


Dyslexia: Separating Fact from Fiction



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#GoRedForDyslexia

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To Jumpstart Our Time Together... Anticipation Guide

- Find the "Anticipation Guide"
- Complete the "Before" column (on the left)
- Don't look anything up! It's okay to be wrong!
- If you're unsure, take an educated guess.



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Anticipation Guide


	True	False
Dyslexia is seeing words backwards, letter reversals, or inversions.		
Dyslexia is more common in males than females.		
Dyslexia can be outgrown.		
Dyslexia cannot be diagnosed until age 8.		
There is convincing evidence showing how Orton Gillingham is the clear approach for students with dyslexia		

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Today's Learning Objectives

Participants will be able to:

- Understand the neurobiological roots of dyslexia
- The underlying causes of dyslexia and its impact on literacy development
- How to identify students with dyslexia
- The role of structure literacy in providing effective intervention



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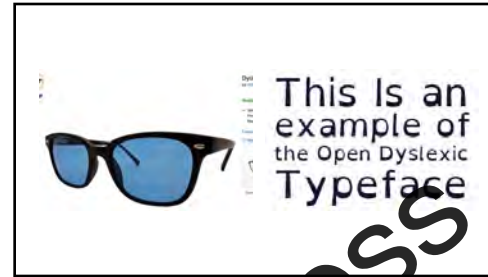


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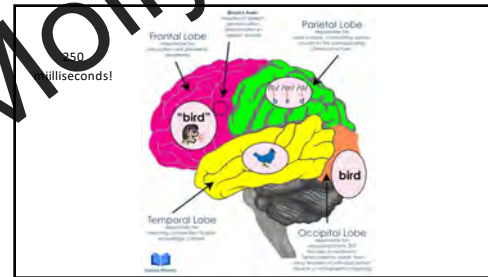


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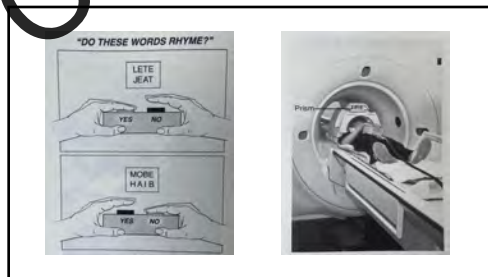
Common Misconceptions about Dyslexia

- Reversing letters; inversions, backwards
- More common in boys than girls
- Linked to intelligence
- Is outgrown
- Linked to vision

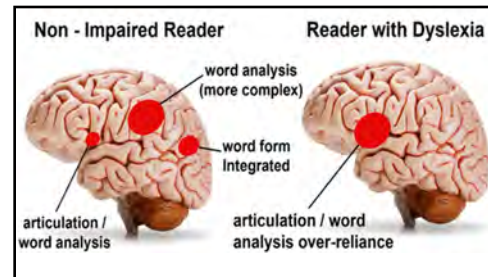
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International Dyslexia Association, 2002

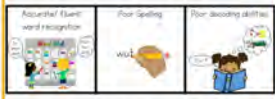
"Dyslexia is a specific learning disability that is neurological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is 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."



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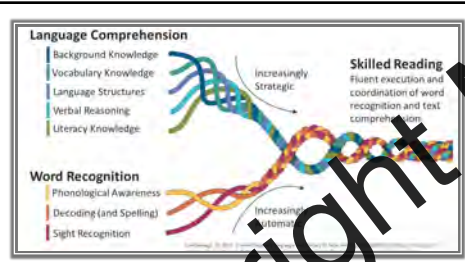
DYSLEXIA IS...

characterized by difficulties with:



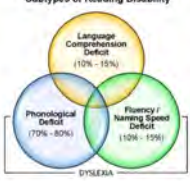
These difficulties usually are a result of deficiency in the phonological component of language.

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Subtypes of Reading Disability*



*Adapted from Moats & Tolman, 2009

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Key Points

- Neurobiologically-based specific learning disorder
- Affects 5-10% of children
- Persistent barrier to reading acquisition
- More frequently diagnosed in males than in females

Cortella & Horowitz, The state of learning disabilities, 2014

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How widespread is dyslexia?

- About **10-15%** of the school population nationwide are identified as having a handicapping condition that qualifies for Special Education (SPED) services.
- One **half** of all students who are identified for special education are classified as having a learning disability (LD). About **80%** of those students have a primary learning disability in reading and language processing.
- Up to **15-20%** of the population as a whole may have symptoms of dyslexia, including slow or inaccurate reading, weak spelling, and poor writing. Not all will qualify for Special Education, but most benefit from systematic, explicit instruction in reading, writing, and language (AKA, Structured Literacy Instruction).


