



ASPIRE
Conference
Oct 2, 2026



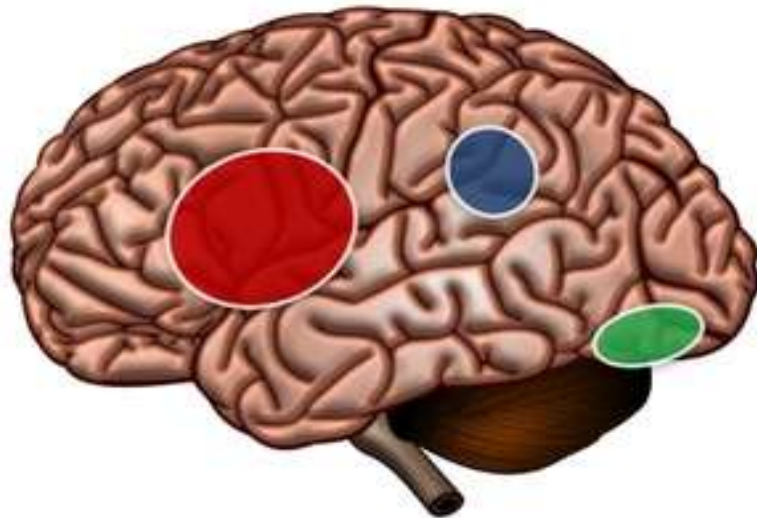


Have Questions or Need Resources?

info@orbida.org

or.dyslexiaida.org

BRAIN PATTERNS THAT DYSLEXIC STUDENTS MAY SHOW

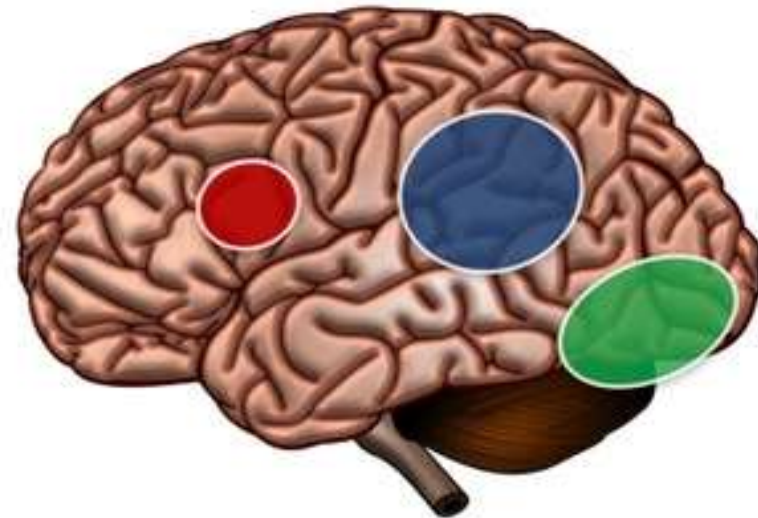


LEFT FRONTAL REGION. Important for compensation

LEFT TEMPORO-PARIETAL REGION. Important for phonological processing and grapheme-phoneme association

LEFT OCCIPITO-TEMPORAL REGION. Important for orthographic processing

BRAIN PATTERNS THAT NON-DYSLEXIC STUDENTS MAY SHOW



Key brain structures that are often impacted in dyslexia.
Developed by and used with permission from Dr. Fumiko Hoeft.

Mini-Simulation

- **Notetaking:** Difficulty copying and comprehending
- **Writing:** Difficulty with written language
- **Reading:** Difficulty with the alphabetic principle and automatic, fluent word recognition



Notetaking

Notetaking Directions:

- Copy down the text which follows to help review for a quiz
- Use the opposite hand with which you would usually write
- You should complete the task within two minutes
- Quiz to follow- you may use your notes

Addysgu

Mae gwaith yr Uned Dyslecsia yn ymestyn dros ardal eang Gogledd-Orllewin Cymru, a'r rhan helaethaf ohoni'n wledig. O ganlyniad, nid yw'r Uned yn cynnal canolfan addysgu. Mae ganddi swyddfeydd ac ystafelloedd at ddefnydd athrawon, ond addysgir yn bennaf mewn ysgolion neu leoedd eraill.

