



---

**Session 1:**  
**Introduction to the Science of Reading**

*Leader Professional Development Series*  
*Leading the Charge for Evidence Based*  
*Literacy Practices*

---

# Presenter Introduction

**Catasha Edwards**

Literacy PD Specialist

Louisiana Department of Education

[catasha.edwards@la.gov](mailto:catasha.edwards@la.gov)



# Literacy Division Mission

All Louisiana students will have improved literacy outcomes through high-quality instruction and interactions by an effective teacher supported by leaders and families.

**Department Priority:** Provide the highest quality teaching and learning environment from birth through graduation.

**Focus Area:** Literacy



# Literacy Pillar: Ongoing Professional Growth



The Louisiana Department of Education believes ongoing professional growth is an essential component of effective teaching and literacy development. The Literacy Division is hosting a series of informational webinars targeting specific topics aimed at building leader knowledge and capacity of the science of reading and how to integrate best practices and evidence based strategies into Louisiana's schools.

- [Summer 2021 K-2 Teacher PD Series](#)
- [Summer 2021 Leader PD Series](#)

# Objectives

By the end of this session, participants will be able to:

- define the science of reading.
- understand the importance of building teacher knowledge around the science of reading.
- Become familiar with two widely recognized theoretical models of proficient reading (Simple View of Reading and Scarborough's Reading Rope)
  - identify the two main components of the Simple View of Reading.
  - identify the strands of Scarborough's Reading Rope and how each strand supports reading development.



# Defining the Science of Reading

The science of reading is a vast, interdisciplinary body of ***scientifically-based\* research*** about reading and issues related to reading and writing.

This research has been conducted over the last five decades across the world, and it is derived from thousands of studies conducted in multiple languages.

Source: The Reading League, "[A Defining Movement.](#)"



# What has the SOR Research Provided?

These studies have revealed a great deal about how we learn to read, *what* goes wrong when students don't learn, and what kind of instruction is most likely to work the *best for the most students.*" – Dr. Louisa Moats



Source: L. Moats, [Teaching Reading is Rocket Science, 2020.](#)

# What the Science of Reading (SOR) is Not?



The body of work referred to as the “science of reading” is **not**

- an ideology,
- a philosophy,
- a political agenda,
- a one-size-fits-all approach,
- a program of instruction,
- a specific component of instruction

Source: The Reading League, “[A Defining Movement.](#)”







# The Importance of Teacher Knowledge

# The Importance of Teacher Knowledge

- **Knowledge** is the most powerful tool that a teacher can be equipped with when teaching a child to read.
- It is important for teachers to know “what to teach” and “how to teach”.
- Unfortunately many in-service and pre-service teachers did not receive training aligned to the science of reading.
- Increased teacher knowledge can be achieved through ongoing professional learning grounded in the science of reading.
- Science of reading professional development for should include:
  - basics of reading psychology and development,
  - understanding language structure for both word recognition and language comprehension, and
  - using validated, reliable, efficient assessments to inform classroom instruction.



Source: L. Moats, [Teaching Reading is Rocket Science, 2020](#).

