Session 1:

Introduction to the Science of Reading

Teacher Professional Development Series

Today's Objective

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

- ★ define the *science of reading.*
- ★ identify the strands of Scarborough's Reading Rope.
- ★ describe how each strand plays an important role in developing skilled readers.

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."
  - For studies to be considered "scientifically-based research," they must:
    - be experimental/quasi-experimental;
    - have detailed description of study methods to allow for replication or refinement of findings;
    - be published in a peer-reviewed journal;

SOURCE: The Reading League, "A Defining Movement."

Defining the Science of Reading

- “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.
- The science of reading has culminated in a preponderance of evidence to inform how proficient reading and writing develop; why some have difficulty; and how we can most effectively assess and teach and, therefore, improve student outcomes through prevention of and intervention for reading difficulties.”

SOURCE: The Reading League, “A Defining Movement.”

Defining the Science of Reading

- The science of reading is derived from researchers from multiple fields:
  - cognitive psychology,
  - communication sciences,
  - developmental psychology,
  - education,
  - implementation science,
  - linguistics,
  - neuroscience,
  - school psychology

SOURCE: The Reading League, "A Defining Movement."

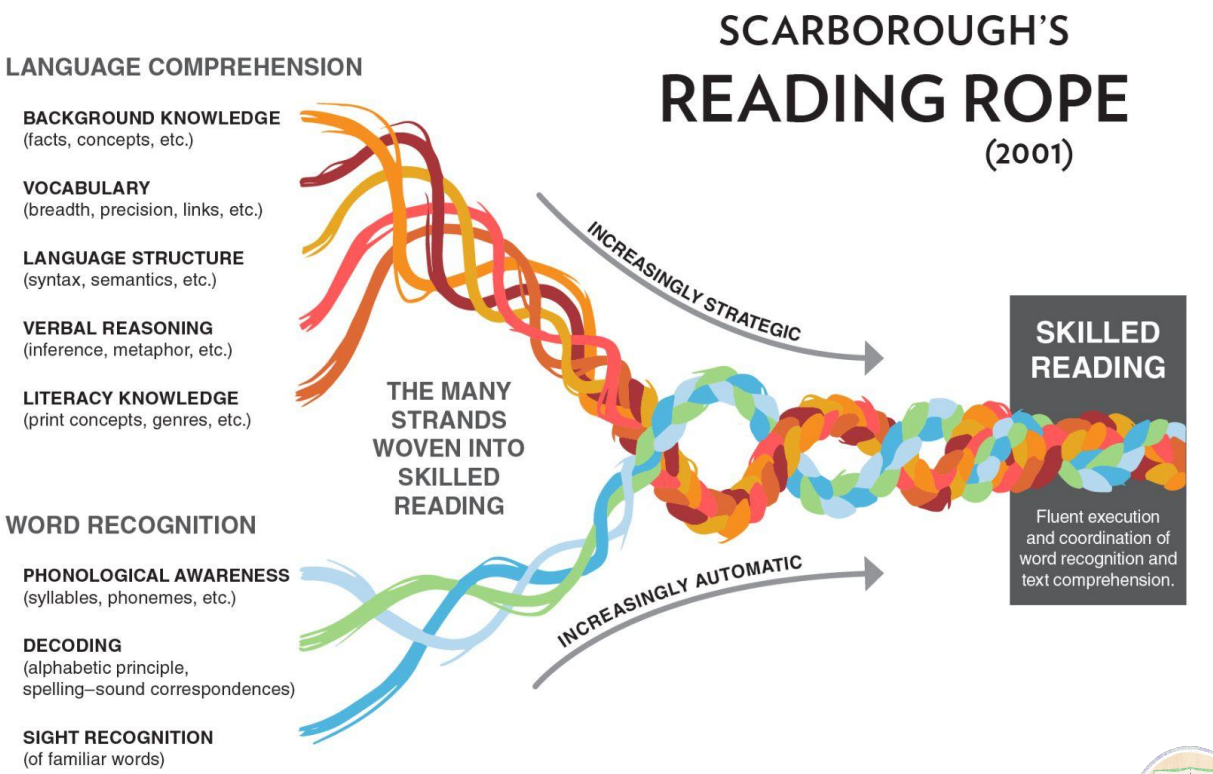
What the Science of Reading is NOT

- The science of reading is *not*:
  - an ideology or philosophy,
  - a fad, trend, new idea, or pendulum swing,
  - a political agenda,
  - a one-size-fits-all approach,
  - a program of instruction
  - a single, specific component of instruction such as phonics

