemic awareness skills paired with phonics instruction, they are less likely to demonstrate the same level of persistent difficulties with reading problems (Fletcher, 2009; Kilpatrick, 2015).

# Myth 6: Myth: Dyslexia is a visual problem and vision therapy or colored overlays will help.

**Fact**: Individuals with Dyslexia demonstrate the same ocular health as those without reading difficulties (Handler et al., 2011). There is no evidence to support the use of colored overlays or vision therapy as an intervention for children with Dyslexia. According to The American Academy of Ophthalmology (2014), "there is no adequate scientific evidence to support the view that subtle eye or visual problems cause learning disabilities. Furthermore, the evidence does not support the concept that vision therapy of tinted lenses or filters are effective, directly or indirectly, in the treatment of learning disabilities. Thus, the claim that vision therapy improves visual efficiency cannot be substantiated."

# **Characteristics of Students with Dyslexia**

Dyslexia is a word-level reading disorder. The severity of Dyslexia exists along a continuum, which can range from mild to severe. Dyslexia is primarily characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. They may also demonstrate difficulty with phoneme segmentation and manipulation. Secondary consequences of Dyslexia may include problems in reading comprehension and reduced reading experience that can impede the growth of vocabulary and background knowledge. Secondary problems may also exist with written expression due to poor orthographic recall of spelling patterns. Students with Dyslexia may show poor phonological processing, rapid automatized naming (also referred to as naming speed), short-term verbal working memory, and processing speed. Conversely, students with Dyslexia often show strengths in oral expression, listening comprehension, problem solving skills, and math calculation and reasoning. These difficulties persist despite the provision of effective classroom instruction and supports and are unexpected in relation to other cognitive abilities. Finally, students with Dyslexia often show co-occurring disorders (e.g., ADHD, dyscalculia) that may also be impacting their reading. Below are domains to assess when considering if a student has characteristics consistent with Dyslexia.

# **Risk Factors of Dyslexia**

Everyone can probably check one or two of these characteristics. That does not mean that everyone has Dyslexia. A person with Dyslexia usually has many of these characteristics, which persist over time and interfere with his or her learning. If your child is having difficulties learning to read, spell, and write and you have noted several of these characteristics, he or she may need to be referred for an evaluation for specific learning disability (Dyslexia) and/or a related disorder. If parents or teachers identify some of these risk factors below, it would be beneficial to speak with your school-based team to further discuss the need for a comprehensive evaluation to determine if the student may have characteristics of Dyslexia.

# Preschool

- Delay in learning to talk
- Difficulty with rhyming
- Poor auditory memory for nursery rhymes
- Difficulty adding new vocabulary words
- Trouble learning and naming letters and numbers and remembering the letter in his/her name
- Inability to recall the right word

Kindergarten and First Grade (many of the previously described behaviors remain problematic)

- Difficulty breaking words into smaller parts, or syllables
- Difficulty identifying and manipulating sounds in syllables
- Difficulty remembering the names of letters and recalling their corresponding sounds
- Difficulty decoding single words (reading single words in isolation)
- Difficulty spelling words the way they sound (phonetically) or remembering letter sequences in very common words seen often in print (e.g., "rite" for "right")

At this stage, students are developing the underlying oral language base necessary for learning to read. Signs that indicate possible difficulties with reading acquisition include:

# Second Grade through Third Grade

- Difficulty recognizing common sight words
- Difficulty decoding single words
- Difficulty reading fluently (e.g., reading is slow, inaccurate, and/or without expression)
- Difficulty decoding unfamiliar words in sentences using knowledge of phonics
- Reliance on picture clues, story theme, or guessing at words
- Difficulty with written expression

# Fourth Grade through Sixth Grade

- Difficulty reading aloud (e.g., fear of reading aloud in front of classmates)
- Avoidance of reading (particularly for pleasure)
- Difficulty reading fluently
- Acquisition of less vocabulary due to reduced independent reading
- Use of less complicated words in writing that are easier to spell than more appropriate words (e.g., "soft" instead of "delicate")
- Reliance on listening rather than reading for comprehension

# Middle School and High School

- Difficulty with the volume of reading and written work
- Difficulty reading fluently
- Difficulty decoding unfamiliar words in sentences using knowledge of phonics
- Difficulty with written assignments
- Tendency to avoid reading
- Difficulty learning a foreign language