# Current Literacy Legislation

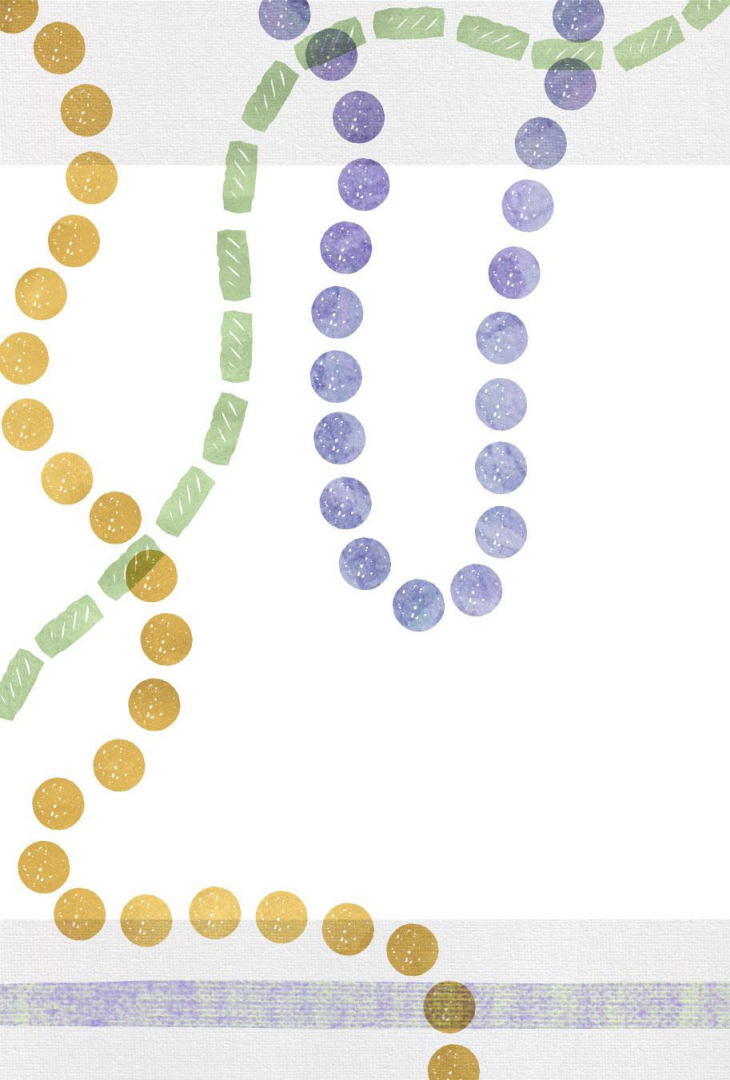
## Louisiana Literacy Legislation

- [SB 216](#) Requires each teacher of kindergarten through third grade who teaches reading, math, science, or social studies, and any administrator of a school with K through 3rd grade to complete an approved professional development course in foundational literacy skills by the beginning of the 2023-2024 academic year.

## Fall 2021

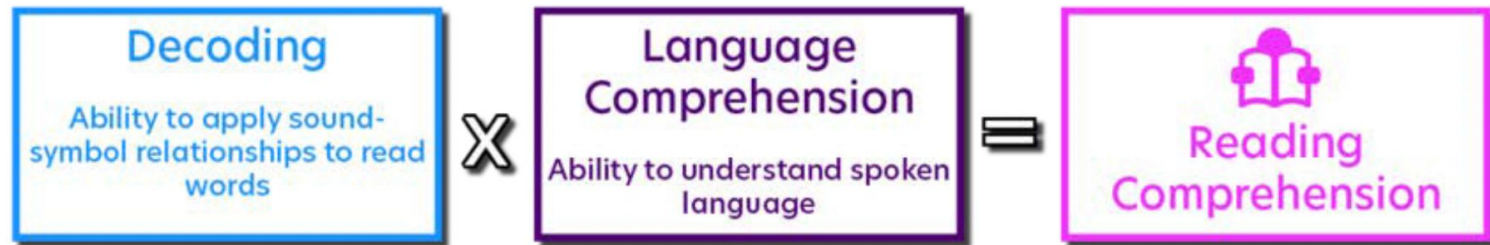
- The LDOE will release a list of approved providers of foundational skills training upon BESE approval.





# Theoretical Models of the Science of Reading

# The Simple View of Reading



(Gough & Tunmer, 1986; Hoover & Gough, 1990)





*Engagement*

## Simple View of Reading Practice

**Meet James:** James is a second grade student at Sunny Day Elementary. His teacher describes him as a fluent reader, but he is unable to gain meaning from the text. **How would you describe James using the Simple View of Reading equation?**

Language Comprehension (LC) X Decoding (D) = Reading Comprehension (RC)  
(hint: use the value of 1 for adequate mastery of an area and the value 0 for inadequate mastery of an area.)





*Engagement*

## Simple View of Reading Practice

**Meet James:** James is a second grade student at Sunny Day Elementary. His teacher describes him as a fluent reader, but he is unable to gain meaning from the text. **How would you describe James using the Simple View of Reading equation?**

Language Comprehension (LC) X Decoding (D) = Reading Comprehension (RC)  
(hint: use the value of 1 for adequate mastery of an area and the value 0 for inadequate mastery of an area.)

$$0(LC) \times 1(D) = 0(RC)$$



# SCARBOROUGH'S READING ROPE (2001)

## LANGUAGE COMPREHENSION

**BACKGROUND KNOWLEDGE**  
(facts, concepts, etc.)

**VOCABULARY**  
(breadth, precision, links, etc.)

**LANGUAGE STRUCTURE**  
(syntax, semantics, etc.)

**VERBAL REASONING**  
(inference, metaphor, etc.)

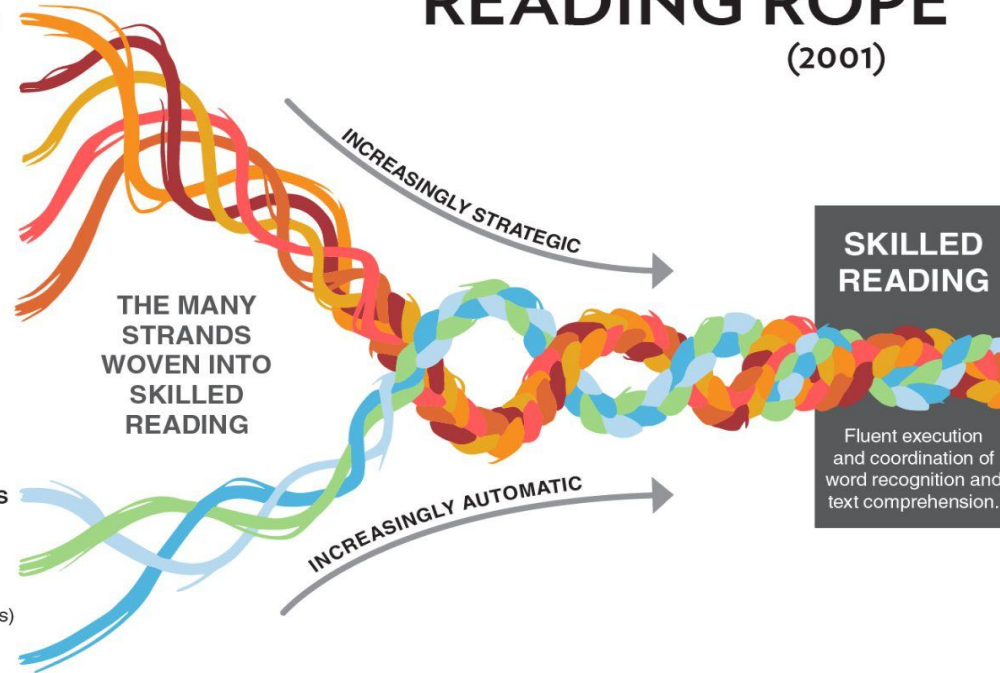
**LITERACY KNOWLEDGE**  
(print concepts, genres, etc.)