SOURCE: The Reading League, "A Defining Movement."

The Simple View of Reading

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


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
INCREASINGLY STRATEGIC
INCREASINGLY AUTOMATIC
SKILLED READING
Fluent execution and coordination of word recognition and text comprehension.

Believes

Language Comprehension

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

Word Recognition

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

Skilled Reading

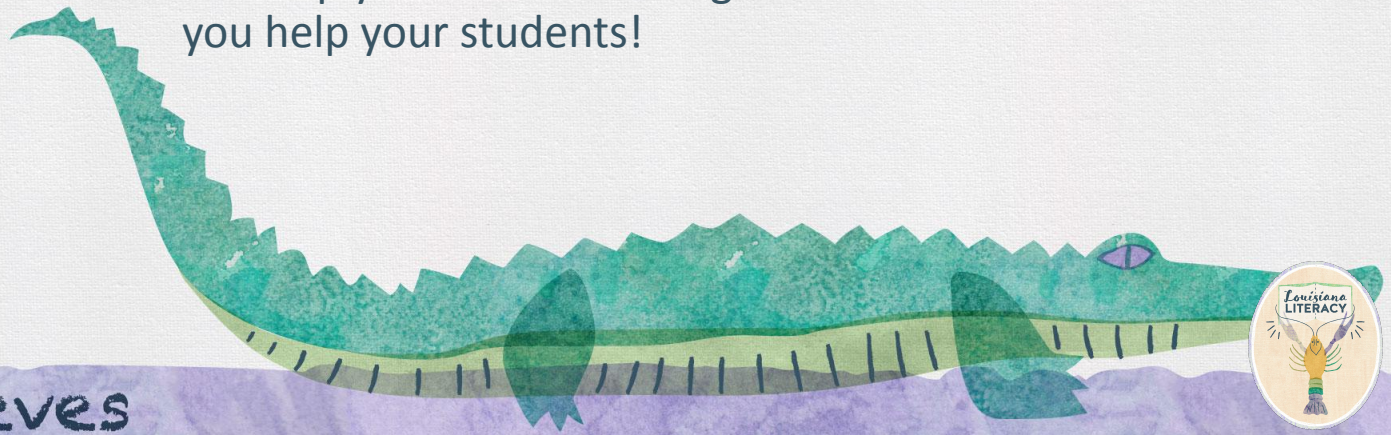
- As the strands associated with word recognition become *increasingly automatic* and the strands associated with language comprehension become *increasingly strategic*, they weave together to reflect *skilled reading* - the fluent execution and coordination of word recognition and text comprehension.

- As students become skilled readers, they are able to read and meaningfully engage with complex texts.

- Struggles with any of the strands of the rope will inhibit students' movement to skilled reading.

Final Thoughts

- Develop systems to identify and monitor students' progress on these strands.
- Don't minimize the importance of the language comprehension strands - particularly in the earliest grade levels where it might be easiest to focus on word recognition.
- Develop your understanding of the nuances of the code - this will help you help your students!



Engage

Reflect on your curriculum or the current lessons that you use to teach reading foundations. How is the science of reading reflected in these? Moving forward, what is something you want to do differently to enhance your work and ensure it is aligned with the principles of the science of reading?

Questions or Suggestions?

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References

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