

# The WNY Literacy Initiative

A Science of Reading Toolkit for administrators, teachers, board members and parents

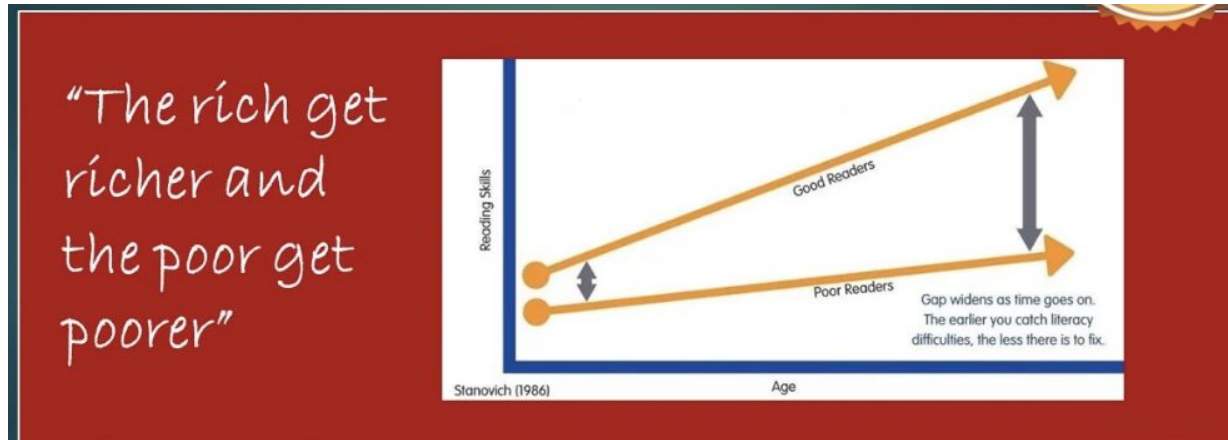


# Moral Imperative: Reading Proficiency For Every Child



- 50% of incarcerated people are functionally illiterate due to dyslexia; 30% more are under-literate due to poor instruction
- 40% of homeless people are functionally illiterate due to dyslexia
- 66%+ of kids can't read on grade level in 8th grade
- \$2.2 Trillion lost due to illiteracy

## The Matthew Effect:



Source: [pages.eab.com](http://pages.eab.com), [decodingdyslexiany.org](http://decodingdyslexiany.org)



Decrease in likelihood that struggling readers in third grade will attend college, compared to their more proficient peers



Of students who do not read proficiently by third grade never reach reading proficiency in future grades

# With the Right Instruction, All Kids Can Learn To Read



The National Institute of Health indicates:

95%

Of elementary students, regardless of background, are cognitively capable of learning to read when they receive sufficient direct instruction on the foundational skills of reading

BUT:

- Approx.  $\frac{1}{3}$  of students will learn to read regardless of how they're taught
- Most schools only teach to this  $\frac{1}{3}$  of students
- Research-aligned instruction reaches all students

# The Science of Reading - What is it?



A vast, interdisciplinary body of scientifically-based research about reading and issues related to reading and writing.

Source: [pages.eab.com](http://pages.eab.com), [thereadingleague.org](http://thereadingleague.org)

