A young girl with dark hair, wearing a pink shirt, is shown in profile, looking down at an open book. Her right index finger is pointing to a line of text in the book. The background is softly blurred, showing another person's hand near the book. The overall lighting is warm and natural.

# Supporting Students with Dyslexia: Early Identification and Effective Intervention

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# Webinar Tips



Close all programs & browsers to maximize bandwidth



Exit & re-enter the webinar if you experience an audio or video lag



Use the Questions feature for technical assistance (and to ask a question!)

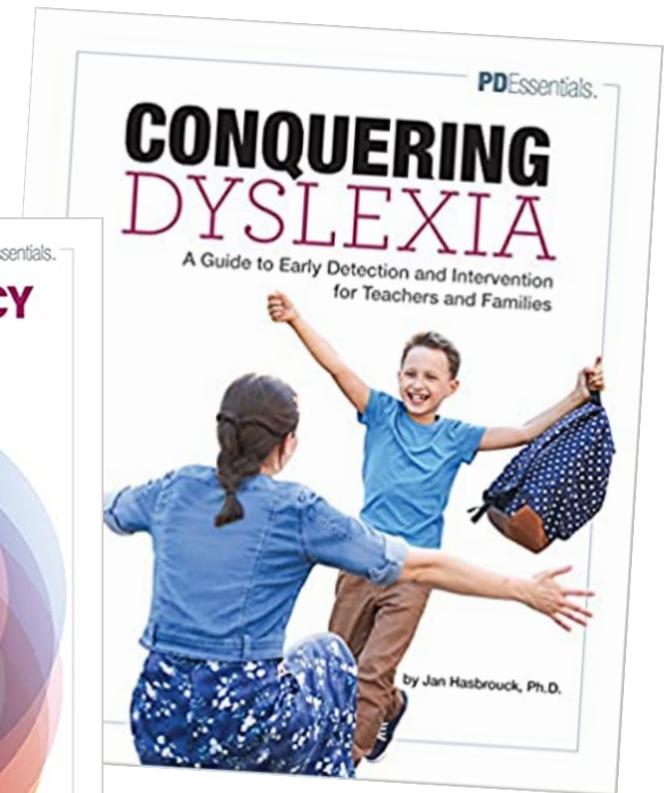
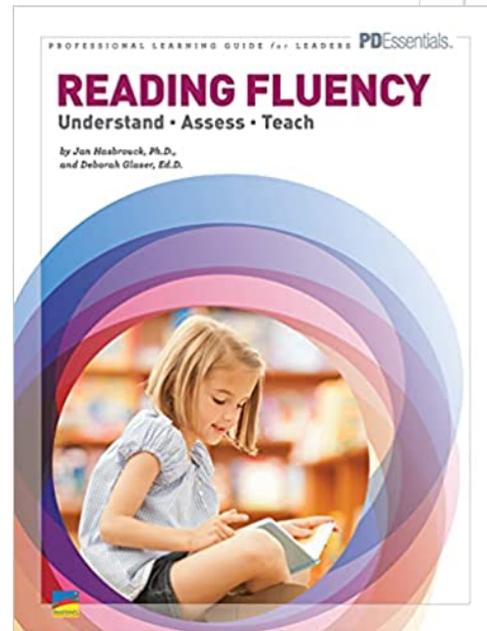


The recording, slide deck & certificate will be sent by email tomorrow

# Meet Your Presenter



**Dr. Jan Hasbrouck**  
Researcher, Educational  
Consultant and Author



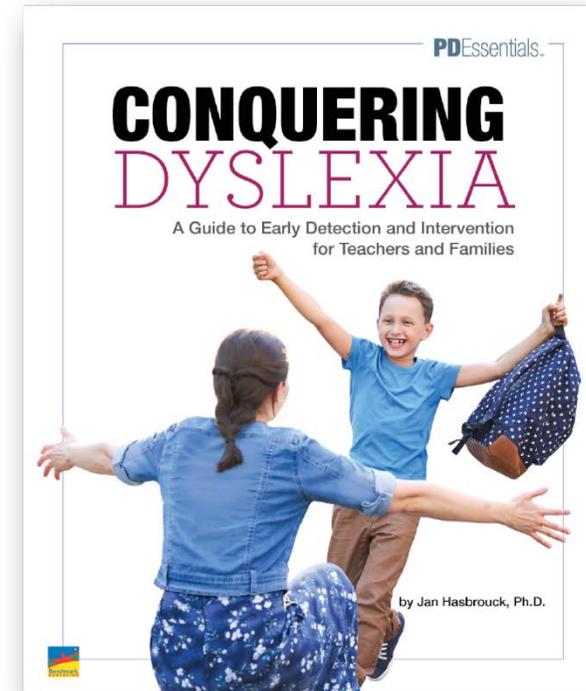
# What You Will Learn

- How dyslexia can be identified-- even in very young children
- The reason why early identification and intervention are so important
- Instructional practices, including structured literacy, and content that address the challenges of dyslexia
- Resources to support children with dyslexia and their families

# Conquering Dyslexia

## A Guide to Early Detection and Intervention for Teachers and Families

- Ch. 1 What is Dyslexia?
- Ch. 2 What are the Signs to Look For?
- Ch. 3 Assessing Dyslexia
- Ch. 4 Teach Students to Read: How
- Ch. 5 Teach Students to Read: What
- Resources for Dyslexia
- Glossary & References

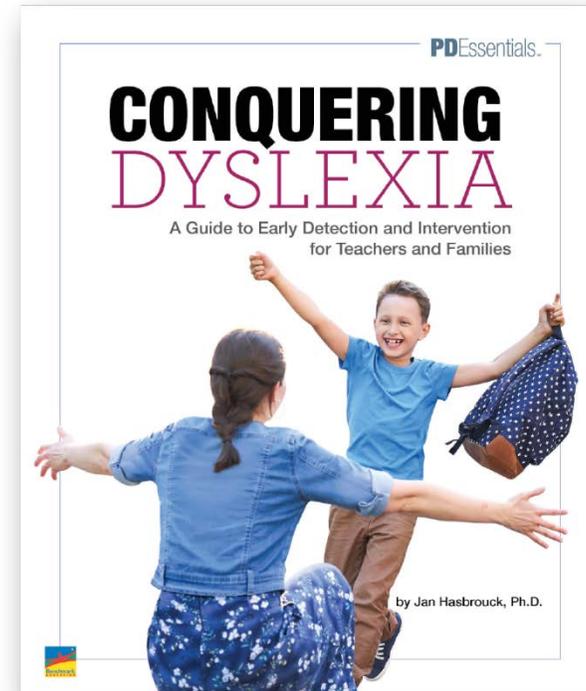


# Conquering Dyslexia

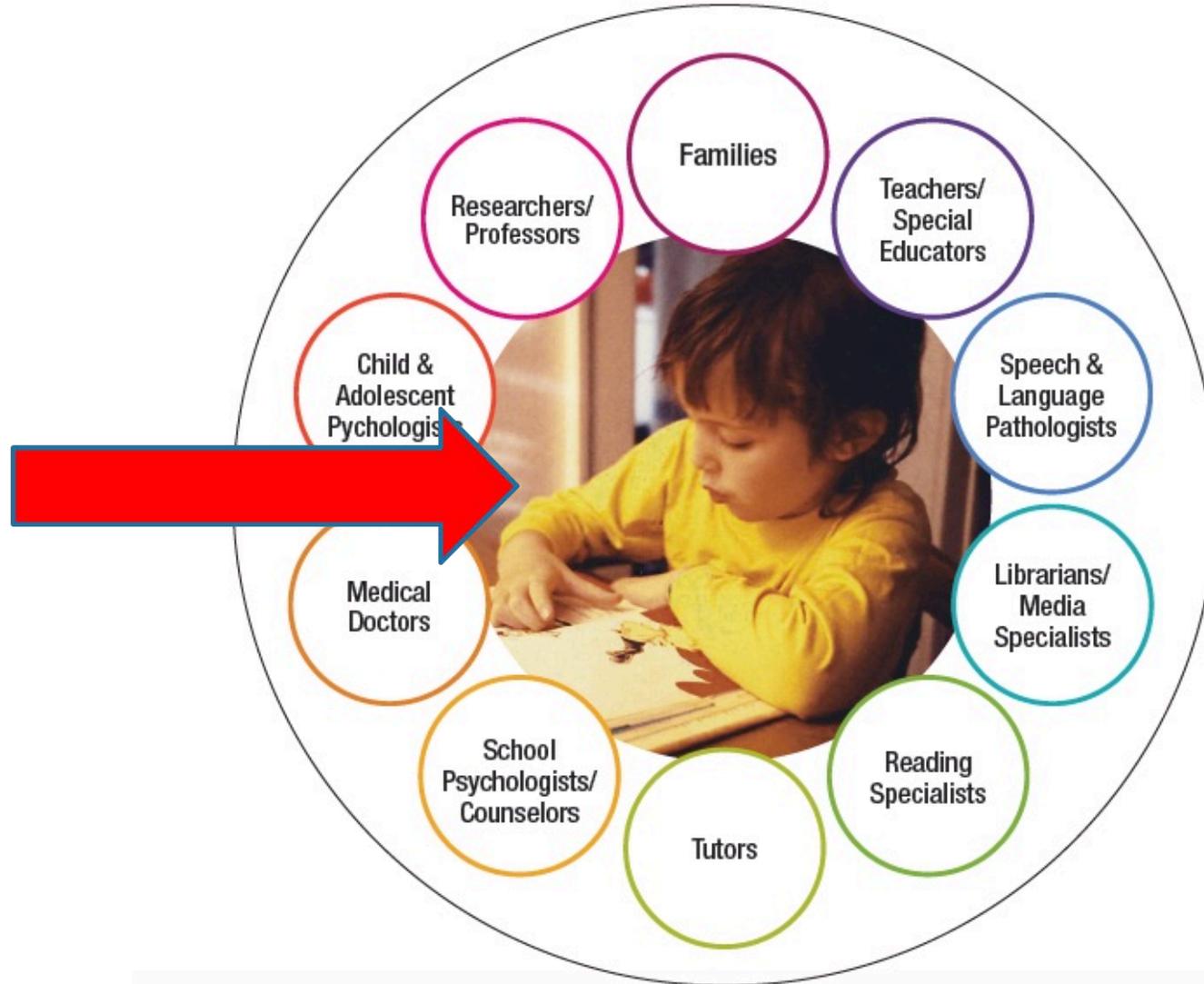
A Guide to Early Detection and Intervention for Teachers and Families

