



Dyslexia and The Science of Reading



The Reading Center
DYSLEXIA INSTITUTE OF MN

KRISTEN BIEBER
DIRECTOR OF TUTORING AND PRACTICUM INSTRUCTOR




© THE READING CENTER / DYSLEXIA INSTITUTE OF MN 2025

1


Dyslexia Facts

- 20% or 1 in 5 people have characteristics consistent with dyslexia
- Dyslexia makes learning to read, write, and/or spell more difficult for those who have it.
- Dyslexia runs in families.
- Dyslexia occurs in people of all backgrounds.
- Dyslexia can be remediated through appropriate intervention, such as the Orton-Gillingham approach, which we teach at The Reading Center.



© THE READING CENTER / DYSLEXIA INSTITUTE OF MN 2025

8




Some Characteristics of Dyslexia:

- Slow or inaccurate reading
- Poor spelling
- Poor writing
- Mixing up similar words
- Not grasping sound / symbol relationships ex: ch /ch/
- Letter reversals b/d
- Letter inversions m/w
- Transpositions left /felt
- Substitutions puppy / dog
- Relies on memorization

© THE READING CENTER / DYSLEXIA INSTITUTE OF MN 2025

10



My child might be dyslexic. What's next?

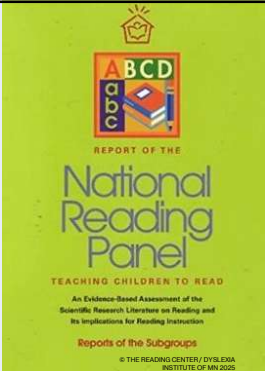
- Talk with your child's doctor about your concern's. They may refer you to get testing for your child.
- Contact one of The Reading Center's Program Navigators. They can answer your questions if:
 - Your student is struggling and needs help
 - You have questions about testing and tutoring services at The Reading Center.

© THE READING CENTER / DYSLLEXIA INSTITUTE OF MINN. 2025

16

What is the Science of Reading?

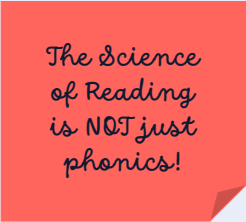
- The term "science of reading" refers to the vast, interdisciplinary body of research about how the skill of reading is acquired.
- Review went back over the past 5 decades. Thousands of studies conducted with multiple languages.
- From this, it was determined how reading and writing develop, why some have difficulty, and how we can assess and teach in the most effective way.



© THE READING CENTER / DYSLLEXIA INSTITUTE OF MINN. 2025

18

What SOR is NOT:



- an ideology or philosophy
- a fad, or a new idea (TRC has been doing this for over 70 years!)
- a political agenda
- a program of instruction
- A single component, like phonics
- It should not be controversial.

© THE READING CENTER / DYSLLEXIA INSTITUTE OF MINN. 2025

19

The Orton-Gillingham approach is based on the Science of Reading.

*** It is not a curriculum.

If you are looking for a reading curriculum, things to know:

Research-based vs. Evidence-based curriculum

Many reading curriculums taut one of these claims, what is the difference?

- Evidence –Based Curricula designed with extensive studies on positive student outcomes.
- Research-Based Curricula are informed by research principles but don't have the same level of testing and evaluation.



20

The Orton-Gillingham Approach

The Orton-Gillingham Approach is SoR.

The Orton-Gillingham Approach is a direct, explicit, multisensory, structured, sequential, diagnostic, and prescriptive way to teach.

Most Properly practiced and understood as an approach not a program or curriculum.

Taught 1-1 or small groups but has been adapted for the classroom successfully.

The Orton-Gillingham Approach is focused on the exact needs of the student.



21

Balanced Literacy

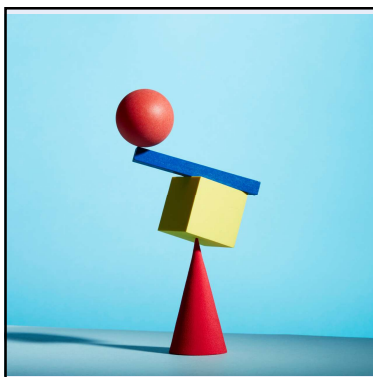
Also known as the whole language approach to teaching reading.

Uses the 3-cueing system.

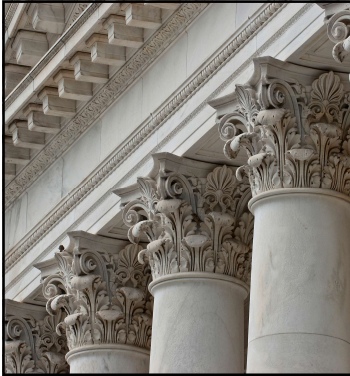
Students are taught to use guessing, skipping, or

Does not include explicit teaching of letter-sounds relationships.