# **Evaluation Considerations for Comprehensive Dyslexia Assessment**

#### Typical cognitive processing deficits for students with Dyslexia

- <u>Rapid Automatized Naming</u>: Measures response time or rapid retrieval for a visual stimulus (objects, colors, **letters**, or **numbers** or a combination). Students may demonstrate below average rapid automatic naming skills.
- <u>Phonological Processing</u>: The use of the sounds of one's language (i.e., phonemes) to process spoken and written language (Wagner & Torgesen, 1987). Students may demonstrate poor to below average phonological processing.
- <u>Orthographic Processing</u>: General knowledge on what is permissible and impermissible in the English spelling. It is the learning of common patterns in words. Students may demonstrate poor to below average orthographic processing.
- <u>Auditory Short-term Working Memory</u>: Ability to hold information in memory and rearrange it. Related to attention and executive functioning. Students may demonstrate poor to below average auditory short-term working memory.
- <u>Phonological Short-term Memory</u>: The ability to temporarily maintain speech-related information. Students may demonstrate poor to below average phonological short-term memory.
- <u>Processing Speed</u>: Refers to the speed of perception (input), speed of output (e.g. oral or motoric response), or speed of integration of perceptual, cognitive, and output processes (Mather and Wendling, 2012). Students may demonstrate poor to below average processing speed.

# Typical Academic Deficits for Students with Dyslexia

- <u>Basic phonological awareness</u>: The ability to notice the sounds structure of spoken words. Basic skills include phoneme blending and segmentation. Students with Dyslexia demonstrate poor blending and segmenting.
- <u>Advanced phonological awareness</u>: The ability to notice the sounds structure of spoken words. Advanced skills include manipulating phonemes, such as deleting, substituting, and reversing. Students with Dyslexia demonstrate poor deleting, substitution, reversing of phonemes.
- <u>Letter knowledge (name and associated sound)</u>: Knowing the correspondence between graphemes (letters) and phonemes (sounds). Necessary for phonetic decoding and storing sight word knowledge. "Talk written down." This is capturing the alphabetic principle where students know the letter names and the associated sounds. Students with Dyslexia in kindergarten and first grade will demonstrate poor performance where performance can be inconsistent at higher grades.
- <u>Reading words in isolation (word identification)</u>: This is a measure of your sight vocabulary. Sight word reading involves recognizing real words instantly, without an analysis of the sounds or parts. Students with Dyslexia have difficulty with decoding; this is true particularly on <u>timed</u> tests.
- <u>Phonics/Decoding unfamiliar words:</u> Phonics is the connection between graphemes (letter symbols) and sounds. Students with Dyslexia have difficulty sounding out unknown words, particularly on <u>timed</u> tests.
- <u>Reading fluency</u>: The accuracy, rate, and prosody of grade level reading. Reading words accurately and easily, with adequate rate, and expression (National Reading Panel, 2000). Students with Dyslexia demonstrate slow, inaccurate, and labored reading.
- <u>Reading comprehension</u>: Extracting meaning from text. The ability to process text, understand its meaning, and to integrate with what the reader already knows. Students with Dyslexia could have average skills, or it can be a secondary deficit.
- <u>Spelling</u>: Encoding letter sequences and patterns of letter streams. Using phoneme-grapheme associations and common orthographic spelling patterns to reproduce entire words. Students with Dyslexia demonstrate poor spelling as this is the most persistent impairment for students with Dyslexia.
- <u>Written Expression</u>: The composition and transcription of text regarding accuracy, fluency, and clarity (Moat and Dakin, 2008). Students with Dyslexia demonstrate below Average scores due to spelling difficulties with creating text.

# Typical Strengths for Students with Dyslexia



Children and adults with dyslexia often find alternative ways of gathering knowledge and develop innovative strategies to learn, work, and achieve in life. Children and adults with dyslexia often have strong critical thinking skills and are known to be creative and have a strong sense of empathy.

- <u>Oral Expression</u>: A person's ability to express wants, thoughts, and ideas meaningfully using appropriate syntactic, semantic, pragmatic, and phonological language structures. This skill is typically average for students with Dyslexia.
- <u>Listening Comprehension</u>: Encompasses the multiple processes involved in understanding and making sense of spoken language. These include recognizing speech sounds, understanding the meaning of individual words, and/or understanding the syntax of sentences in which they are presented. This skill is typically average for students with Dyslexia.
- <u>Vocabulary</u>: Knowledge of words. Language-based academic knowledge as well as general world knowledge. This skill is typically average, but can be somewhat inconsistent for students with Dyslexia.
- <u>Reasoning/Problem Solving Skills</u>: The ability to use inductive, deductive, and general sequential reasoning to solve novel problems. This skill is typically average for students with Dyslexia.
- <u>Math Calculation and Reasoning</u>: Calculation measures computational skills and automaticity with basic math facts. Math reasoning measures mathematical knowledge, problem solving, and analysis. Students with Dyslexia may have average math calculation skills, but may demonstrate poor math reasoning due to struggles with decoding word problems.