## WORD RECOGNITION

**PHONOLOGICAL AWARENESS**  
(syllables, phonemes, etc.)

**DECODING**  
(alphabetic principle,  
spelling-sound correspondences)

**SIGHT RECOGNITION**  
(of familiar words)



THE MANY  
STRANDS  
WOVEN INTO  
SKILLED  
READING

**SKILLED  
READING**

Fluent execution  
and coordination of  
word recognition and  
text comprehension.

INCREASINGLY  
AUTOMATIC

INCREASINGLY  
STRATEGIC



# Word Recognition

- Phonological awareness (syllables, phonemes, etc.)
- Decoding (alphabetic principle, spelling-sound correspondences)
- Sight Recognition (of familiar words)

Pathway to **skilled reading**:

Word recognition increases as the strands in this area become *increasingly automatic*.



# Language Comprehension

- Background Knowledge (facts, concepts, etc.)
- Vocabulary (breadth, precision, links, etc.)
- Language Structure (syntax, semantic, etc.)
- Verbal Reasoning (inference, metaphor, etc.)
- Literacy Knowledge (print concepts, genres, etc.)

## Pathway to skilled reading:

Language comprehension increases as the strands in this area become *increasingly strategic*.



# Skilled Reading

- **Skilled reading** is defined as fluent execution of word recognition and language comprehension.
- As the strands from each area become more tightly woven together,
  - the word recognition strands become *increasingly automatic*, and
  - the language comprehension strands becoming *increasingly strategic*.
- Students who have challenges with *any* strand of the rope, will not be able to read and meaningfully engage with complex text.





## Scarborough's Rope Practice

**Meet James (again):** James is a second grade student at Sunny Day Elementary. His teacher describes him as a fluent reader, but he is unable to gain meaning from the text. His teacher is aware that James experiences more difficulty when the information is not explicitly stated and requires him to make an inference.

**Using Scarborough's Reading Rope, which language comprehension strand is James most likely having difficulty with?**





## Scarborough's Rope Practice

**Meet James (again):** James is a second grade student at Sunny Day Elementary. His teacher describes him as a fluent reader, but he is unable to gain meaning from the text. His teacher is aware that James experiences more difficulty when the information is not explicitly stated and requires him to make an inference.

**Using Scarborough's Reading Rope, which language comprehension strand is James most likely having difficulty with?**

**James' difficulty when information is not explicitly stated may indicate difficulty with the Verbal Reasoning strand. He would most likely benefit from explicit instruction with Verbal Reasoning strand strategies.**





## Engagement

# Reflection

- Think about the curriculum currently used to support the foundations of reading instruction in your school or district. How is the curriculum aligned to the science of reading?
- Think about your current literacy professional development plan for K-3 teachers.
- What activities are planned to support teachers in:
  - understanding the basics of reading psychology and development,
  - understanding language structure for both word recognition and language comprehension, or
  - using validated, reliable, efficient assessments to inform classroom instruction.
- What activities do you plan to add to your PD calendar to support literacy instruction aligned to the science of reading?



# Resources

- [Louisiana Literacy Landing Page](#)
- [Louisiana Literacy Library](#)
- [Summer 2021 K-2 Teacher PD Series](#)
- [Summer 2021 Leader PD Series](#)
- [Effective Literacy Implementation for Leaders](#)



# Questions

Contact [catasha.edwards@la.gov](mailto:catasha.edwards@la.gov) or [LouisianaLiteracy@la.gov](mailto:LouisianaLiteracy@la.gov) with questions or suggestions.

Thank you for attending today's session!

The Department appreciates your **Literacy Leadership!**





# References

Amplify Literacy Hub. *Introduction to the Science of Reading*. <https://amplify.com/literacy-hub/>

Defining Movement. (2021, February 21). *The science of reading: A defining guide*.  
<https://www.whatisthescienceofreading.org/science-of-reading-guide>

Gough PB, Tunmer WE. Decoding, Reading, and Reading Disability. *Remedial and Special Education*. 1986;7(1):6-10.

Hoover, W.A., Gough, P.B. The simple view of reading. *Read Writ 2*, 127–160 (1990).

Moats,L. (2020) *Teaching Reading Is Rocket Science, 2020*. American Federation of Teachers