## Decades of Neuroscience Research Provide Insight on How Students Learn to Read



42 Research centers nationwide examine reading-related brain activity



30 Years of brain-based research dedicated to learning to read

# The Science of Reading: Training the Brain



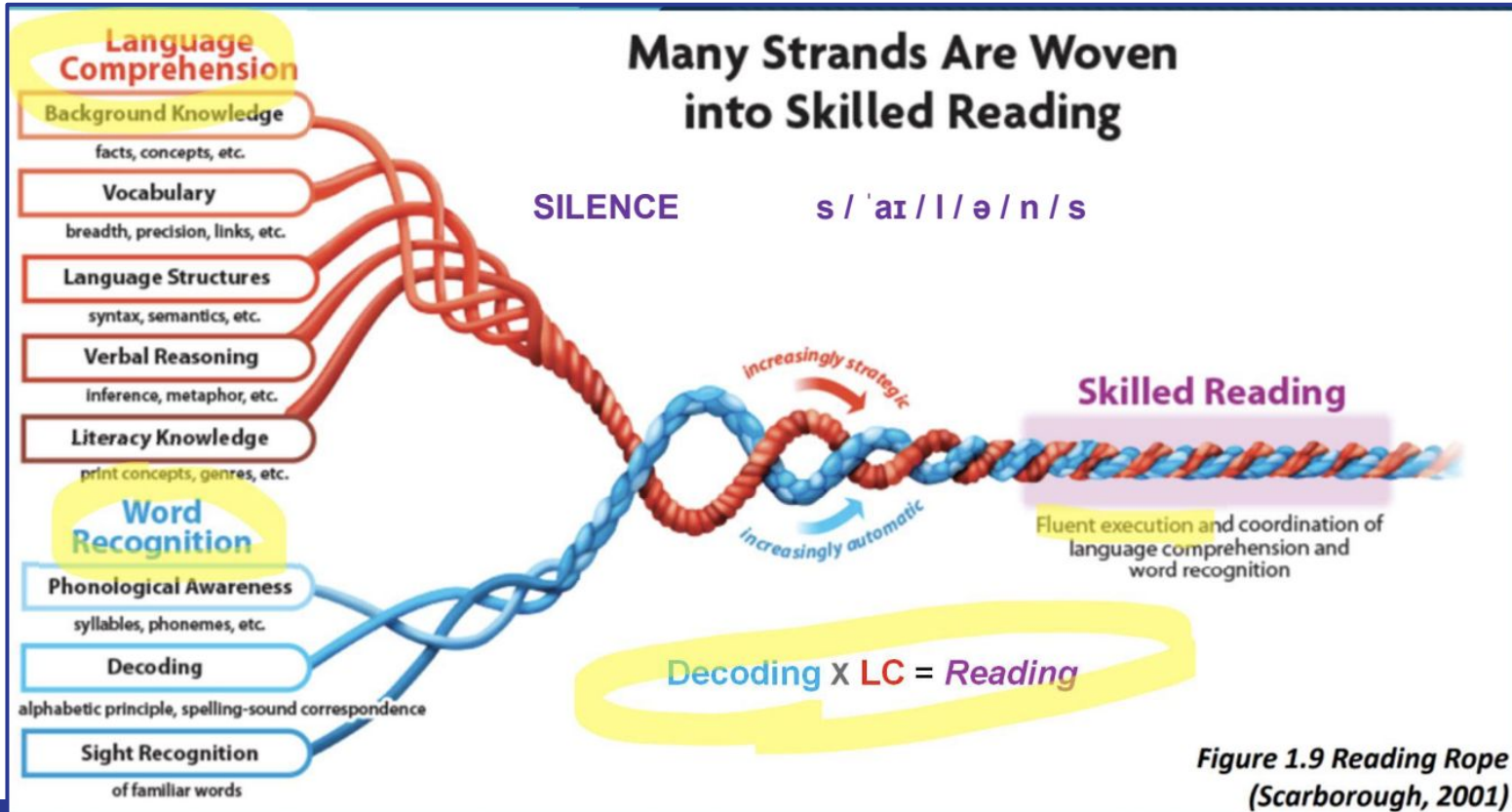
- Our brains are not naturally wired to read
- You have to build neural pathways in all four areas of the brain
- These pathways are best built between Kindergarten & Third Grade

## The Simple View of Reading (Gough/Tunmer):

$$\text{Reading Comprehension} = \text{Word Decoding} \times \text{Language Comprehension}$$

Source: [pages.eab.com](https://pages.eab.com)

# The Science of Reading Is Not Just Phonics



# Reading Instruction: A Comparison

## (un)Balanced Literacy / Whole Language

- Expect student to have phonemic awareness
- Phonics lite (incidental/haphazard)
- Guessing / Cueing
- Leveled readers / Predictable books
- Count errors
- Mini lessons
- Sight words = common words to memorize

**VS.**

## Structured Literacy / Evidence-Based

- Teach phonemic awareness
- Synthetic phonics systematically
- Decoding / encoding by phonics
- Decodable readers
- Categorize errors
- Explicit instruction / practice
- Words that follow no code

# Literacy & Mental Health

Literacy goes hand-in-hand with mental health; it's not either/or.