Children and adults with Dyslexia often find alternative ways of gathering knowledge and develop innovative strategies to learn, work, and achieve in life.

# Other Possible Related Concerns/Co-morbid Conditions:

Specific learning disabilities, including Dyslexia, may occur in conjunction with other disorders or conditions. Within one individual there may be multiple conditions that should be considered in the referral and evaluation process. Some examples for a student with a specific learning disability and Dyslexia may include but is not limited to:

- Language and communication disorders
- Difficulty with writing abilities (Dysgraphia)
- Difficulty with math (Dyscalculia)
- Difficulty with motor skills/developmental coordination (Dyspraxia)
- Attention Deficit Disorder/Attention Deficit Hyperactivity Disorder
- Mental disorders (anxiety, depression, etc.)

#### **Intervention Considerations**

#### **General Education Instruction**

The general education teacher will provide interventions or accommodations in the classroom for the student. If the student is successful and begins to make adequate progress no further action is needed. If the general education teacher provides interventions or accommodations in the classroom, however, and the student is not successful, further action should be taken. Every school district is different but almost always the first step is to notify the principal and then make a referral to the Teacher Assistance Team (sometimes called the Problem Solving Team).

The general education teacher must be diligent in documenting the student's levels of performance, the duration and frequency of the interventions, and the student's response to the individual interventions. Decisions regarding the student's future interventions will be based on what was tried in the past and what worked and what didn't. If the student does not respond to general education interventions, it is likely that the Teacher Assistance Team will determine that more intensive interventions are needed or additional evaluation information is necessary based on the student's presenting needs.

Students come to school with a wide variety of skills, abilities, interests and experiences with literacy. The National Reading Panel (2000) conducted a rigorous and comprehensive review of reading instruction research which outlined five essential components of content of reading instruction programs, which needs to include phonemic awareness, phonics and word recognition, reading fluency, vocabulary development, and reading comprehension. Each of these components should be taught and integrated with one another throughout instruction. Specifically, for children with Dyslexia, students should be provided explicit, systematic instruction in the areas of basic and advanced phonemic awareness with explicit phonics instruction for highest effectiveness. When providing **evidence-based intervention**, the instruction should be:

- Explicit directly teaches each language and print concept clearly.
- Systematic has a definite, logical sequence of concept introduction.
- Cumulative continual review of skills as they build on one another.
- Sequential and incremental step-by-step procedures for introducing, reviewing, and practicing concepts. Immediate, corrective feedback is necessary to develop automatic word recognition skills.
- Multisensory engages the visual, auditory, and kinesthetic channels simultaneously or in rapid succession.
- Data-driven decisions are made based on data that is collected and then reviewed, along with the student's instructional response over time.

# Ineffective Intervention Strategies

**Covered overlays and colored lenses:** *Likely to result in placebo, practice, or Hawthorne effects (Griffiths, Taylor, Henderson, & Barrett, 2016).* 

**Specialized fonts:** Changing font to arial does not appear to impact reading (Kuster, van Weerdenburg, Gompel, & Bosman, 2018).

**Vision therapy:** Vision problems can interfere with the process of reading, but children with dyslexia or related learning disabilities have the same visual function and ocular health as children without such conditions. Currently, there is inadequate scientific evidence to support the view that subtle eye or visual problems cause or increase the severity of learning disabilities. (Handler et al., 2011)

A joint statement from the The American Academy of Ophthalmology (2014):

"Currently, there is no adequate scientific evidence to support the view that subtle eye or visual problems cause learning disabilities. Furthermore, the evidence does not support the concept that vision therapy or tinted lenses or filters are effective, directly or indirectly, in the treatment of learning disabilities. Thus, the claim that vision therapy improves visual efficiency cannot be substantiated."

**Working Memory Training:** Tend to result in short term training effects that do not improve real world cognitive skills (Melby-Lervag, Redick, & Humblme, 2016).

# Effective Intervention Strategies for Children with Dyslexia (Kilpatrick, 2015)

- Minimal Improvement Group (0-5 Standard Score improvements)
  - None formally trained phonological awareness/analysis
  - Most did explicit, systematic phonics
  - o All provided reading practice with connected text
- Moderate Improvement Group (6-9 Standard Score improvements)
  - All did explicit, systematic phonics
  - o All provided reading practice
  - Nearly all trained in phonological segmentation and/or blending
    - This is "basic phonological awareness" (mastered by most at end of 1st grade)
- Highly Successful Group (12-25 Standard Score improvements)
  - Aggressively addressed and "fixed" phonemic awareness issues using advanced phonemic awareness training
  - o All did explicit, systematic phonics

## Areas to Consider for Evaluation

#### **Background Information**

Information from parents and teachers tells us a lot about a student's overall development and pattern of strengths and weaknesses. Because dyslexia is genetically linked, a family history of dyslexia indicates that a student is more likely to have dyslexia. A history of delayed speech or language also puts a child at-risk for reading difficulties. It is important to know the types and length of time of any interventions the student has received at school, home, or through tutoring, as well as the student's response to the intervention. Missed instruction, should be taken into account when considering the possibility of any learning disability. This includes days of school missed as well time spent out of the classroom for behavior issues.