Fletcher, Lyon, Fuchs, & Barnes (2019)

Learning Disabilities: From Identification to Intervention (2nd ed)



# THE SUPPORT SUCCESS CIRCLE

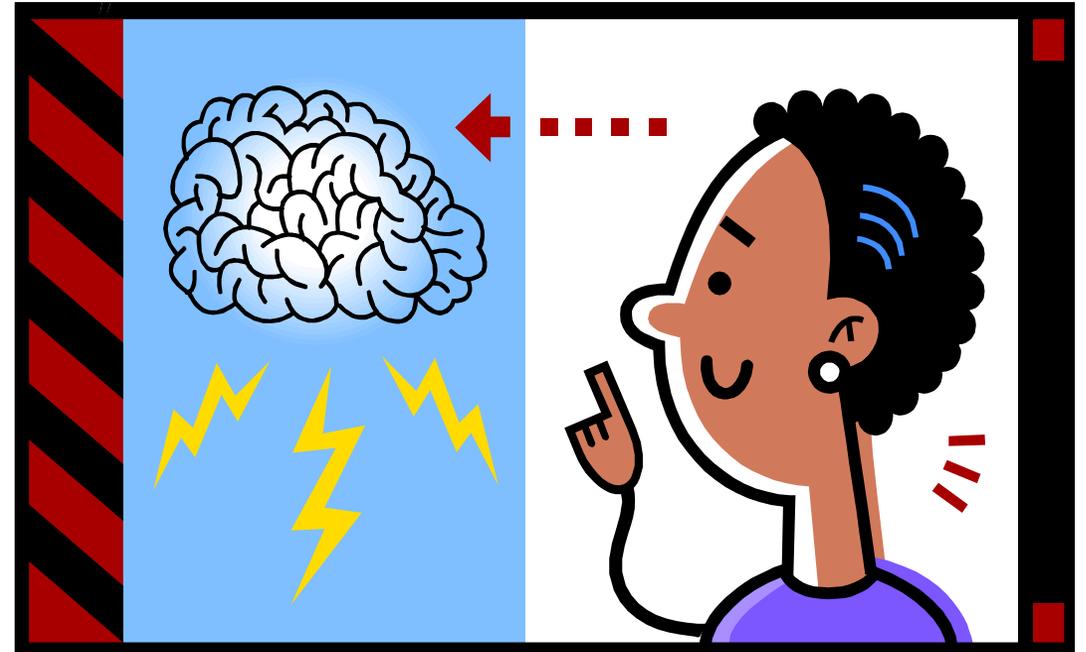




# What is Dyslexia?

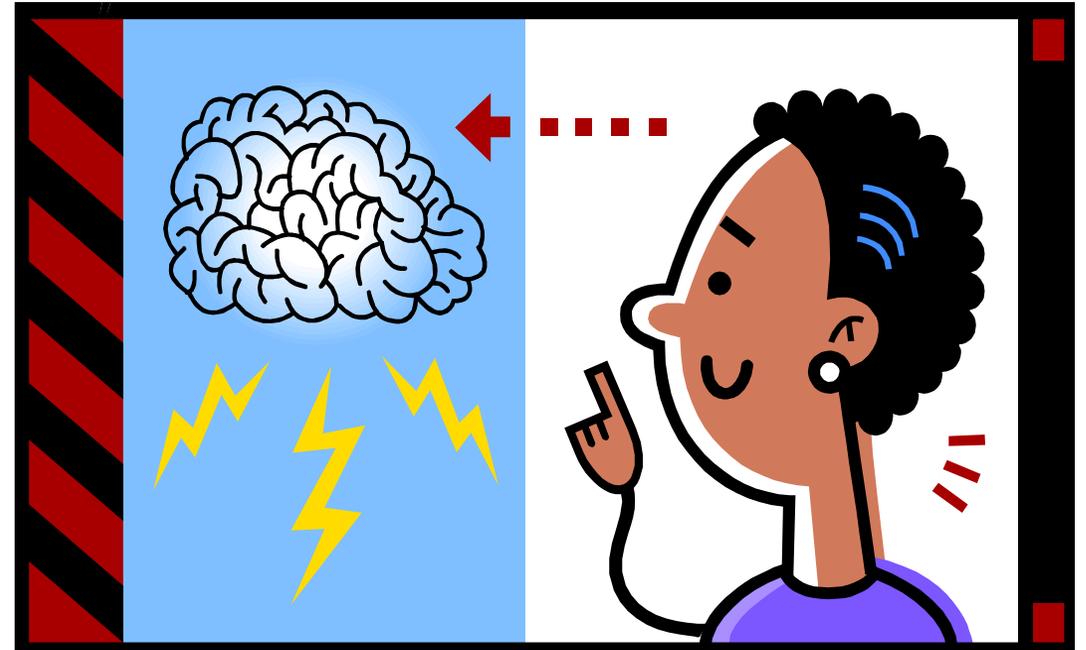
- Type in chat:

What do you think about when you hear “dyslexia”?



# Dyslexia?

- Reversals b/d p/q
- Text moves **X** the page
- Reading **X**ckwards
- Eye **X**ision issues
- Boys more than girls
- Need to try harder



# Dyslexia Research

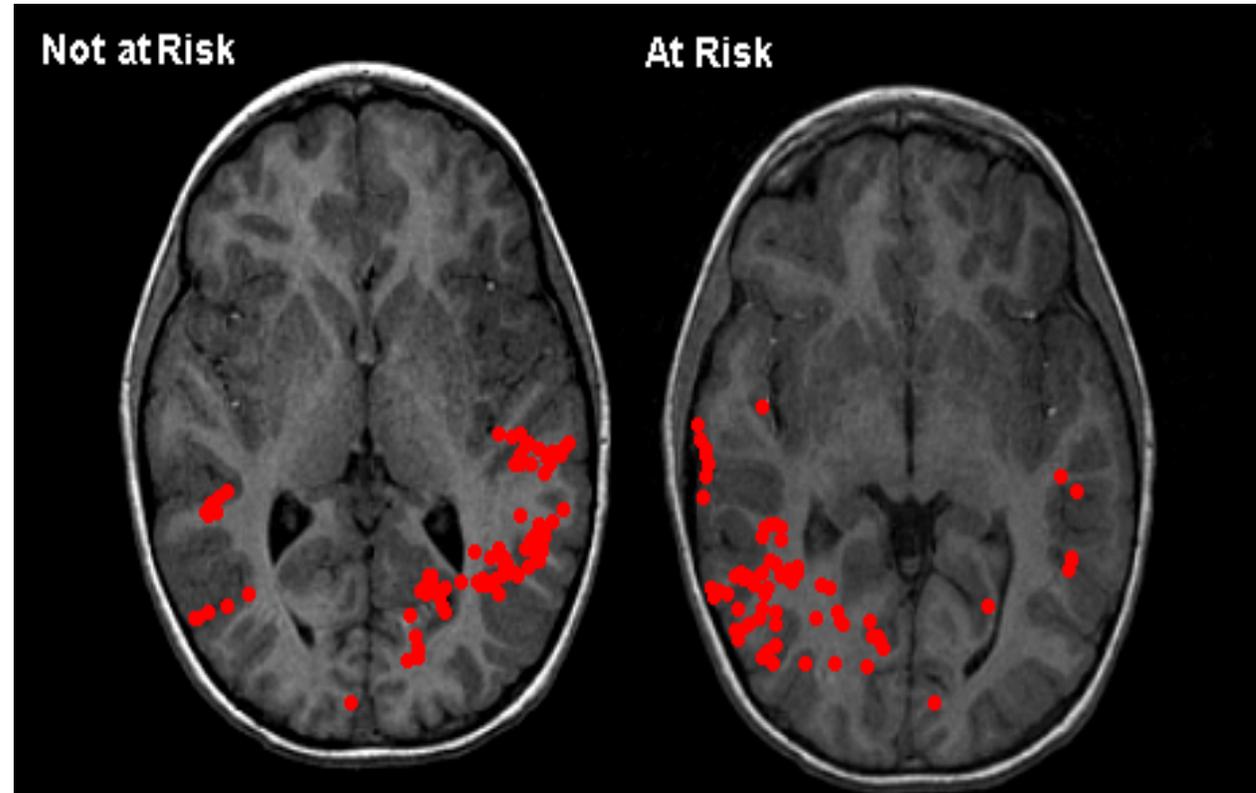
## Medicine

- Neuroanatomy
- Neurobiology
- Pediatrics
- Developmental cognitive neuroscience
- Ophthalmology & optometry

## Psychology & Education

- Cognitive psychology
- Educational psychology
- Special education
- Developmental cognitive psychology
- Audiology & speech pathology

# Magnetic Source Imaging



5 Year Olds Before Learning to Read

# Dyslexia

- Not a visual/spatial issue

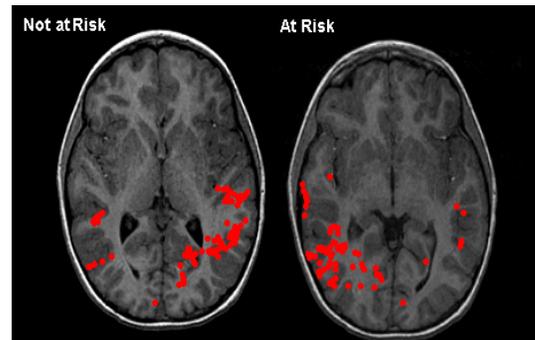
Blind children learn to read with relative ease;

Deaf children have tremendous difficulty learning to read.