- Trauma & Reading:

“one thing is more important to traumatized children than anything else...The research shows that the single most powerful predictor of their ability to overcome the trauma and survive their circumstances is the ability to read.”

- From NAEP & other educational data aggregations:

“a vast number of our children are experiencing chronic self-blame/shame about not being good enough at learning.”



# Dyslexia

Dyslexia is:

- Trouble with connecting sounds to symbols: decoding symbols and groups of symbols
- A specific learning disability that is neurobiological in origin
- **About 80% of all Learning Disabilities: 1 in 6 kids have dyslexia**
- Many are undiagnosed or misdiagnosed
- Resources are often not available

All children can learn to read with science-based, explicit reading and writing instruction

Sources: [decodingdyslexiany.org](http://decodingdyslexiany.org), [dyslexia1n5.com](http://dyslexia1n5.com)

# Who's Making the Shift to Evidence-Based Instruction?



Below is a list of the states that have passed laws “aimed at expanding evidence-based learning early instruction” ([edweek.org](http://edweek.org), [edweek.org](http://edweek.org))

- Alabama
- Arizona
- Arkansas
- Colorado
- Connecticut
- Florida
- Kentucky
- Mississippi
- Missouri
- North Carolina
- Oklahoma
- Oregon
- Pennsylvania
- Rhode Island
- Texas
- Tennessee
- West Virginia

**Nearly 20 states** indicate that they will use part of their emergency Covid 19 funding for teacher training in literacy (source: [Rural Ed Voices](#))

# Case Study: Mississippi

- 2013: Legislators provided funding to start training the state's teachers in the science of reading
- Dec 2019 (Emily Hanford): "While every other state's 4th graders made no significant progress in reading on this year's test, or lost ground, Mississippi's 4th grade reading scores are up by 10 points since 2013."
- Mississippi is the poorest state in the nation, but the 4th graders are reading at the national average

Source: [New York Times](#)

# Case Study: Arkansas

2017 Right To Read Act: A comprehensive state-wide plan

- Colleges of education must teach “scientific reading instruction”
- School districts must provide training in evidence-based reading instruction for K-6 teachers
- Teachers in all other grades/subjects incl. admin must demonstrate “awareness” of science of reading
- State must prepare list of literacy curriculum material

Student scores on DIBELS, an early-literacy test, have improved “drastically”

Source: [Edweek.org](https://www.edweek.org)

# Case Study: Tennessee



- Legislation filed 2/3/20, proposed by the department of education and backed by the governor, would provide a free, evidence-based early-literacy curriculum to districts, and they'd be required to use it or show that their own curricula is evidence-based.
- Districts would have to use approved curricula designed to build students' content knowledge.
- All K-3 teachers would be trained in research-based foundational reading instruction, and teacher- and principal-preparation programs would have to teach evidence-based reading instruction.

Source: [Edweek.org](https://www.edweek.org)

# The NYSED Literacy Picture



## Data From NYSED 2018-2019, Reading Proficiency

*% of Students Proficient in Grades 3-8*

	2018	2019	Percentage Point Change	# of Test Takers
Statewide Combined Grades ELA	45.2	45.4	0.2	987,398

	2018	2019	Percentage Point Change
NYC	46.7	47.4	0.7
Buffalo	23.4	24.7	1.3
Rochester	11.4	13.2	1.8
Syracuse	15.4	17.7	2.3
Yonkers	26.7	31.5	4.8