#### Intellectual/Cognitive Assessment

Cognitive/intellectual abilities are not the best predictors of dyslexia since most children with dyslexia have average to above average intelligence. However, during initial assessments, intelligence testing can ensure problem solving skills are intact and determine whether reading skills are unexpected compared to the child's abilities. Intelligence assessments offer valuable insights into a child's problem solving strengths, weaknesses, and approach to novel tasks. Testing provides a better understanding of the child's verbal, visual, hands on, working memory, and paper-and-pencil processing speed skills. Lastly, many children with dyslexia feel they are "dumb" and sometimes benefit from tangible evidence to the contrary - formal intelligence testing can provide this.

# **Oral Language Skills**

Oral language, simply stated, refers to our ability to listen to and understand speech as well as to express our thoughts through speech. Oral language is made up of low-level skills, such as recognizing and making the sounds within our speech, and higher-level skills, such as getting meaning by listening to someone speak or creating sentences to express thoughts. Students with dyslexia typically have adequate higher-level language skills. Indicators of higher-level oral language skills include being able to understand an age-appropriate story and spoken directions, to carry on a conversation, and to understand and use words that are age appropriate. If a student has average higher-level oral language skills but much difficulty developing written language (reading and spelling) skills, the need for evaluation for dyslexia is recommended.

Although students with dyslexia usually have strong higher-level language skills, they typically have problems (a deficit) in low-level language skills (see following section "Phonological processing"). This deficit limits the ability to learn to read and spell using the sounds of the language. Young children with dyslexia often have delays in language development, but their higher-level language skills are usually age-appropriate by the time they enter school. Difficulties with higher-level language skills suggest a need for a language evaluation by a speech-language pathologist to rule out language impairment.

#### Word Recognition

Word recognition is the ability to read single printed words. It is also called word reading or word identification. Tests of word recognition require that students read individual words printed in a list. The student is not able to use cues, such as the meaning of a sentence, to help them figure out the word. Tests of word recognition that score both accuracy and the time it takes for the student to read the words (fluency) are particularly useful. Students with dyslexia often become accurate but are still very slow when reading words. Both accuracy and the speed of word reading can affect understanding what is read.

#### Decoding

Decoding is the ability to read unfamiliar words by using letter-sound knowledge, spelling patterns and chunking the word into smaller parts, such as syllables. Decoding is also called "word attack". Decoding tests should use nonsense words (words that look like real words but have no meaning, such as *frut* or *crin*) to force the student to rely on these decoding skills rather than on memory for a word already learned.

#### Spelling

Assess the student's ability to spell individual words using their knowledge of morphology and etymology along with grapheme-phoneme relationships. Students should be able to:

- Spell words using an understanding of morphological structure, for example: <ever + y → every, say + s → says, in + tent + ion → intention>. Spell words using etymological relationships, for example: <two, twice, twin> and <there, where, here>.
- Demonstrate understanding of spelling conventions, including the 3 suffixing conventions (E rule, Y rule and doubling rule), conventions for doubled consonants, and multiple purposes for "silent <e>."
- Demonstrate understanding of the grammatical force and consistent spelling of suffixes regardless of pronunciation for example: <ed> to form past tense in <played, planted, walked>, <ist> to form a noun indicating someone who does something <artist, florist, dentist> and <est> for the superlative

<slowest, greatest, kindest>. Demonstrate understanding of multiple forms of suffixes, including <s, es> for plural and third person verb forms.

• Use understanding of stress and the schwa to spell related words such as <history/historic, cave/excavate, declare/declaration>.

Spelling stresses a child's short and long-term memory and is complicated by the ease or difficulty the child has in writing the letters, legibly and in the proper order. Spelling is usually the most severe weakness among students with dyslexia and can be effectively remedied by teaching morphology and etymology along with phoneme-grapheme relationships.