Effective for students who find learning to read relatively easy.



24



Structured Literacy

Focuses on explicitly teaching literacy skills.

Based on the **Science of Reading**, also known as SoR.

Teaches sound-symbol relationship. Students focus on sounds out words, rather than guessing.

Is effective for all learners.

© THE READING CENTER / DYSLLEXIA INSTITUTE OF MINN. 2025

25

Balanced Literacy uses LEVELED READERS:

- Unlearned phonetic sounds and patterns students cannot sound out.
- Predictable, repetitive content.
- Relies on pictures and predictable text to read, taking attention away from words, making reading slow and inaccurate.

© THE READING CENTER / DYSLLEXIA INSTITUTE OF MINN. 2025

27

Structured Literacy uses DECODABLE READERS:

- Use only taught phonetic sounds.
- Contain controlled vocabulary that students can sound out.
- Include variation of phonemes in words, requiring the student to sound out words.


© THE READING CENTER / DYSLLEXIA INSTITUTE OF MINN. 2025

30

Why we don't use cueing:

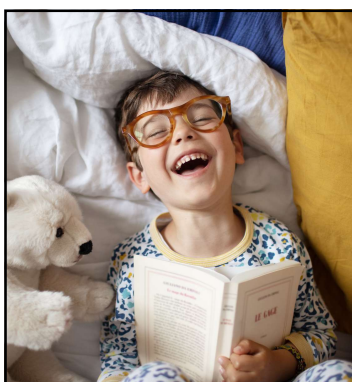
Cueing teaches students to be poor readers because:

- It encourages guessing, not using what they know about decoding words with sound-symbol relationships.
- This reinforces habits of struggling readers instead of strengthening the habits of good readers.
- Good readers are accurate readers.



© THE READING CENTER / DYSLLEXIA INSTITUTE OF MN 2025

39



Habits of Good Readers:

- Recognizing sound-symbol relationships, patterns (i.e., syllable patterns), and morphological units in words.
- Developing vocabulary First orally, then in reading and writing.
- Reading with accuracy and automaticity, as well as prosody, meaning, and expression.
- Comprehending what is read and being able to answer literal, inferential, and evaluative questions.

© THE READING CENTER / DYSLLEXIA INSTITUTE OF MN 2025

43

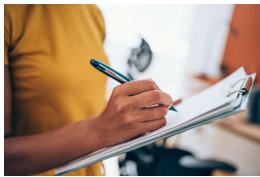



The Reading Center

- The Reading Center has been tutoring and testing those with dyslexia for 73 years.
- We provide services online, in the Twin Cities, and in Rochester, MN.
- Dyslexia Testing
- 1 on 1 Tutoring for dyslexic students.
- Training for adults who would like to work with dyslexic students.
- FREE professional development aligned with the science of reading for MN teachers.
- School Partnerships
- Scholarships based on means

© THE READING CENTER / DYSLLEXIA INSTITUTE OF MN 2025

44



**Evaluations and Academic Testing
at The Reading Center**

- With over 70 years of experience, we have developed testing that identifies characteristics of dyslexia and how to respond to it.
- Rochester, Woodbury and Online options
- Available for adults and children
- Office Administrator at 507-288-5271 or read@thereadingcenter.org to talk with one of our Program Navigators, there is no fee to speak to one of them.

© THE READING CENTER / DYSLLEXIA INSTITUTE OF MN 2025

45



Orton-Gillingham Training

- Are you interested in learning how to deliver structured reading, spelling, and writing instruction supported by the science of reading?
- The Reading Center offers training in the Orton-Gillingham approach.
- Who has taken our training?
Licensed teachers, paraprofessionals, home educators, parents, and even grandparents.

© THE READING CENTER / DYSLLEXIA INSTITUTE OF MN 2025

47

Please Join Us this Summer!

Are you interested in learning how to support struggling readers with evidence-based instruction in reading, spelling, and writing?

Register for The Reading Center's **Basic Orton-Gillingham Training Institute**

Begins July 9, 2025, and runs through July 31, 2025.
Monday – Friday 8:00 am – 4:30 pm daily

Trainees have the option of attending training at either our Rochester, MN location or our Woodbury, MN location.

© THE READING CENTER / DYSLLEXIA INSTITUTE OF MN 2025

48

Resources:

- <https://www.thereadingcenter.org/>
- Modified from the "Basic Facts about Dyslexia: What Every Layperson Ought to Know"
- ©Copyright 1993, 2nd edition 1998 - The International Dyslexia Association. Baltimore, MD.
- ©2005 The Reading Center/Dyslexia Institute of MN, Basic Orton-Gillingham Reference Manual
- <https://www.nichd.nih.gov/sites/default/files/publications/pubs/nrp/Documents/report.pdf>
- <https://speldsa.org.au/>

© THE READING CENTER / DYSLLEXIA INSTITUTE OF MINN. 2025