The International Dyslexia Association

# Dyslexia

- Not a visual/spatial issue **AUDITORY!**
- Varies in intensity and impact (mild to severe)
- Genetic



The International Dyslexia Association

# Dyslexia

- Not a visual/spatial issue **AUDITORY!**
- Varies in intensity and impact (mild to severe)
- Genetic
- Can affect speaking fluency (processing, storing, accessing)
- Emotional consequences; confidence

The International Dyslexia Association

# Noah

18-year-old HS senior with dyslexia

One page from his daily  
journal in English class...

Today I was so embarrassed in English that I never want to go to English class again. When you said you were going to pass out the paper back out I know it was going to be bad. I can't forget out but the loud kid in the class always get my paper! She make fun of my spelling and calls my name out in front of the whole class. Then she keeps pointing out my miss spelled words and all the kid around her laugh and look at me. This is not first time I have been in backst in class. I hate pop corn reading and I just sit there and freak out and can't listen to the story, and then a kid calls on me and I have to say pass or just turn Red in my faces. I hate English and hate thinking about it. These Jonals don't happy me and I hate doing them! I'm not go to be a writer as me job so there no point in it. Spelling and Read are my disabilities and I get No help to get eney better in it. The school doesn't help me and that why it hate <sup>NA</sup> School and all the kid who laugh at me! School Just Herts me.

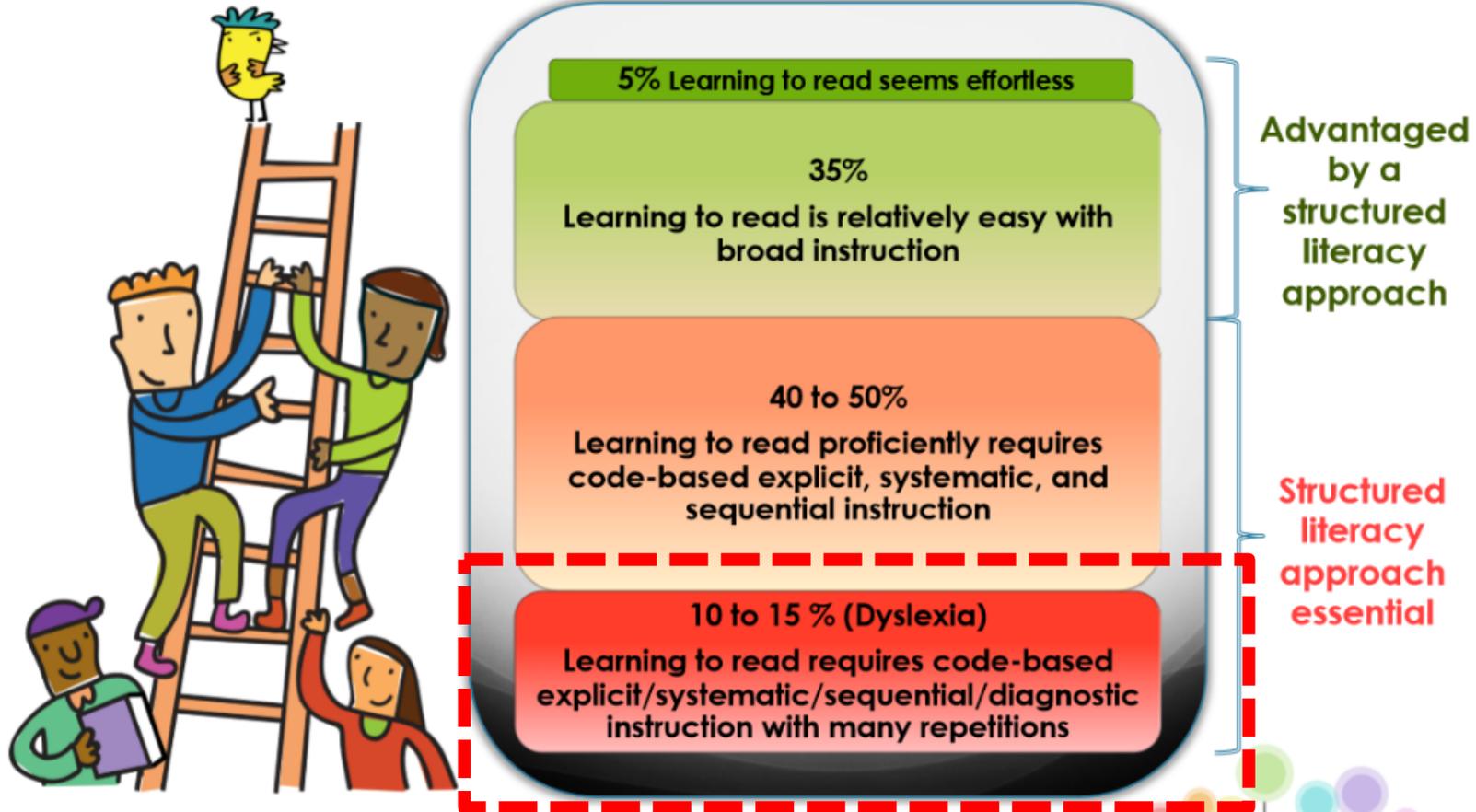
“School  
Just Herts  
me.”

# Dyslexia

- Not a visual/spatial issue **AUDITORY!**
- Varies in intensity and impact (mild to severe)
- Genetic
- Can affect speaking fluency (processing, storing, accessing)
- Emotional consequences; confidence
- Perhaps 15% of the population (?)

The International Dyslexia Association

# The Ladder of Reading



© N. Young, 2012 (Updated 2020)

Artwork by Dean Stanton

(Lyon, 1998; NRP, 2000; IDA, 2015; Hempenstall, 2016)

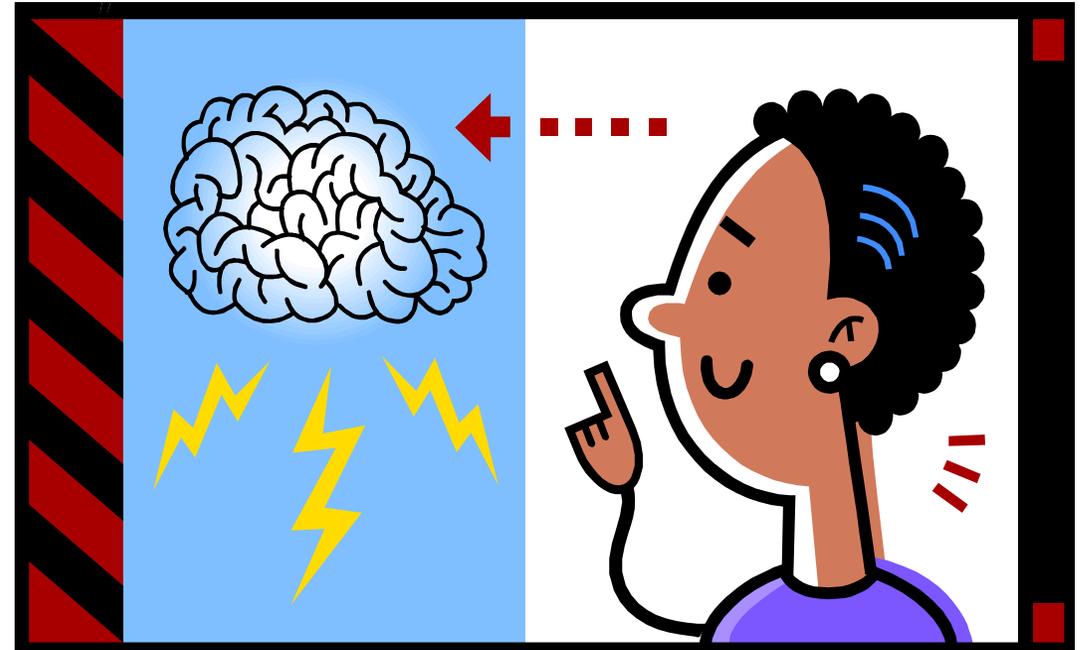
[www.nancyyoung.ca](http://www.nancyyoung.ca)