# **Phonological Processing**

Phonology is one small part of overall language ability. Phonology is the "sound system" of our language. Our spoken language is made up of units of meaning within words (morphemes), and individual speech segments that are distinctive for meaning (phonemes). There are also models for analyzing words than include syllable division. Most methods for teaching reading require students to think about, remember, and correctly sequence the sounds in words in order to learn to link letters to sounds for reading and spelling. Good readers do this automatically without conscious effort. However, students with dyslexia can have difficulty with identifying, pronouncing, or recalling sounds. Tests of phonological processing focus on these skills.

# **Automaticity/Fluency Skills**

Students with dyslexia often have a slow speed of processing information (visual or auditory). Tasks measure Naming Speed (also called Rapid Automatic Naming). Sets of objects, colors, letters, and numbers are often used. These items are presented in rows on a card, and the student is asked to name each as quickly as possible. Naming speed, particularly letter naming, is one of the best early predictors of reading difficulties. Therefore, it is often used as part of screening measures for young children. Slow naming speed results in problems with developing reading fluency. It also makes it difficult for students to do well on timed tests. Students with both the naming speed deficit and the phonological processing deficit are considered to have a "double deficit." Students with the double deficit have more severe difficulties than those with only one of the two.

# **Reading Comprehension**

Typically, students with dyslexia score lower on tests of reading comprehension than on listening comprehension because they have difficulty with decoding and accurately or fluently reading words. It is important, however, to be aware that students with dyslexia often have strong higher-level oral language skills and are able to get the main idea of a passage despite difficulty with the words. Further, reading comprehension tasks usually require the student to read only a short passage to which they may refer when finding the answers to questions. For these reasons, students with dyslexia may earn an average score on reading comprehension tests but still have much difficulty reading and understanding long reading assignments in their grade-level textbooks.

Primary reading/spelling characteristics of dyslexia:

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

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

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

# The Phonological-Core Deficit of Dyslexia

Weakness in one or more of the following:

- Phonemic awareness/analysis
- Phonemic blending/synthesis
- Rapid automatized naming
- Phonological working memory
- Nonsense word reading, letter-sound knowledge acquisition

Typically more than one of these, sometimes all

- Children who are average or better in all of these DO NOT have dyslexia!
- We don't find poor word readers without one or more of these characteristics

Questions to Determine the Identification of Dyslexia

- Do data show the following characteristics of dyslexia?
  - Difficulty with accurate and/or fluent word reading
  - Poor spelling skills (phoneme to grapheme)
  - Poor decoding ability (grapheme to phoneme)
- Do these difficulties result from a deficit in the phonological component of language? (\*Average phonological scores alone do **not** rule out dyslexia)
- Are these difficulties **unexpected** for the student's age in relation to the student's other cognitive abilities and provision of effective classroom instruction?

# **Special Education and Dyslexia**

Do all children who have dyslexia need special education?

- Not necessarily, but it is possible to meet eligibility requirements.
- Students who have a disability must meet the following requirements to be eligible for Special Education:

**ARSD 24:05:25:04.02.** Determination of needed evaluation data. Based on the above review and input from the student's parents, identify what additional data, if any, are needed to determine:

(a) Whether the student has a particular category of disability as described in this article (SD Eligibility guidelines);

(b) The present levels of academic achievement and related developmental needs of the student; and

(c) Whether the student needs special education and related services.

# Dear Colleague Letter (OSERS 10-23-15):

- "The purpose of this letter is to clarify that there is nothing in the IDEA that would prohibit the use of the terms dyslexia, dyscalculia, and dysgraphia in IDEA evaluation, eligibility determinations, or IEP documents."
- "Stakeholders requested that OSERS provide SEAs and LEAs with a comprehensive guide to commonly used accommodations in the classroom for students with specific learning disabilities, including dyslexia, dyscalculia, and dysgraphia."
- "The IDEA does not dictate the services or accommodations to be provided to individual children based solely on the disability category in which the child has been classified, or the specific condition underlying the child's disability classification."

# Advocating for Your Dyslexic Learner

Parenting a child with dyslexia is a journey, which is often equated to a marathon rather than a sprint. For many, the first step in the journey of advocacy is education. With personal education and continual communication with school personnel, the journey will be productive.

After educating oneself about dyslexia, parents can better determine if discussions with school personnel about their child having dyslexia are appropriate. If a parent recognizes that a number of the characteristics of dyslexia match to their child, the next step is to engage in communication with the child's teacher and other school personnel.

• **Request a meeting** with the classroom teacher. Ask the teacher to include other key players.