Quiz

1. What geographic area is mentioned in this passage:
Be sure to cite evidence from the passage to support your answer.
2. Write down the main idea of this passage:

What Made This Difficult:

- Reading from a screen
- Letter for letter transcription
- Knowing that you had a limited amount of time to get a complete set of notes
- Difficulties in the physical act of handwriting
- Difficulties with spelling because the language patterns are unfamiliar
- Problems listening and writing at the same time.

What This Simulates

- Near and far point copying difficulty (visual-motor processing confusion)
- Working memory difficulties
- Inadequate letter pattern recognition to hold large chunk of passage long enough to copy
- Cognitive overload: visual, kinesthetic/motor, and auditory stimuli simultaneously

What We Can Do

- Pre-teach key vocabulary
- Provide a copy of teacher notes prior to instruction
- Recorded notes or peer scribe (student just listens)



Reading

What This Task Requires:

- Visual tracking
- Sequencing
- Symbol recognition
- Sound-symbol Association
- Word Identification
- Decoding strategies
- Orthographic Memory
- Receptive Oral Language Comprehension
- Receptive Oral Vocabulary
- Reading Vocabulary
- Reading Comprehension

What We Can Do

- Train teachers to be highly knowledgeable in the science of how we learn to read and in the structure of our language.
 - Phonological awareness
 - Phonics
 - Morphology
 - Syntax and Semantics
 - Oral language & vocabulary
- Summarize as you read together.
- Provide audio versions of the text.
- Provide extra time.
- Pre-teach key vocabulary & concepts
- Take volunteers or give students a sense of when they will be called on.

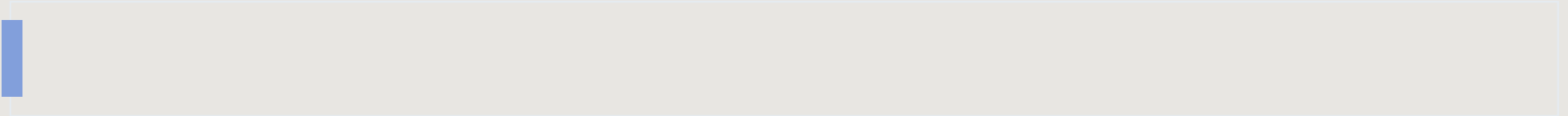
Dyslexia Defined

Updated and adopted by IDA Board of Directors October 2025

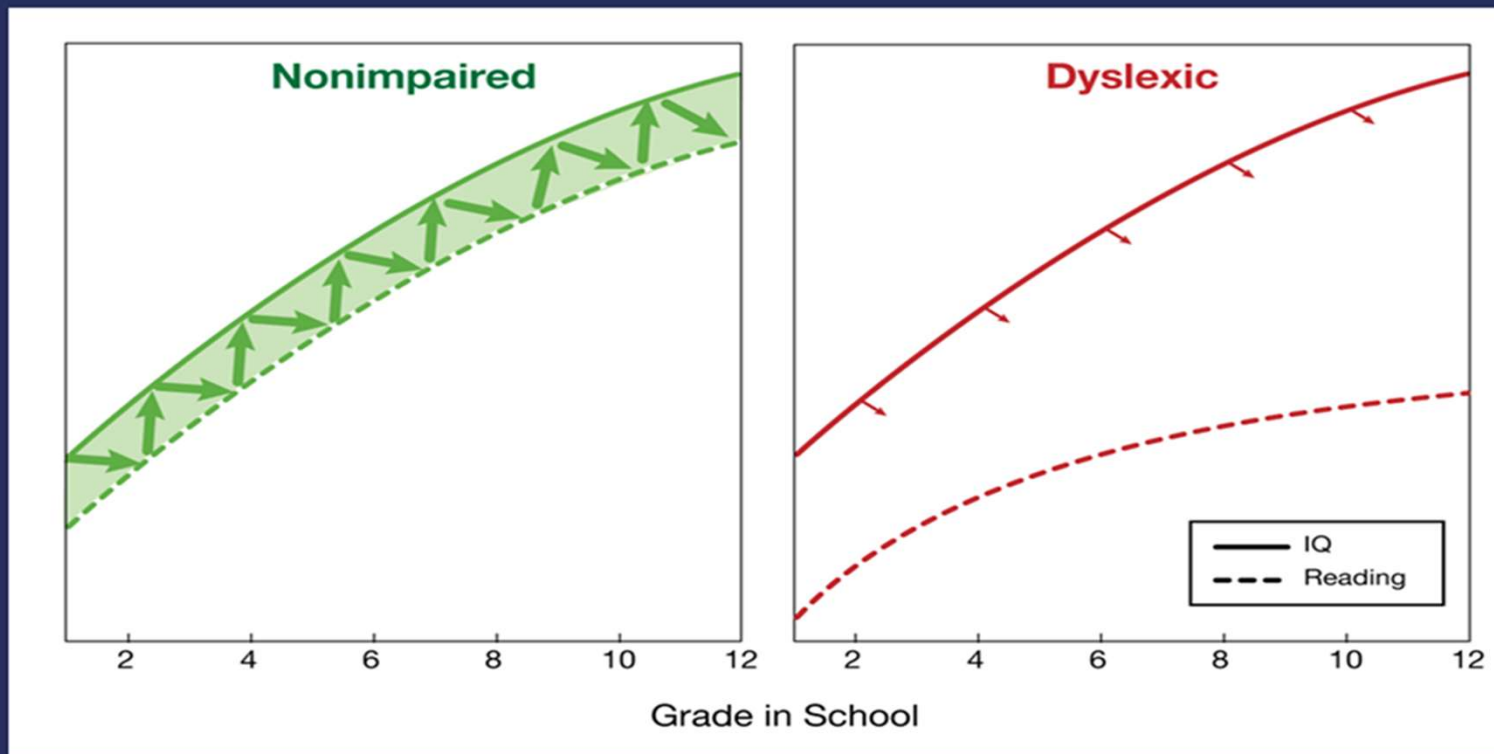
- Dyslexia is a specific learning disability characterized by difficulties in word reading and/or poor spelling that involve accuracy, speed, or both and vary depending on the orthography.
- These difficulties occur along a continuum of severity and persist even with instruction that is effective for the individual's peers.
- The causes of dyslexia are complex and involve combinations of genetic, neurobiological, and environmental influences that interact throughout development.