Find solutions at the International Dyslexia Association (IDA) • ida.org
 Source: IDA Fact Sheet, "Dyslexia Basics" • Moats & Dakin (© 2016) Crown for IDA

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Dyslexia


- Core deficit in *phonological processing*
- Results in impairments in decoding, spelling, and word recognition
- Leads to difficulties in fluency and comprehension
- Under DSM-5, dyslexia is an SLD that 'impedes the ability to learn or use academic skills'



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Understanding Phonological Processing

- The use of the sounds of one's language (i.e., phonemes) to process spoken and written language (Wagner & Torgesen, 1987)
- Includes phonological awareness, phonological working memory, and phonological retrieval



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Etiology of Dyslexia

- Strongly heritable
- Occurs in up to 68% of identical twins of individuals w/ dyslexia
- Up to 50% of individuals with first degree relative with dyslexia

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Recognizing psychiatric comorbidity with reading disorders, *Frontiers in Psychiatry*, 2018

- More likely to suffer from generalized anxiety
- Higher rates of depression



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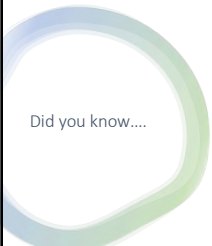
Comorbidities

- Speech and language problems; 1/3 of children with dyslexia have language disorders & 1/2 of children with language disorders have dyslexia
- 20-40% of children with ADHD have dyslexia
- Increased risk for students with autism spectrum disorder
- Higher rates of dyslexia in children with dyscalculia (math learning disorder) and dysgraphia (writing learning disorder)

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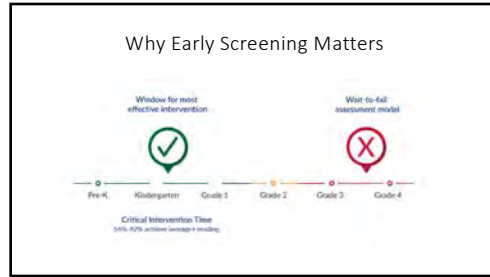
Did you know....

- More likely to suffer from generalized anxiety; higher rates of depression
- Children show stronger emotional responses
- Higher rates of conduct disorder & oppositional defiant disorder
- Higher rates of dyslexia in children with dyscalculia (math learning disorder) and dysgraphia (writing learning disorder)

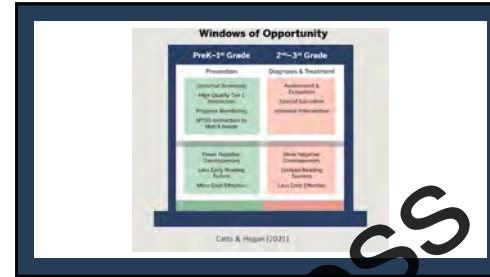


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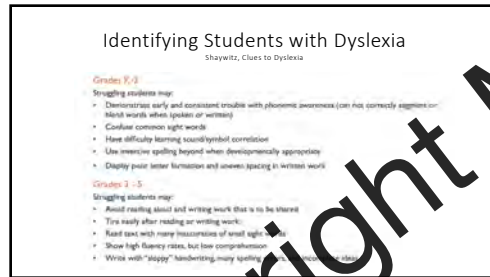
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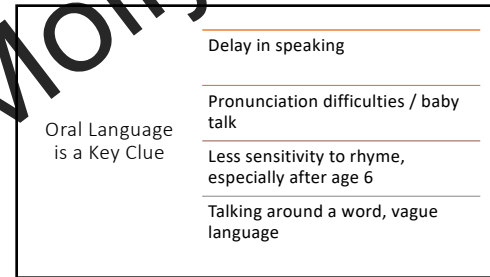
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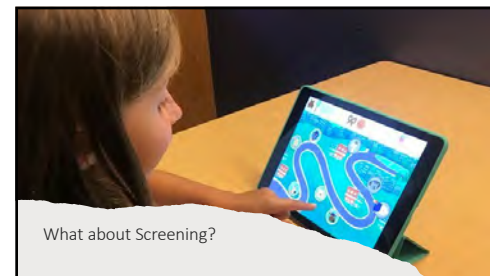
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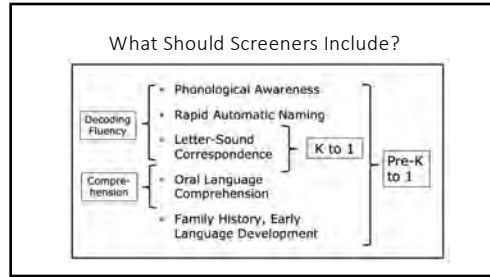