- **Prepare documents** to share that support your concerns. Items should show strengths and weaknesses of your child.
  - Examples of child's written work
  - Relevant graded tests and school assessments
  - Notes from teachers
  - Standardized test results
  - o Dyslexia screening assessment results
  - Report cards
  - Personal notes of one's observations of student relating to school
- Create a positive advocacy environment during the meeting.
  - Write concerns and questions in advance on paper
  - Present concerns and information calmly
  - Keep the focus on the child and his or her needs
  - o Listen to what others have to say and avoid interruptions
  - Ask for clarification when someone says something not understood
  - Show support for both the child and his/her school personnel
  - Request a plan of action, if appropriate
- Become a team player in your child's educational journey.
  - Build a relationship with your child's teacher through communication
  - Work together to ensure accommodations are implemented
  - Create an engaging environment at home for homework by having it free of distractions and offer support, as needed
- Find support by connecting with other families who are also navigating this journey.

#### Accommodations



Each student with a specific learning disability/Dyslexia is unique and will therefore have unique needs. Based on the detailed information learned through the evaluation a discussion including the teachers, evaluators, and parents should occur to decide what accommodations are best for each individual student. Below is a list of some of the available accommodations that may benefit a student with Dyslexia. This is not an exhaustive list, nor is every accommodation listed effective for every student.

#### **Reading**

- Provide access to audio books
- Provide access to text-to-speech
- Only ask student to read aloud if he/she volunteers
- Provide extra time for reading assignments
- Provide a quiet environment for reading
- Allow students to preview reading materials

# **Spelling/Writing**

- Design spelling tests to focus on one skill at a time
- Allow corrections for spelling errors on written work
- Provide access to speech-to-text, spell check, and/or word prediction software
- Offer alternative projects instead of written reports
- Provide written copies of notes
- Minimize the amount of copying from the board
- Allow students to use a keyboard to take notes
- Allow students to tape record lectures
- Reduce written work
- Provide a letter formation strip

- Provide graphic organizers or guided notes
- If necessary, provide a scribe

#### **Homework**

- Reduce number of assignments
- Allow students to dictate answers
- Allow typewritten homework
- Email list of assignments to student and parents
- Providing guidance on specific study skill strategies to employ for homework assignments

#### **Testing**

- Clarify or simplify written directions
- Allow students to take tests orally
- Provide for extra time
- Read directions aloud
- Read test questions aloud
- Provide alternatives to testing (oral projects or videos)
- Provide a quiet testing area with minimal distractions

#### **Directions/Instructions**

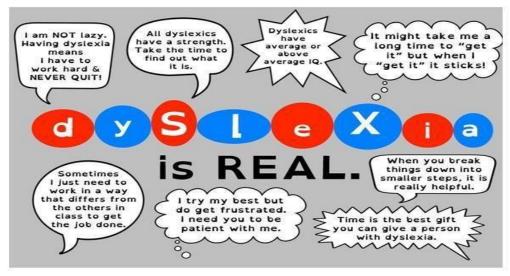
- Repeat directions
- Use step-by-step instructions
- Check for understanding
- Clarify or simplify written directions

#### **Resources for Interventions**

- Florida Center on Reading Research lessons targeting skill deficits: <u>https://fcrr.org/</u>
- Heggerty Phonemic Awareness Curriculum: <u>https://heggerty.org/</u>
- Guide for Teachers: https://Dyslexiaida.org/wp-content/uploads/2015/01/DITC-Handbook.pdf
- Effective Reading Instruction: <u>https://Dyslexiaida.org/effective-reading-instruction/</u>
- For more on South Dakota Learning Disability Eligibility: <u>http://doe.sd.gov/oess/sped-IEP.aspx</u>
- Fact Sheets: <u>https://dyslexiaida.org/fact-sheets/</u>

# **Student Rights**

Students are their best self-advocates and can be encouraged to develop self-advocacy skills. More information to build self-advocacy for students with dyslexia is available at <u>http://dyslexiahelp.umich.edu/dyslexics/living-with-dyslexia/self-advocate-for-your-dyslexia</u> State and federal law and regulations help define the rights of students to assist them overcome and accommodate their learning problems. In South Dakota, in dealing with specific learning disabilities the following are relevant: South Dakota Codified Laws, Title 13 Education; Administrative Rules of South Dakota, Rule 24:03 - 24:43; The Individuals with Disabilities Education Act 2004 (IDEA); Section 504 of the Rehabilitation Act of 1973; and, the Americans with Disabilities Act (ADA).