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Reading  
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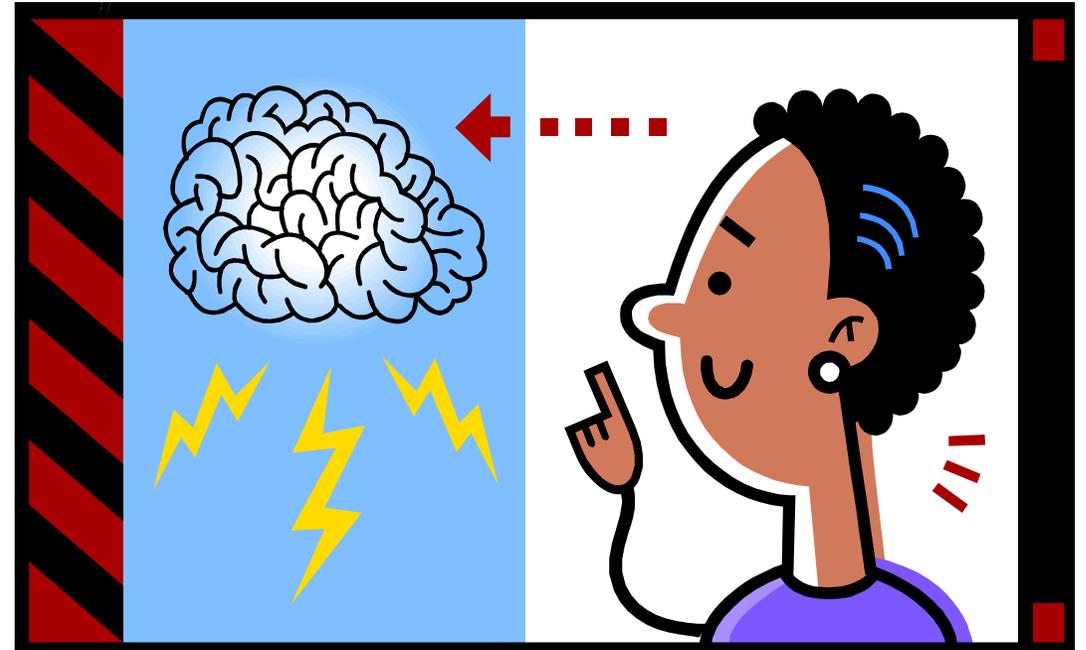
# What is Dyslexia?

- Questions?
- Comments?
- Reactions?



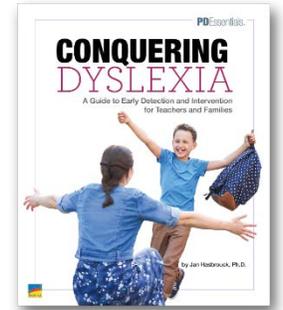
# Assessing Dyslexia

- A challenging topic...



# Assessing Dyslexia

“...there is an understandable, urgent wish to diagnose [dyslexia] quickly and definitively. Unfortunately, such a measure does not exist.”



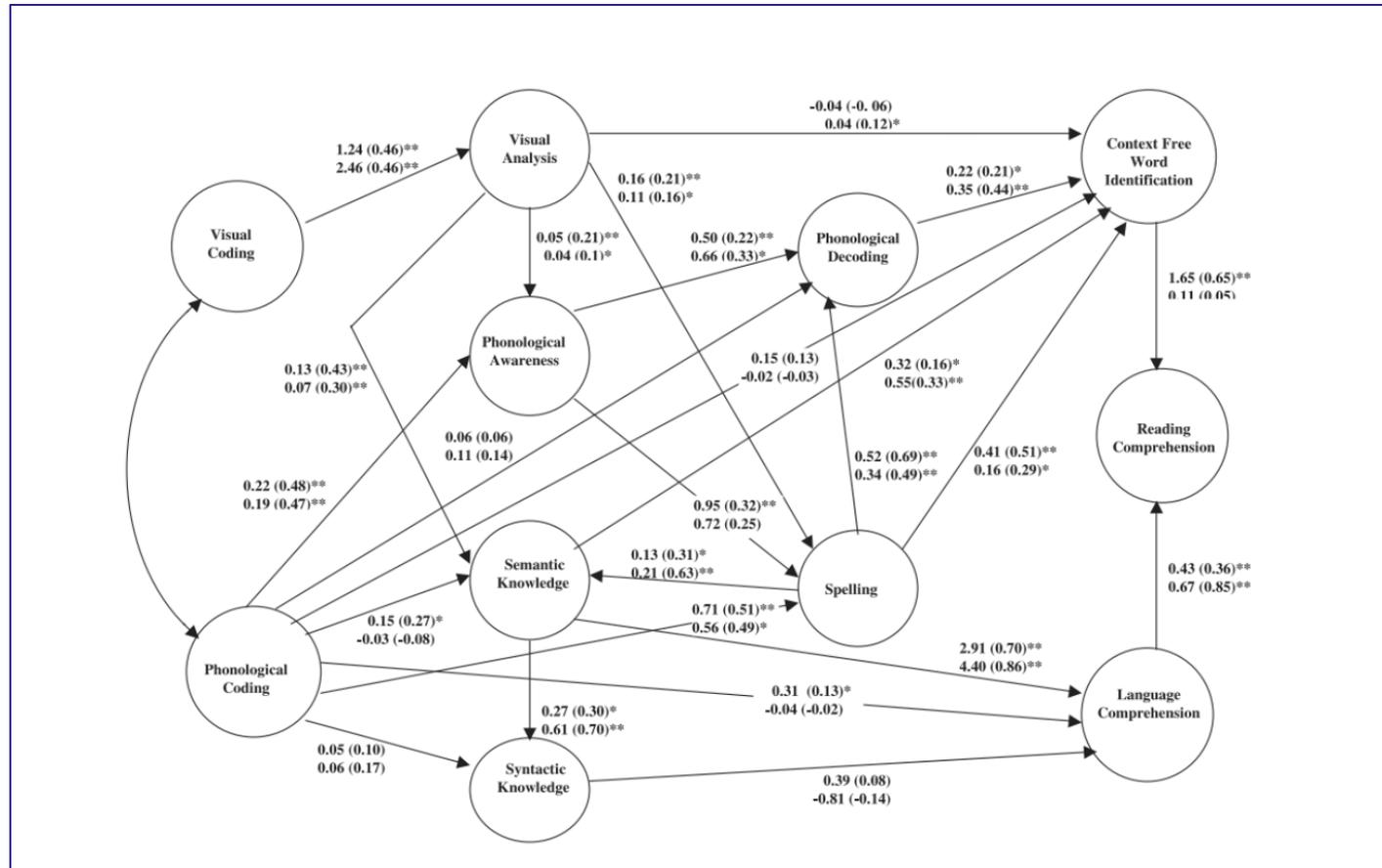
p. 53

# What is “Reading”?

“Reading is a highly complex task that involves many interconnected and codependent linguistic processes that draw upon a variety of separate skills.”

Hasbrouck & Glaser (2019)

# What is “Reading”?



Vellutino et al. (2007). Components of Reading Ability: Multivariate Evidence for a Convergent Skills Model of Reading Development, *Scientific Studies of Reading*, 3-32.

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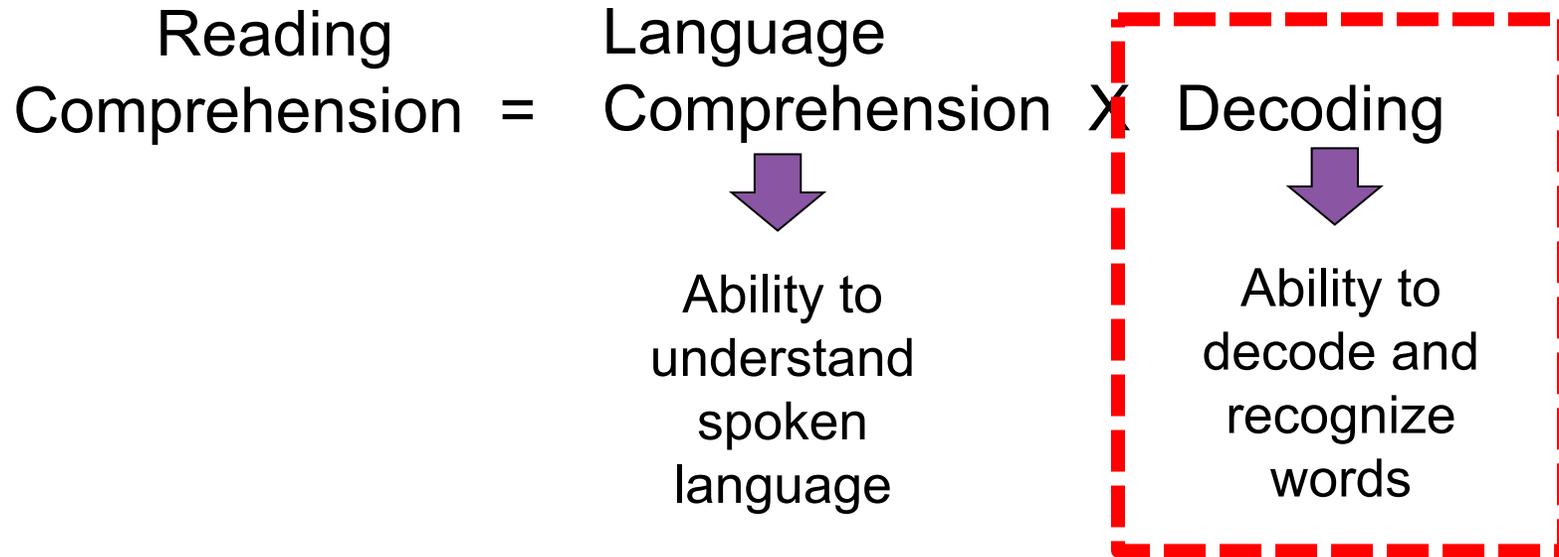
“The Simple View of Reading”