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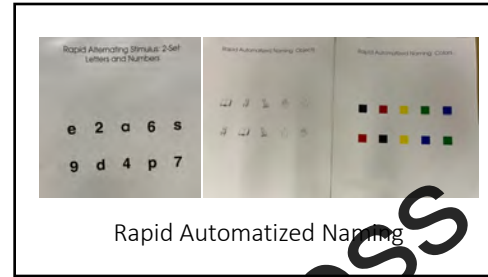


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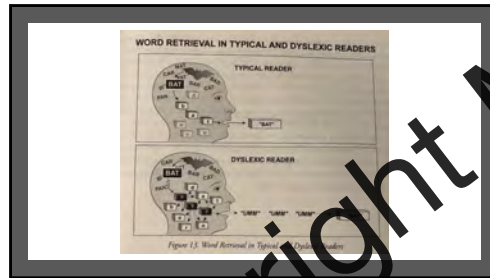
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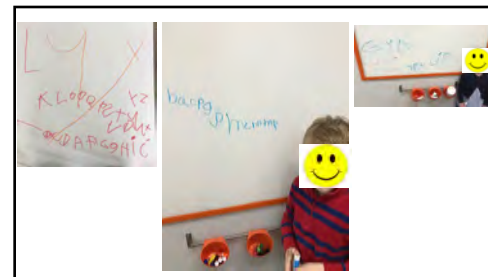
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- ### Essential Skills for Diagnosis
- Phonological Awareness – an individual's awareness of and access to the sound structure of his/her oral language
 - Phonological or Language-Based Memory – ability to recall sounds, syllables, words
 - Rapid Automatic Naming – speed of naming objects, colors, digits, or letters
 - Receptive Vocabulary – understanding of words heard
 - Phonics Skills – understanding of the symbol (letter) to the sound(s) relationship, either individually or in combination with other letters
 - Decoding – ability to use symbol-sound associations to identify (read – pronounce) words
 - Real Words
 - Nonsense Words
 - Oral Reading Fluency – ability to read accurately, at a story-telling pace – to facilitate / support comprehension
 - Spelling
 - Writing

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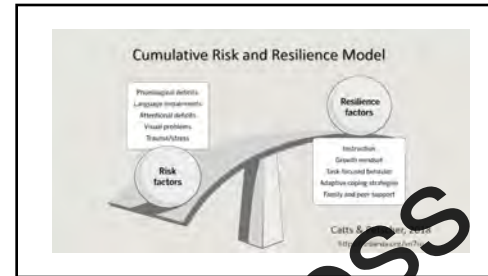
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After Diagnosis, Then What?

What is the prognosis?

"For those with dyslexia, the prognosis is mixed. The disability affects such a wide range of people and produces such different symptoms and varying degrees of severity that predictions are hard to make. The prognosis is generally good, however, for individuals whose dyslexia is identified early, who have supportive family and friends and a strong self-image, and who are involved in a proper remediation program" (1989).

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Multisensory Structured Language Instruction

- Explicit, direct, cumulative, intensive, and focused on the structure of language
- Use of visual, auditory, and kinesthetic-tactile pathways simultaneously to enhance memory and learning of written language.
- Links are consistently made between the visual (language we see), auditory, and kinesthetic-tactile

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Multisensory Strategies

Multisensory strategies are a component of multisensory structural language education which focuses on the structured, systematic, direct teaching of the organization of language. Multisensory strategies combine two or more of the senses **simultaneously**.

V visual **A** auditory **K** kinesthetic/motor **T** tactile

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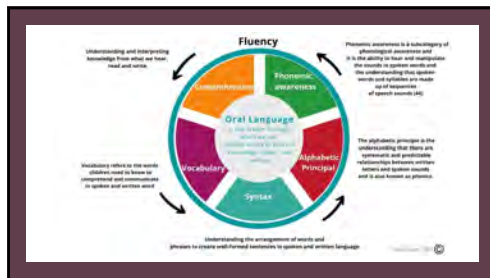
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What is [Orton Gillingham](#)?

Orton-Gillingham is a highly structured approach that breaks reading and spelling down into smaller skills involving letters and sounds, and then building on these skills over time. It was the first approach to use explicit, direct, sequential, systematic, multi-sensory instruction to teach reading, which is not only effective for all students but essential for teaching students with dyslexia.

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WHAT IS STRUCTURED LITERACY?

Explicit, systematic teaching that focuses on phonological awareness, word recognition, phonics and decoding, spelling, and syntax at the sentence and paragraph levels.

www.flyreaders.com

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Anticipation Guide

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		Dyslexia cannot be diagnosed until age 8.		
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CONTINUE THE CONVERSATION...

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