Design by Cheri Grimmet Alabama Branch of the International Dyslexia Association

"Everyone is a genius, but if you judge a fish by its ability to climb a tree, it will live its whole life believing that it is stupid." Albert Einstein

"I didn't succeed despite my dyslexia, but because of it. It wasn't my deficit, but my advantage. Although there are neurological trade-offs that require that I work creatively [and] smarter in reading, writing and speaking, I would never wish to be any other way than my awesome self. I love being me, regardless of the early challenges I had faced." Scott Sonnon, martial arts world champion and author

"I have learned to live with it and make the best of it. I read all the time. When I was diagnosed with dyslexia, I was told to read everything from street signs to cereal boxes, and that my mom shouldn't read the menu for me. I should read it to her! It has helped a great deal. I am reading well, but it is something I work on every day." Bella Thorne, actress "The real fear that I have for dyslexic people is not that they have to struggle with jumbled input or that they can't spell, but that they will quit on themselves before they get out of school. Parents have to create victories whenever they can, whether it's music, sports or art. You want your dyslexic child to be able to say: 'Yeah, reading's hard. But I have these other things that I can do.'" Stephen J. Cannell, Emmy-winning TV producer

# People First Language

"People First Language" (PFL) puts the person before the disability, and describes what a person has, not who a person is. PFL uses phrases such as "person with a disability," "individuals with disabilities," and "children with disabilities," as opposed to phrases that identify people based solely on their disability, such as "the disabled."

#### Resources

Office of Special Education and Rehabilitative Services letter addressing Dyslexia: <a href="https://www2.ed.gov/policy/speced/guid/idea/memosdcltrs/guidance-on-Dyslexia-10-2015.pdf">https://www2.ed.gov/policy/speced/guid/idea/memosdcltrs/guidance-on-Dyslexia-10-2015.pdf</a>

International Dyslexia Association <u>www.interdys.org</u>

National Center for Learning Disabilities <a href="https://www.ncld.org/">https://www.ncld.org/</a>

What Works Clearinghouse <u>https://ies.ed.gov/ncee/wwc/</u>

Upper Midwest Branch http://umw.Dyslexiaida.org/

Learning Disabilities Association of America <u>https://ldaamerica.org/</u>

The Yale Center for Dyslexia and Creativity http://Dyslexia.yale.edu/parentstalkC.html

Dyslexic Advantage http://dyslexicadvantage.org

Understood for Learning & Attention Issues <u>http://understood.org</u>

South Dakota Parent Connection www.sdparent.org

Center for Disabilities <u>https://www.usd.edu/medicine/center-for-disabilities</u>

Funding provided through the South Dakota State Department of Education, Division of Special Education/Early Intervention Services from IDEA Part B Grant #H027A080091, the U.S. Department of Education, Office of Special Education and Rehabilitative Services. The views expressed herein do not necessarily reflect the views of the U.S. Department of Education or any other Federal agency and should not be regarded as such. The Division of Special Education/Early Intervention Services receives funding from the Office of Special Education Programs, Office of Special Education and Rehabilitative Services, U.S. Department of Education. This information is copyright free. Readers are encouraged to copy and share it, but please credit the Division of Special Education/Early Intervention Services, South Dakota State Department of Education.

The South Dakota State Department of Education does not discriminate on the basis of race, color, sex, age, national origin, religion, or disability in matters affecting employment or in providing access to programs. In

accordance with the Americans with Disabilities Act (ADA) this document is available in alternative formats, upon request. Contact the Division of Special Education/Early Intervention Services, South Dakota State Department of Education at (605) 773-3678 or fax (605) 773-3782.

#### References

- Fletcher, J. M. (2009). Dyslexia: The evolution of a scientific concept. *Journal of the International Neuropsychological Society, 15*(4), 501-508.
- Griffiths, P. G., Taylor, R. H., Henderson, L. M., & Barrett, B. T. (2016). The effect of coloured overlays and lenses on reading: A systematic review of the literature. *Ophthalmic & Physiological Optics*, 36(5), 519-544.
- Handler, S. M., Fierson, W. M., Section on Ophthalmology, Council on Children with Disabilities, American Academy of Ophthalmology, American Association for Pediatric Ophthalmology and Strabismus, & American Association of Certified Orthoptists (2011). Learning disabilities, dyslexia, and vision. *Pediatrics*, 127(3), e818–e856.
- Kilpatrick, D. A. (2015). Assessing, preventing, and overcoming reading difficulties. New York: Wiley.
- Kuster, S. M., van Weerdenburg, M., Gompel, M., & Bosman, A. M. T. (2018). Dyslexie font does not benefit reading in children with or without dyslexia. *Annals of Dyslexia, 68*, 25-42.
- Mather, N., & Wendling, B. J. (2012). *Essentials of dyslexia: Assessment and intervention*. Hoboken, NJ: Wiley.
- Melby-Lervåg, M., Redick, T. S., & Hulme, C. (2016). Working memory training does not improve performance on measures of intelligence or other measures of "far transfer": Evidence from a metaanalytic review. *Perspectives on Psychological Science*, *11*, 512-534.
- National Reading Panel. (2000). Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction. Retrieved from http://www.nichd.nih.gov/publications/pubs/nrp/documents/report.pdf
- Pennington, B. F., McGrath, L. M., Rosenberg, J. Barnard, H., Smith, S. D., Willcutt, E. G., ... Olson, R. K. (2009). Gene x environment interactions in reading disability and attention-deficit/hyperactivity disorder. *Developmental Psychology*, 45(1), 77-89.
- Proctor, C. M., Mather, N., Stephens-Pisecco, T. L., & Jaffe, L. E. (November, 2017). Assessment of dyslexia. *Communiqué, 46*, 1, 20–23.
- Rutter, M., Caspi, A., Fergusson, D., Horwood, L. J., Goodman, R., Maughn, B., ... Carroll, J. (2004). Sex differences in developmental reading disability: New findings from 4 epidemiological studies. *Journal of the American Medical Association, 291*, 2007-2012.
- Shaywitz, S. E. (2003). Overcoming dyslexia: A new and complete science-based program for reading problems at any level. New York.