$$RC = LC \times D$$

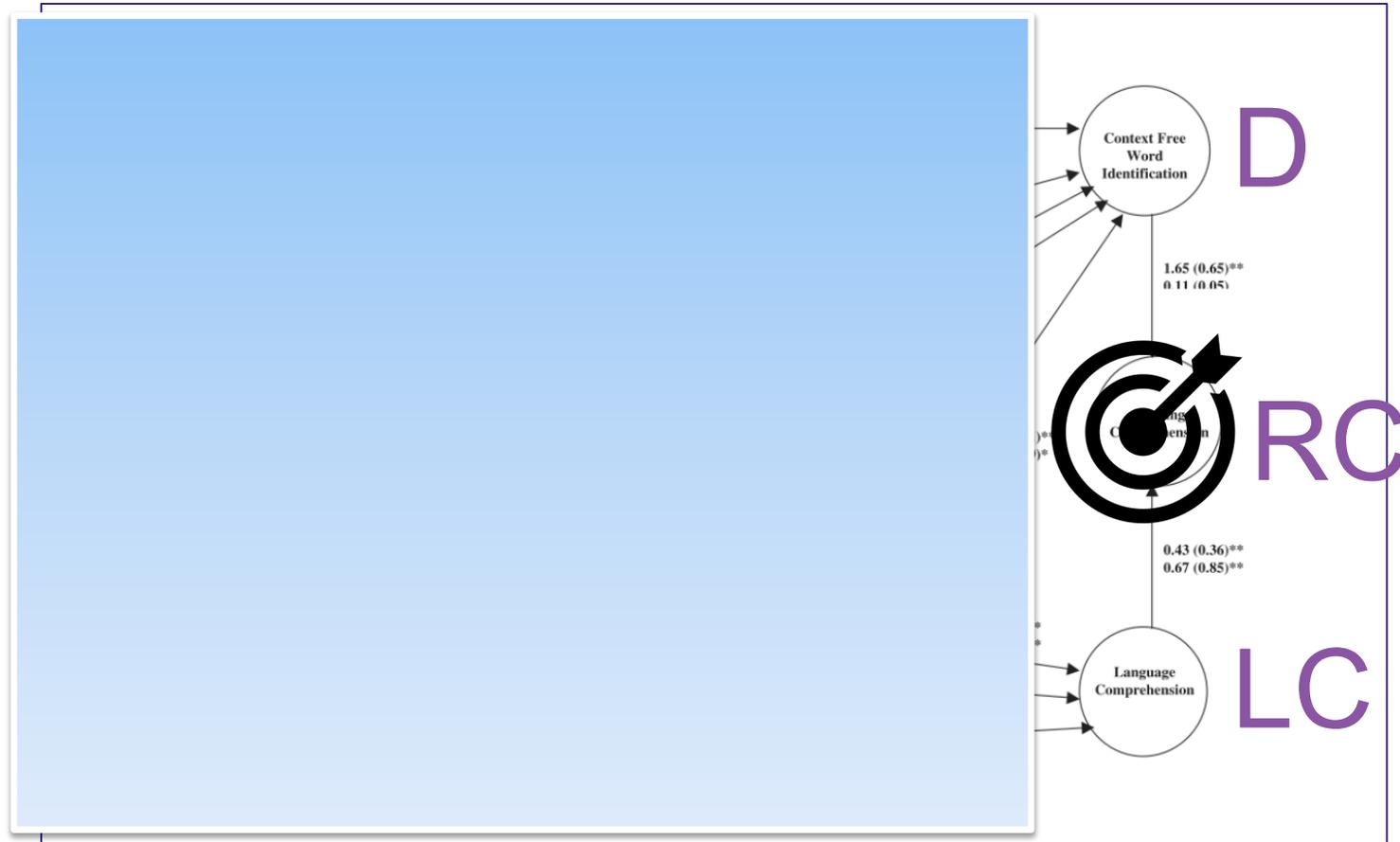
Gough & Tunmer (1986)

# The Simple View of Reading

$$RC = LC \times D$$



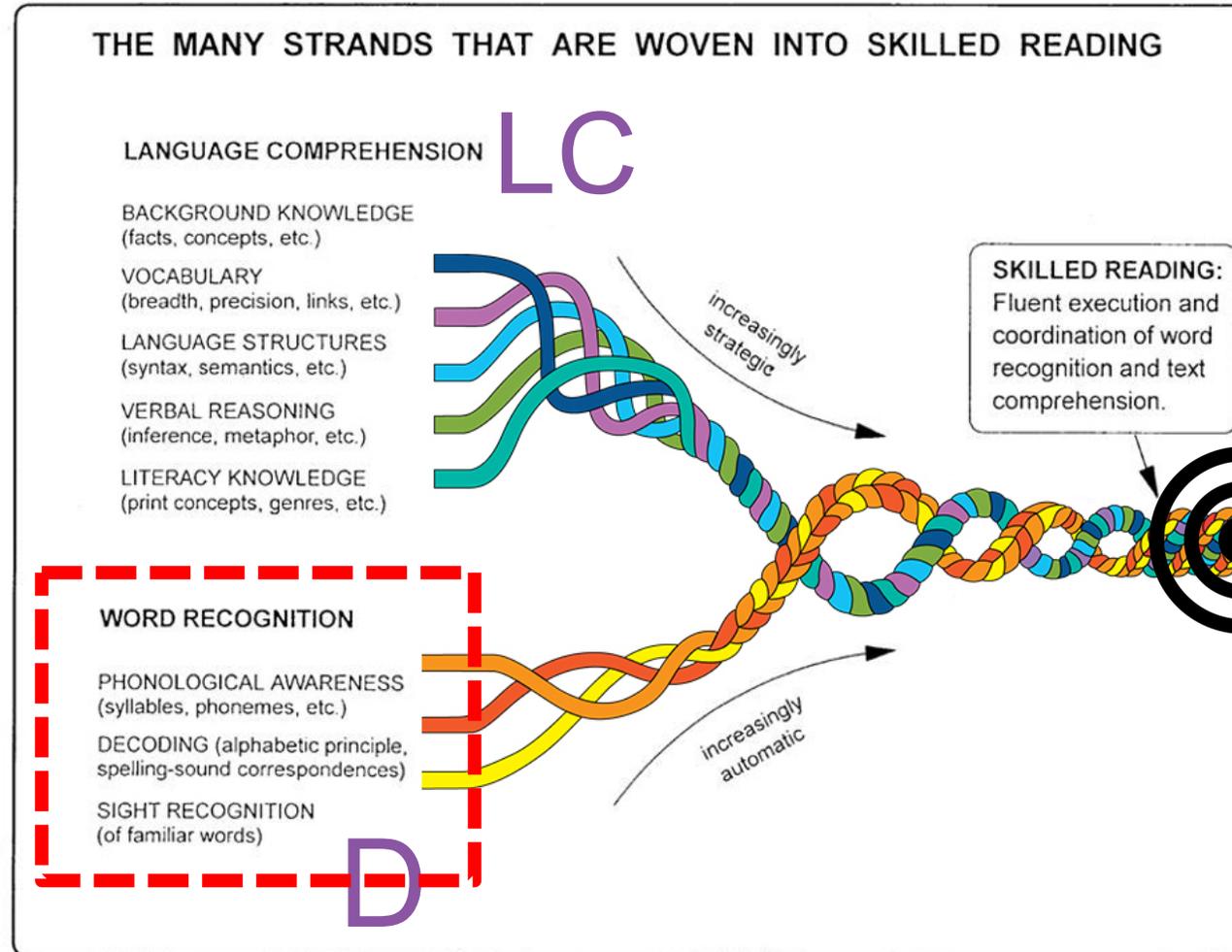
# The Simple View of Reading



“The Simple  
View  
of Reading”

Vellutino et al. (2007). Components of Reading Ability: Multivariate Evidence for a Convergent Skills Model of Reading Development, *Scientific Studies of Reading*, 3-32.

# Scarborough's Rope



Scarborough (2001)

# Assessing Dyslexia

## SPELLTalk listserve

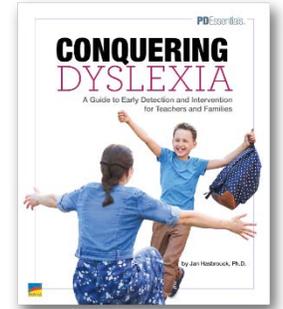
Steve Dykstra, Ph.D.

“Early in learning there is no reason to separate dyslexic children from kids who struggle to read for other reasons. They all need the same thing...we should intervene effectively, robustly with all of them and not worry about who is or is not dyslexic”.