### Big 5 City School Districts

*% of Students Proficient in ELA Across All Grades 3-8*

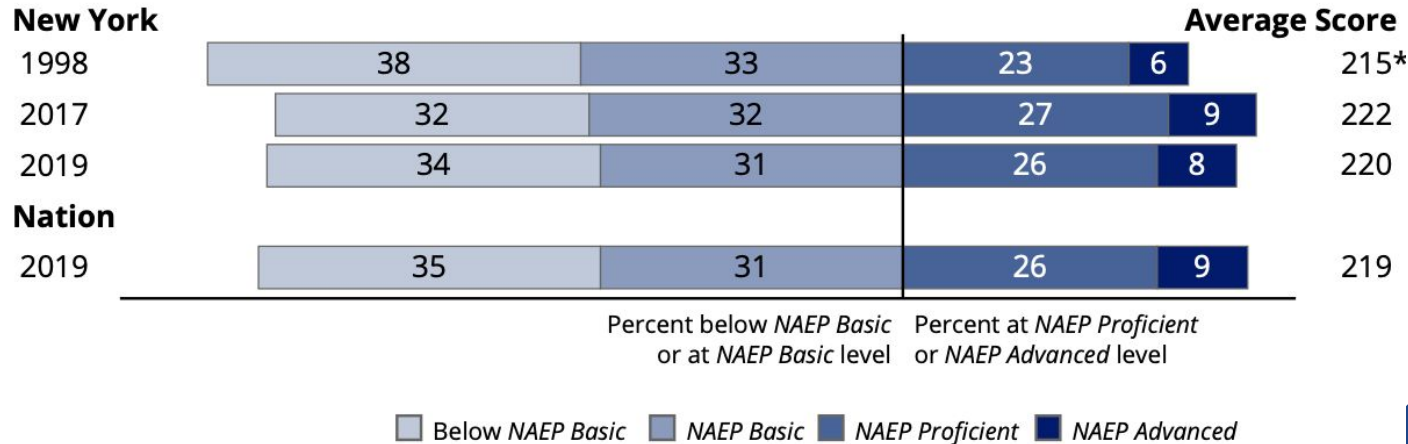
# The Literacy Picture in New York State

## 2019 Reading State Snapshot Report

New York ■ Grade 4 ■ Public Schools



### NAEP Achievement-Level Percentages and Average Score Results

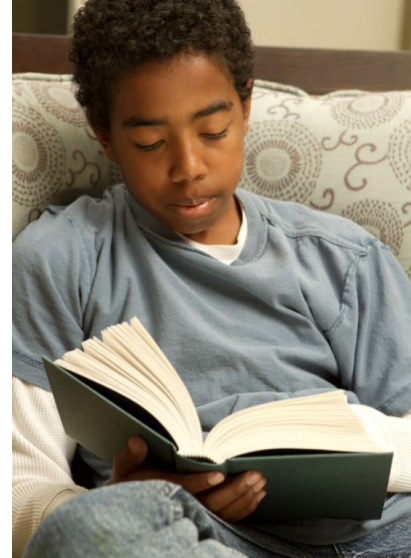


Source: [NCES](#)

\* Significantly different ( $p < .05$ ) from state's results in 2019. Significance tests were performed using unrounded numbers.

# Next Steps

1. Raising awareness
2. Creating committee of leaders in WNY to organize effort
3. The WNY Science of Reading conference: October 2022
4. Facilitating partnerships between schools & experts





# Resources

1. [APM Reports: Emily Hanford, How Children Are Taught To Read series](#)
2. [How Do Kids Learn To Read? - EdWeek](#)
3. [The Science of Reading Defining Guide: Download the free ebook](#)
4. [Knowledge Matters](#)
5. [EAB: Narrowing the 3rd Grade Reading Gap](#)
6. [Curriculum Matters](#)
7. [The Superintendent's Perspective](#)
8. [The National Reading Panel](#)
9. [Scarborough's Reading Rope](#)
10. [Dyslexia In the Classroom](#)
11. [The Knowledge Gap by Natalie Wexler](#)