Shaywitz, S. E., & Shaywitz, B. A. (2003). Dyslexia: Specific reading disability. Pediatric Review, 24, 147-153.

Ziegler, J. C., & Usha, G. (2005). Reading acquisition, developmental dyslexia, and skilled reading across languages: A psycholinguistic grain size theory. *Psychological Bulletin*, 131(1), 3-29.

# Dyslexia Criteria Spreadsheet

Skill Area	Test/Subtest Given			Description
Rapid Automatized		Score		
Naming	<b>Skill Characteristic: Below</b>			
		0		
Phonological				
Processing	Skill Characteristic: Poor to	o Below Average		
		0		
Orthographic				
Processing	Skill Characteristic: Poor to Below Average			
		0		
Auditory Short-Term				
Working Memory	Skill Characteristic: Poor to			
		0		
Phonological Short-				
Term Memory	Skill Characteristic: Poor to			
		Ŭ		
Processing Speed				
	Skill Characteristic: Poor to Below Average			
Basic Phonological				
Awareness	Skill Characteristic: Poor b			
Advanced Phonological				
Awareness	Skill Characteristic: Poor d	eletion. substitution.		
	& reversing	, ~,		
Reading Words in				
Isolation	<b>Skill Characteristic:</b> Difficulty decoding; particularly on timed tests			
Phonics Decoding				
Unfamiliar Words	Skill Characteristic: Difficulty sounding out unfamiliar words; particularly on timed tests			
Reading Fluency				
	Skill Characteristic: slow, la			
	Grade Level:	50 <sup>th</sup> Percentile		
	End of 1 <sup>st</sup> Grade	50-60 wpm		
	End of 2 <sup>nd</sup> Grade	85-95 wpm		
	End of 3 <sup>rd</sup> Grade	100-110 wpm		
	End of 4 <sup>th</sup> Grade	115-125 wpm		
	End of 5 <sup>th</sup> Grade	135-145 wpm		
	End of 6 <sup>th</sup> , 7 <sup>th</sup> , 8 <sup>th</sup> Grade	145-155 wpm		
Deading				
Reading	Skill Characteristics Carold	he evenege (s-mand		
Comprehension	Skill Characteristic: Could be average (>word ID) or secondary deficit			
	in the secondary deficit			
Spelling				
~pomis	Skill Characteristic: poor s	nelling, nersistent		
	impairment			

Written Expression			
······	Skill Characteristic: Below Average; poor spelling		
	Spanna		
Oral Expression			
	Skill Characteristic: Average; relative strength		
Listening			
Comprehension	Skill Characteristic: Relative strength		
Vocabulary			
· · · · · · · · · · · · · · · · · · ·	Skill Characteristic: Average		
Reasoning/Problem			
Solving	Skill Characteristic: Average		
Math Calculation &			
Reasoning	<b>Skill Characteristic:</b> Average math calculation; may see lower math reasoning due to reading difficulties in story problems		
Risk Factors		·	
Other Considerations			
Phonological Core Deficit of Dyslexia	Weakness in <u>one</u> or more of the following:   Phonemic awareness/analysis   Phonemic blending/synthesis   Rapid automatized naming   Phonological working memory		
	Nonsense word reading, letter-sound knowled	YES	NO
Characteristics of Dyslexia	Difficulty with accurate and/or fluent word reading		
	Poor spelling skills (phoneme to grapheme)		
	Poor decoding ability (grapheme to phoneme)		
	Difficulties result from a deficit in phonological component of language		
	Difficulties <u>unexpected</u> for age in relation to cognitive abilities/instruction		
Diagnostic Impression			