April 5, 2019

# Assessing Dyslexia

“Early screening is so important for our students with dyslexia... it begins the process of quickly connecting students with the powerful interventions that can help them overcome dyslexia, or even prevent it from ever being a factor in their lives.”



p. 78

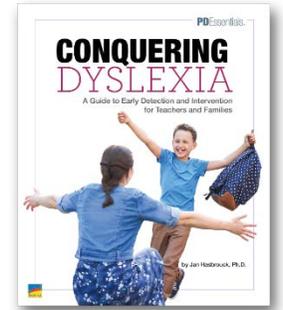
dyslexia assessment  intervention

# Assessing Dyslexia

Early signs parents can look for:

**Phonological Awareness:** the ability of the brain to notice, identify, and ultimately manipulate the units of oral language— **whole words and word parts.**

**Phonemic Awareness:** the ability to notice, identify and manipulate individual **sounds (phonemes)** in spoken words.



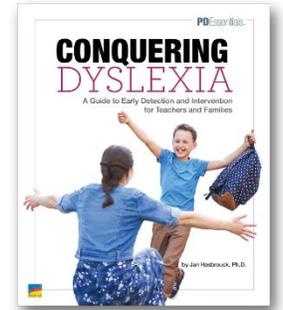
p. 26-37

# Assessing Dyslexia

Early signs parents can look for:

**MAY** have difficulty:

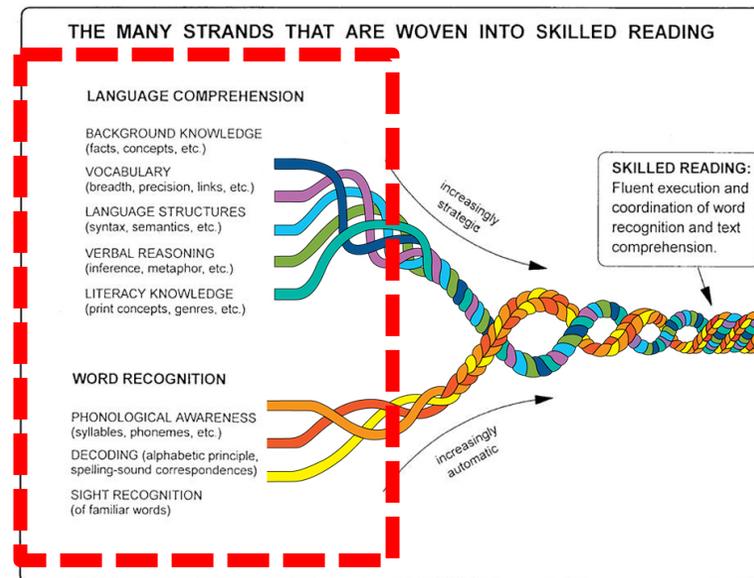
- Pronouncing words
- Learning the alphabet, letters
- Hearing and producing rhymes
- Noticing sound or letter patterns (“mommy” and “moon” start with /m/”)
- Retrieving words when speaking



p. 26-37

# Assessing Dyslexia

- Phonological/Phoneme Awareness
- Word Identification: Phonics/Decoding
- Automatic Word Recognition (Sight Words)
- Reading Fluency (accuracy, rate, expression)
- Spelling
- Handwriting
- Language Proficiency
- Listening Comprehension



# Assessing Dyslexia

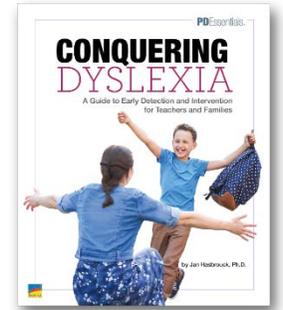
## Rapid Automatized Naming (RAN)?

“...the relation of rapid naming deficits and reading in individuals with dyslexia remains controversial.”

Fletcher, Lyon, Fuchs, & Barnes (2019, p. 118)

“The existing evidence does not support a persistent core deficit in naming speed for readers with dyslexia.”

Vukovic & Siegel (2006, p. 25)



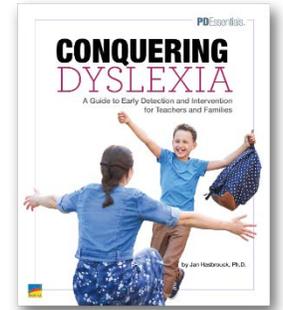
p. 88

# Assessing Dyslexia

## Dyslexia Diagnostic Checklist

“...there is no one, single, universally-adopted assessment that can be used to definitively identify if a student has dyslexia (Odegard, 2019). We instead rely on a ‘pattern’ or ‘cluster’ of concerns.” p. 93

dyslexia assessment  intervention



p. 92-96

# Assessing Dyslexia

	Concern? Y/N	Mild	Moderate	Severe
Phonological/Phoneme Awareness				
Phonics/Decoding				
Automatic Word Recognition (Sight Words)				
Reading Fluency				
Listening Comprehension				
Spelling				
Handwriting				
Language Proficiency				
Family History				
Appropriate Instruction/Intervention				

© Conquering Dyslexia 2020 p. 92

# Assessing Dyslexia

**“Emily”**  
**Grade 2**  
**Fall**

	Concern? Y/N	Mild	Moderate	Severe
Phonological/Phoneme Awareness				
Phonics/Decoding				
Automatic Word Recognition (Sight Words)				
Reading Fluency				
Listening Comprehension				
Spelling				
Handwriting				
Language Proficiency				
Family History				
Appropriate Instruction/Intervention				

# Assessing Dyslexia

**“Emily”  
Grade 2  
Fall**

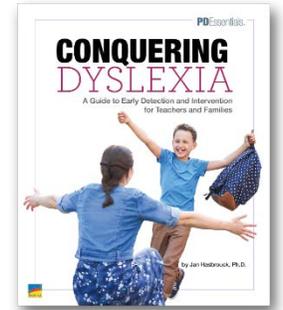
	Concern? Y/N	Mild	Moderate	Severe
Phonological/Phoneme Awareness	YES			X
Phonics/Decoding	YES		X	
Automatic Word Recognition (Sight Words)	YES		X	
Reading Fluency	YES			X
Listening Comprehension	NO			
Spelling	YES	X		
Handwriting	NO			
Language Proficiency	NO			
Family History	YES		X	X
Appropriate Instruction/Intervention	Has been provided			

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# Share Diagnostic Results

Children diagnosed with dyslexia benefit by receiving:

- a clear and understandable explanation of their diagnosis
- on-going family support
- appropriate intervention provided as early as possible



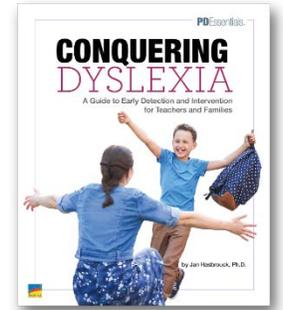
p. 93

Livingston, Siegel, & Ribary (2018)

# Share Diagnostic Results

Children diagnosed with dyslexia benefit by receiving:

- a clear and understandable explanation of their diagnosis
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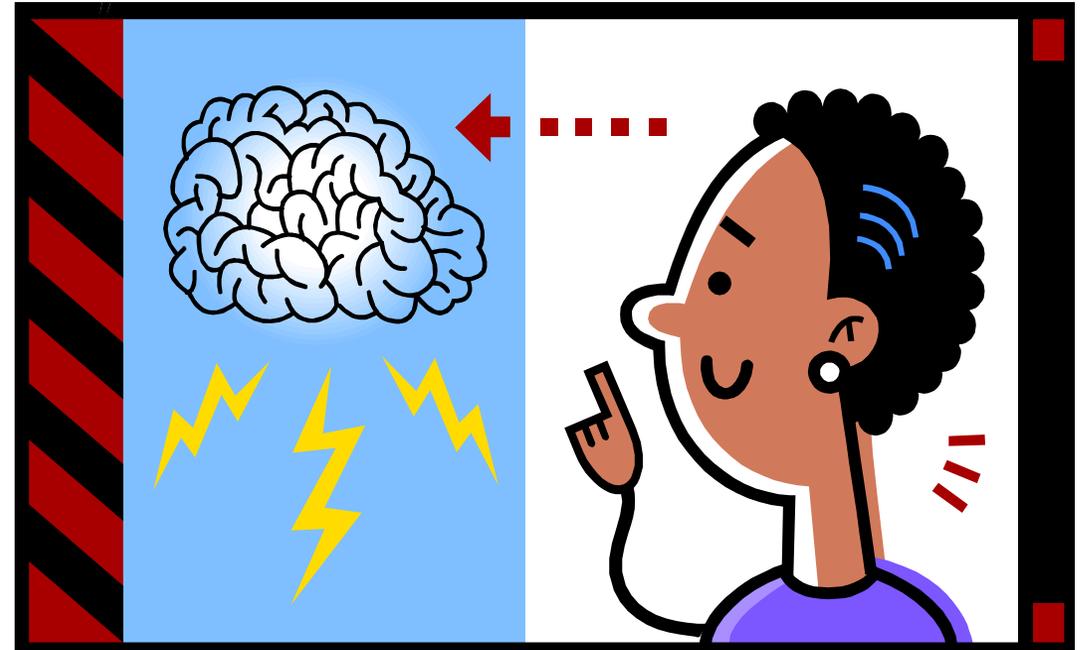
p. 93

Livingston, Siegel, & Ribary (2018)

dyslexia assessment  intervention

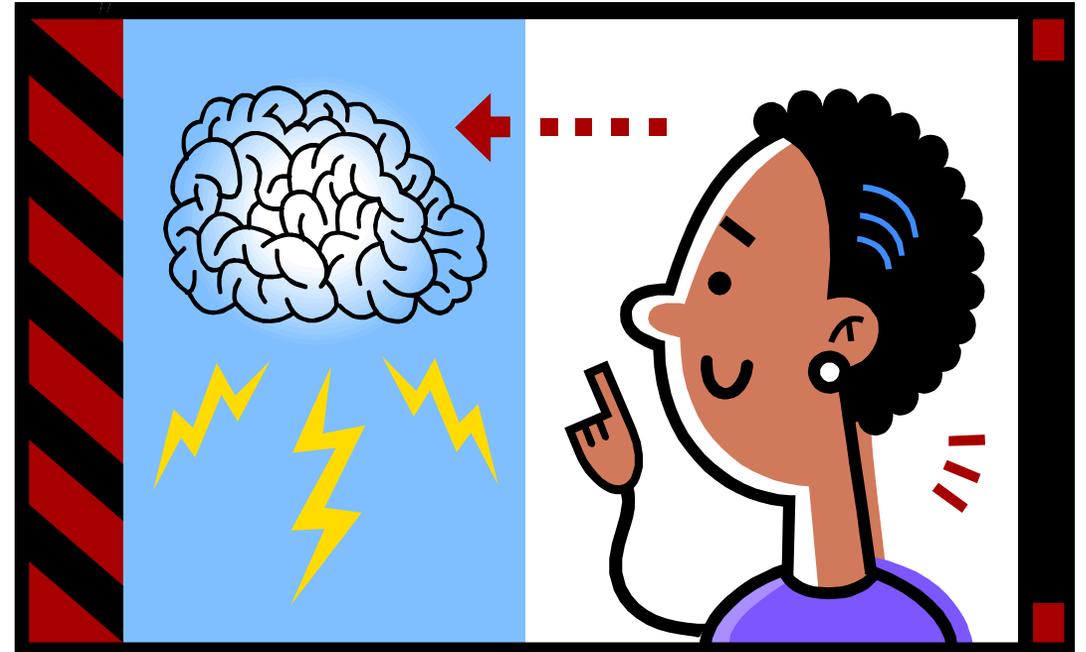
# Assessing Dyslexia

- Questions?
- Comments?
- Reactions?