- Underlying difficulties with phonological and morphological processing are common but not universal, and early oral language weaknesses often foreshadow literacy challenges.
- Secondary consequences include reading comprehension problems and reduced reading and writing experience that can impede growth in language, knowledge, written expression, and overall academic achievement.

- Psychological well-being and employment opportunities may also be affected.
- Although identification and targeted instruction are important at any age, language and literacy support before and during the early years of education is particularly effective.

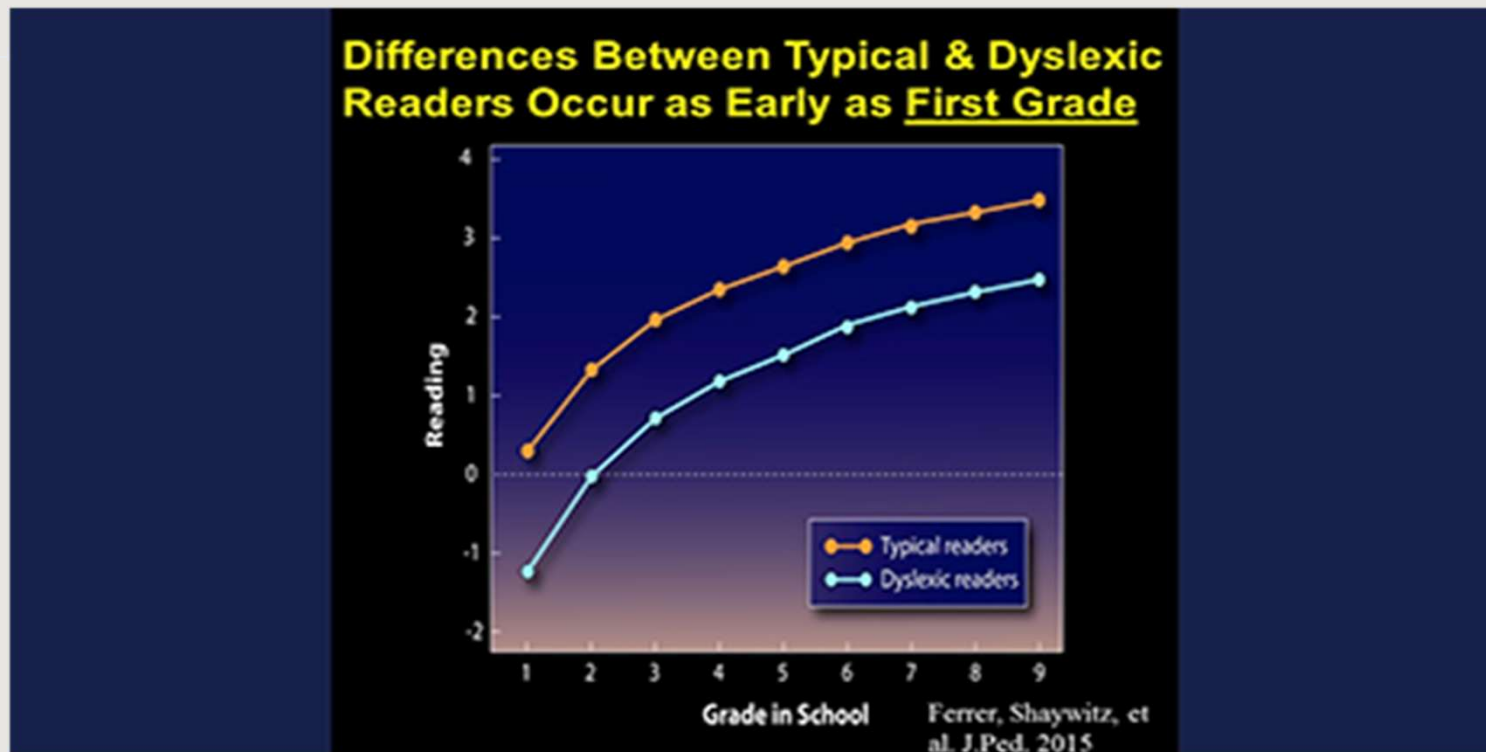


Non-impaired:
IQ-Reading Linked



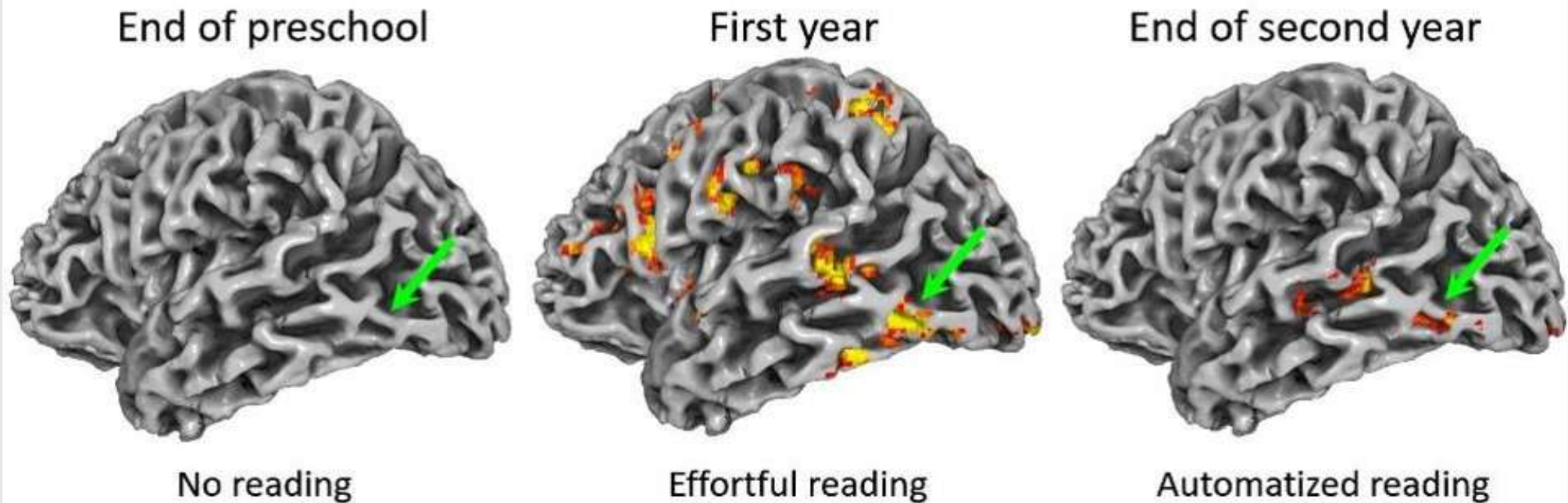
Based on Ferrer et al., 2010

Achievement Gap in Reading Is Present as Early as First Grade and Persists through Adolescence