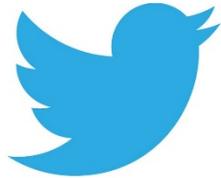


# Teaching Students with Dyslexia

- How?
- What?



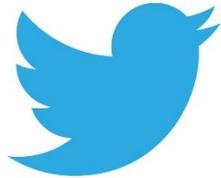
# Teaching Students with Dyslexia



Tweet from Dr. Nadine Gaab @GaabLab  
October 9, 2020 5:55 PM

Keep in mind that all children who struggle with learning to read need evidence-based interventions regardless of the cause of their struggle, their school's or parent's resources, their skin color, & whether they have a #dyslexia diagnosis or not. Our task is to make this happen.

# Teaching Students with Dyslexia



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Keep in mind that all children who struggle with learning to read need evidence-based interventions regardless of the cause of their struggle, their school's or parent's resources, their skin color, & whether they have a #dyslexia diagnosis or not. **Our task is to make this happen.**

## How?

# Research on Instruction & Intervention

## Medicine

- Neuroanatomy
- Neurobiology
- Pediatrics
- Developmental cognitive neuroscience
- Ophthalmology & optometry

## Psychology & Education

- Cognitive psychology
- Educational psychology
- Special education
- Developmental cognitive psychology
- Audiology & speech pathology

# Research on Instruction & Intervention

Anita Archer

Mark Seidenberg

Louisa Moats

Jack Fletcher

David Kilpatrick

Carolyn Denton

Virginia Berninger

Tim Shanahan

Doug Carnine

Barbara Foorman

Maryanne Wolf

Sharon Vaughn

*and more...*

# Research on Instruction & Intervention

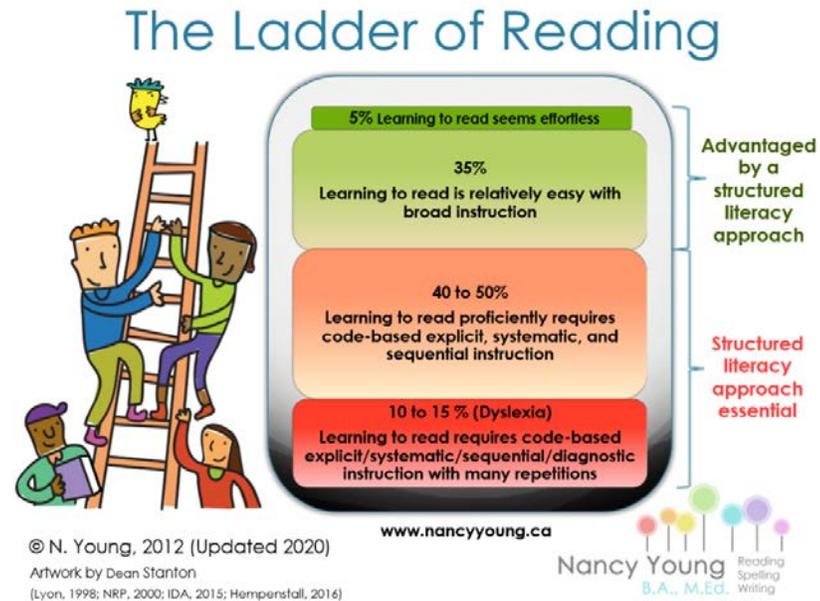
“...reading is not learned in the same way we learn to talk.”

“[requires] building a new circuit linking the visual code to existing neural systems for language...”

Dr. Mark Seidenberg

*Language at the Speed of Sight (2017)*

# Research on Instruction & Intervention



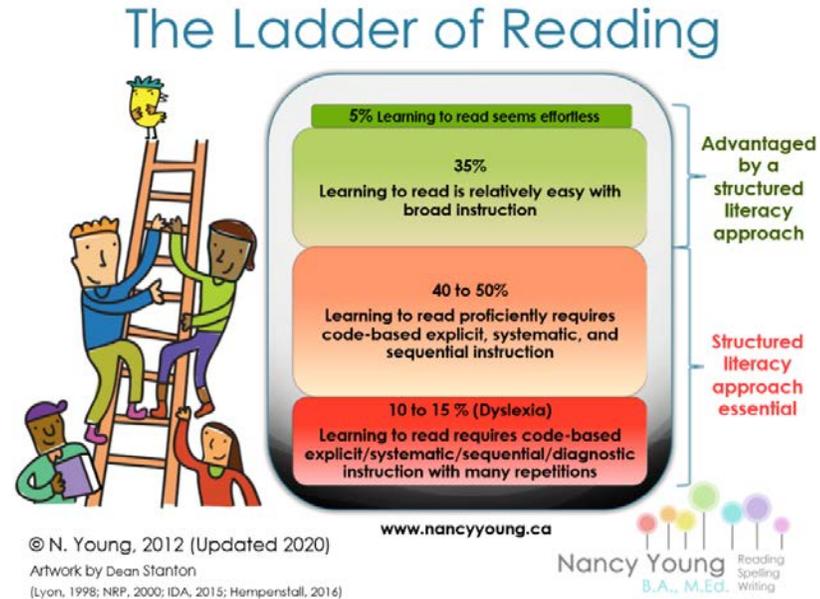
Some of our students will build these circuits more easily than others!

# Research on Instruction & Intervention

“Researchers now estimate that 95 percent of all children can be taught to read.”

Dr. Louisa Moats (2020)

# Research on Instruction & Intervention



With appropriate instruction & intervention almost all students can successfully climb the ladder!

# Research on Instruction & Intervention: WHAT?

“How do children learn to read?... The answer is the same for all children.

Cultural, economic, and educational circumstances obviously affect children’s progress, but what they need to learn does not change.”

Dr. Mark Seidenberg

*Language at the Speed of Sight (2017)*

# Research on Instruction & Intervention: WHAT?

“How do children learn to read?... The answer is the same for all children.

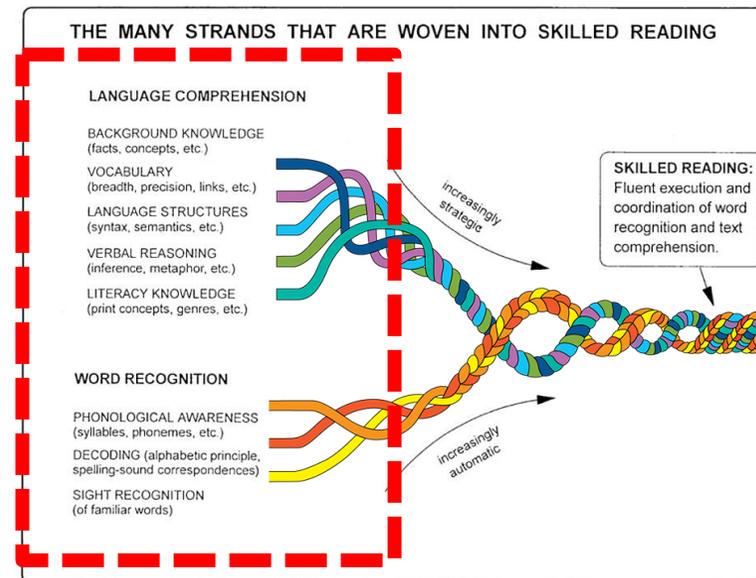
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# Research on Instruction & Intervention: WHAT?

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- Reading Fluency (accuracy, rate, expression)
- Spelling
- Handwriting
- Language Proficiency
- Listening Comprehension



# Research on Instruction & Intervention: HOW?

“The most ethical and prudent action is to provide all children with the **most effective reading methods**...thereby accelerating the process of all children and minimizing the likelihood that any child will struggle to learn to read.”

Buckingham & Castles (2019)

## Structured Literacy p.101-112

\*Comprehensive \*Systematic \*Explicit \*Intensive \*Multimodality  
and informed by data...

# Structured Literacy

Comprehensive	
Systematic	
Explicit	
Intensive	
Multimodality	

and informed by data...

# Structured Literacy

Comprehensive	Designed to cover essential foundational components of reading + advanced skills & knowledge
Systematic	
Explicit	
Intensive	
Multimodality	

and informed by data...

# Structured Literacy

Comprehensive	Designed to cover essential foundational components of reading + advanced skills & knowledge
Systematic	Carefully designed scope & sequence
Explicit	
Intensive	
Multimodality	

and informed by data...