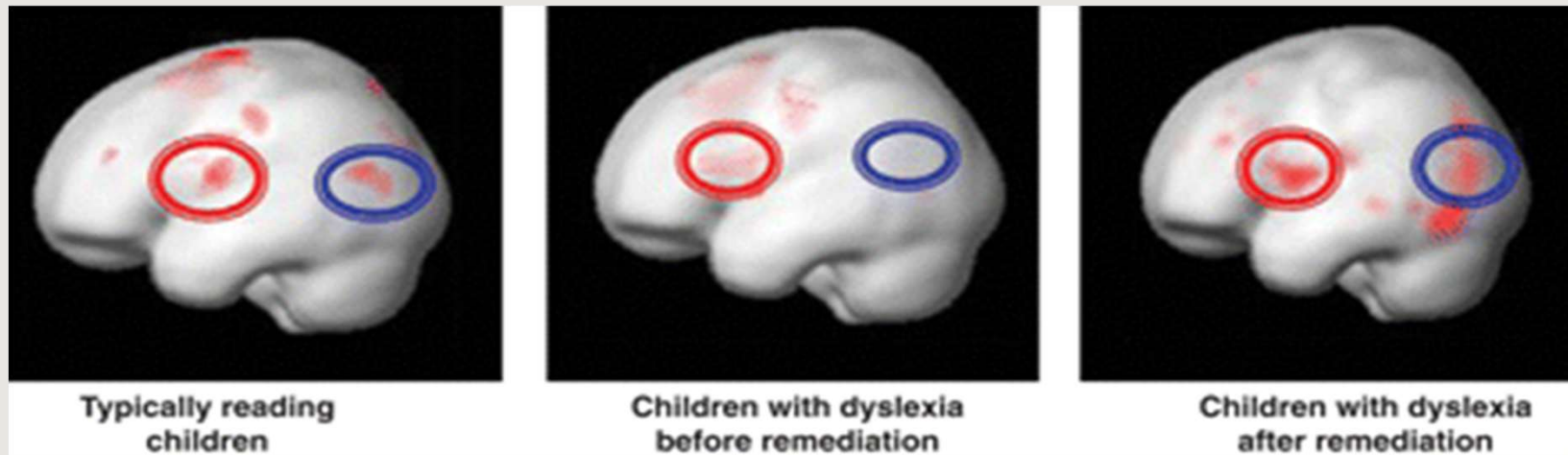
Emilio Ferrer, PhD, Bennett A. Shaywitz, MD, John M. Holahan, PhD, Karen E. Marchione, MA, Reissa Michaels, MSW, Sally E. Shaywitz, MD.
The Journal of Pediatrics. Volume 167, Issue 5, Pages 1121-1125.e2 (November 2015) DOI: 10.1016/j.jpeds.2015.07.045

The development of reading in a single child



Dehaene-Lambertz Ghislaine et.al. 2018 Fast emergence and subsequent automatization of the reading circuit

Effective Reading Instruction Changes the Brain



“Such improvements are much more likely to occur in children who are beginning to read (ages 6 to 8) than in older children...” (Gabrielli, 2009)

Treatment

Early Screening for Risk or Test at Any Age

Structured Literacy

Classroom Accommodations

Treatment of Any Concurrent Conditions

Foster Strengths

Helpful Classroom Practices and Accommodations

- Flexible Learning Environment (Universal Design for Learning)
- More Time
- Access to Audiobooks
- Graphic Organizers
- Alternative Formats to Demonstrate Knowledge
- Step by Step Instruction
- Reduced Homework
- Clarify Directions
- Memory Aids
- Calculator/Math Facts Charts
- Access to Technology Tools

Assistive Technology

Reading

Audio- texts

Bookshare

Learning Ally

Libby

Apps/Software/Devices

- Google Translate
- C-Pen Reader
- Office Lens
- Read & Write
- Snapverter/ Snap & Read
- Claro PDF

Assistive Technology

Writing

Co-Writer
Grammarly
Read Write Gold
Easy Spelling Aid

Notetaking

Notability
Livescribe Smart Pen
Snapverter
One Note

Organization

Inspiration
Snap Type

Math

ModMath
Braining Camp
MyScript Calculator



IDA-Oregon Branch

We are:

- Serving Oregon and Southwest Washington as a volunteer-led, member-based, non-profit organization
- Striving to create a bright future for all individuals with dyslexia and other related learning differences so that they may lead richer, more robust lives, and have access to the tools and resources they need.
- Promoting awareness and understanding of dyslexia
- Promoting and implementing effective instruction and intervention
- Supporting professionals in this field
- Supporting individuals with dyslexia



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Thank You!

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