# Structured Literacy

Comprehensive	Designed to cover essential foundational components of reading + advanced skills & knowledge
Systematic	Carefully designed scope & sequence
Explicit	Effectively delivered with clarity & intention; gradual release of responsibility (I do; We do; You do)
Intensive	
Multimodality	

and informed by data...

# Structured Literacy

Comprehensive	Designed to cover essential foundational components of reading + advanced skills & knowledge
Systematic	Carefully designed scope & sequence
Explicit	Effectively delivered with clarity & intention; gradual release of responsibility (I do; We do; You do)
Intensive	Focus, purpose, active engagement
Multimodality	

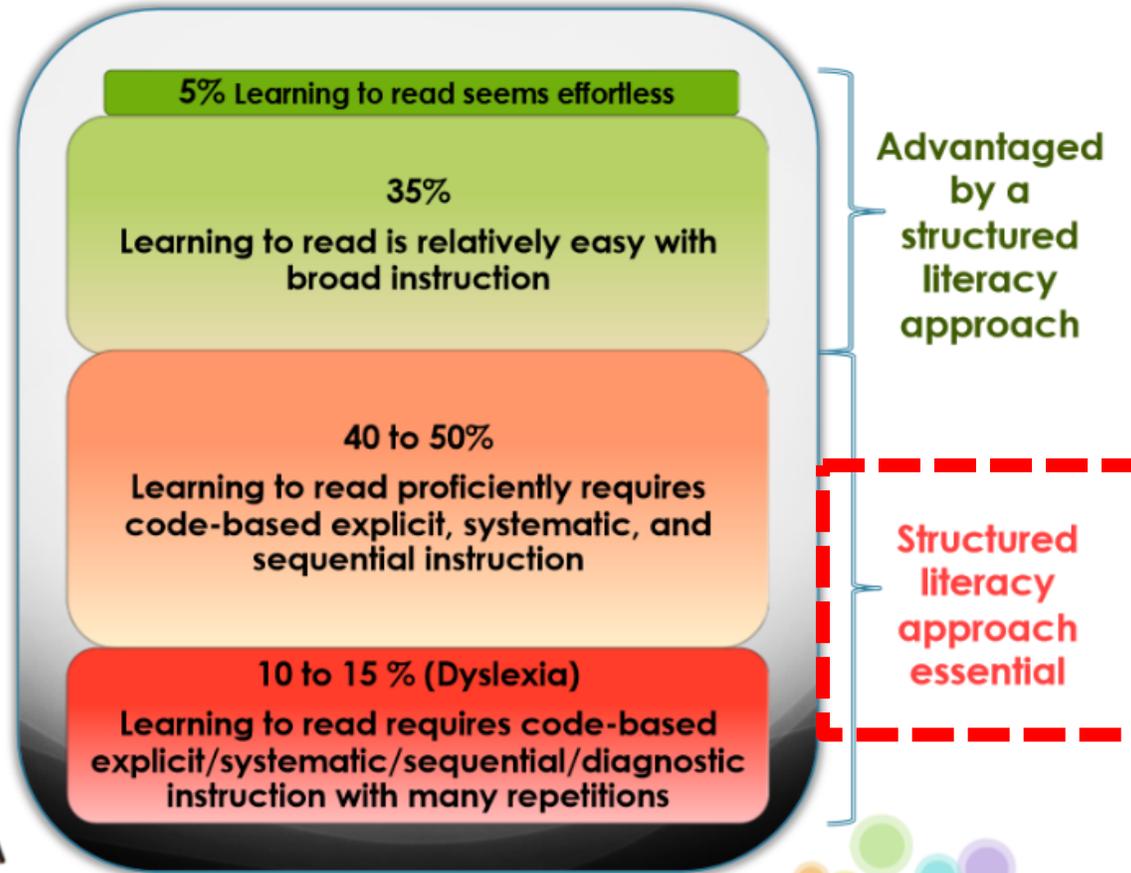
and informed by data...

# Structured Literacy

Comprehensive	Designed to cover essential foundational components of reading + advanced skills & knowledge
Systematic	Carefully designed scope & sequence
Explicit	Effectively delivered with clarity & intention; gradual release of responsibility (I do; We do; You do)
Intensive	Focus, purpose, active engagement
Multimodality	Using all sensory modalities <i>directly related to reading/writing skill development</i>

and informed by data...

# The Ladder of Reading



© N. Young, 2012 (Updated 2020)

Artwork by Dean Stanton

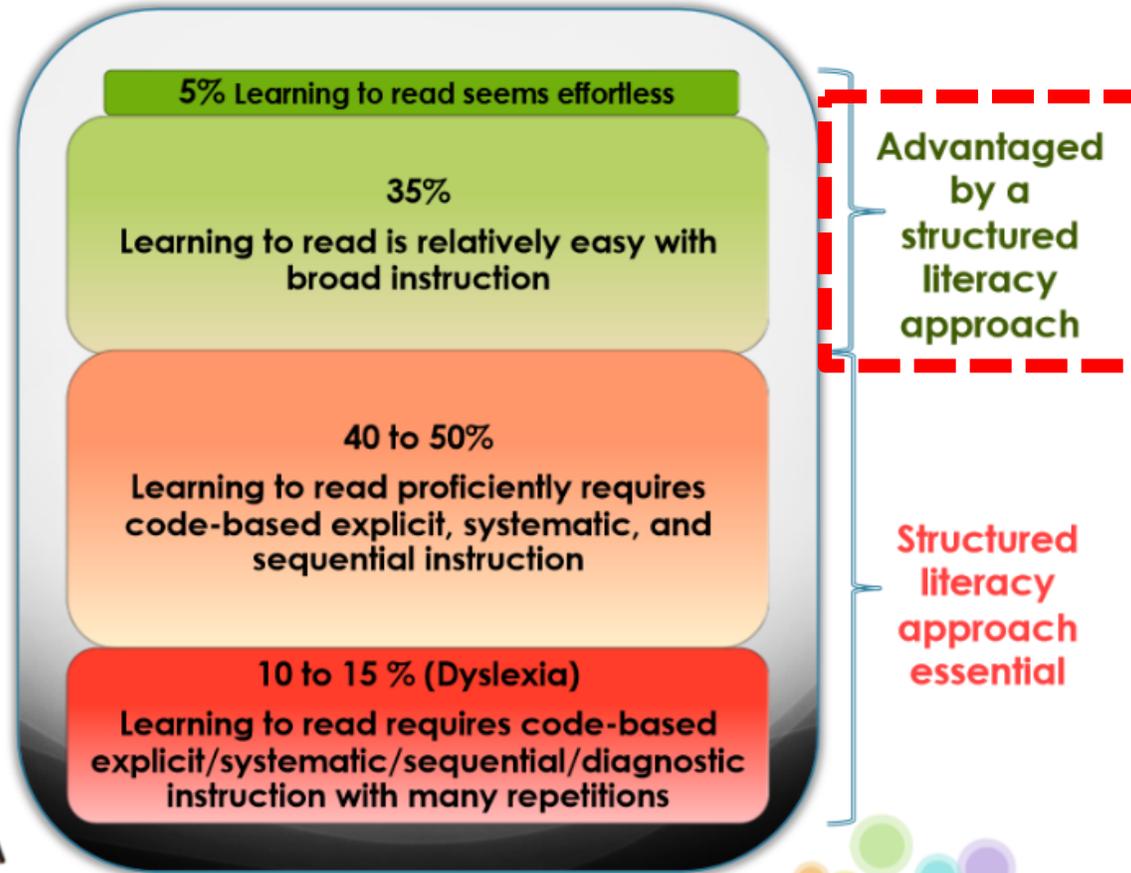
(Lyon, 1998; NRP, 2000; IDA, 2015; Hempenstall, 2016)

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B.A., M.Ed.  
Reading  
Spelling  
Writing

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# The Ladder of Reading



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(Lyon, 1998; NRP, 2000; IDA, 2015; Hempenstall, 2016)

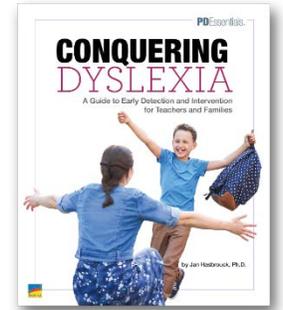
[www.nancyyoung.ca](http://www.nancyyoung.ca)

  
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Reading  
Spelling  
Writing

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# Recommended Resources

- Decoding Dyslexia [decodingdyslexia.net](http://decodingdyslexia.net)
- IDA <https://dyslexiaida.org/>
- Reading Rockets [www.readingrockets.org](http://www.readingrockets.org)
- The Gaab Lab [www.gaablab.com](http://www.gaablab.com)
- Glean Education [www.gleaneducation.com](http://www.gleaneducation.com)
- University of Florida Literacy Institute (UFLI) Virtual Teaching Resource Hub [education.ufl.edu/uflr](http://education.ufl.edu/uflr)



p. 160-162



## Learn the Science of Reading

- 7–10-week online course that teaches foundational skills and instructional practices based on the science of reading
- Learn to understand and recognize dyslexia and its warning signs
- Learn the structure of the English and Spanish language system
- Includes the *Teaching Reading Sourcebook* and *Assessing Reading: Multiple Measures* textbooks
- Available for graduate credit

[www.corelearn.com/online-elementary-reading-academy](http://www.corelearn.com/online-elementary-reading-academy)

# Questions?



**Get in Touch with CORE!**

[info@corelearn.com](mailto:info@corelearn.com)  
888.249.6155



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