

Experience Dyslexia



Agenda

- Introduction
- Simulation
- Reactions/questions/thoughts about simulation
- Understanding the Dyslexic Brain
- The Reading Rope & Four Processors
- Why Structured Literacy?
- What can I do?

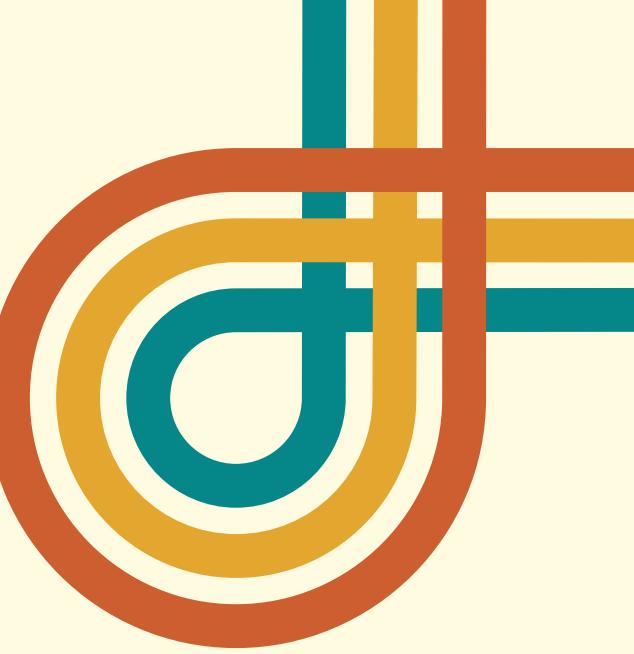
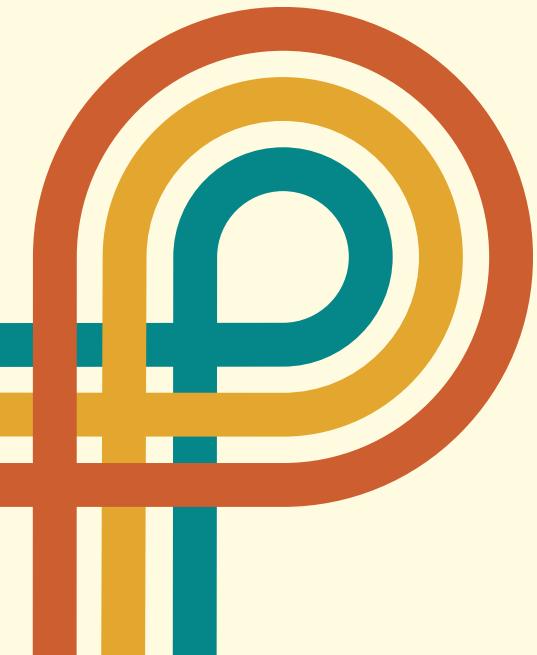
Introduction

DA's Literacy Specialist Team

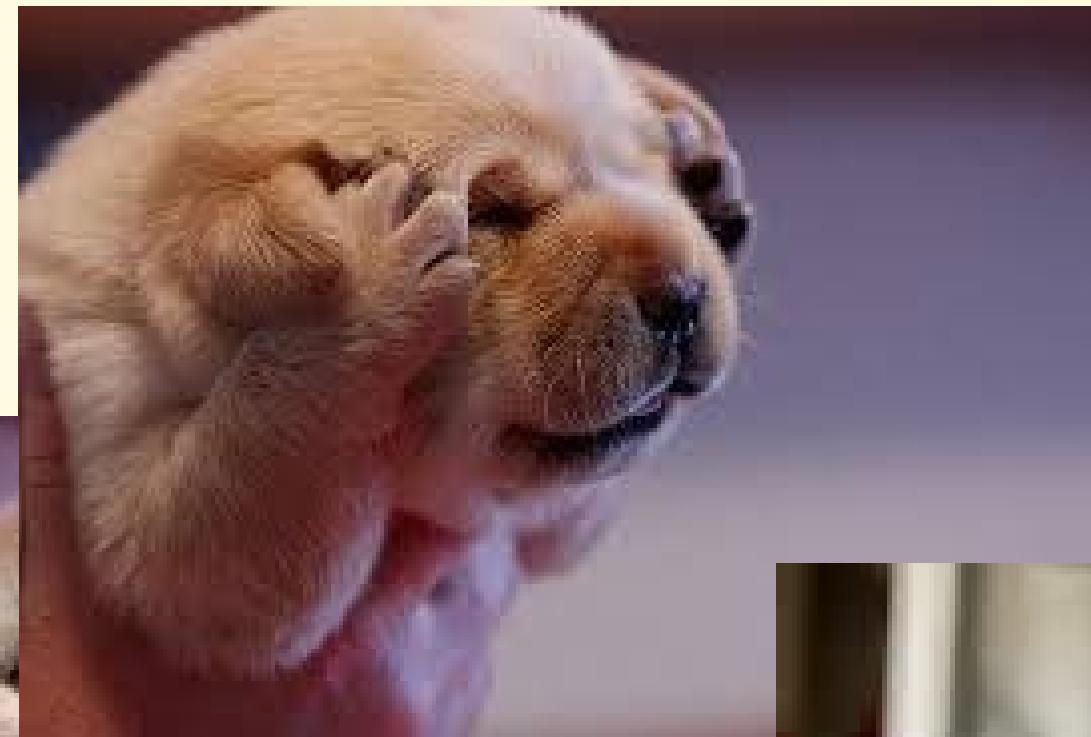
- Jessica Bodden
- Tammy Curran
- Dana Green
- Jenna Jeffress
- Kyla Pellouchoud



Experience Dyslexia Simulation



Reactions and questions about the simulation?



Definition

- “Dyslexia is a specific learning disability characterized by difficulties in word reading and/or spelling that involve accuracy, speed, or both and vary depending on the orthography. These difficulties occur along a **continuum of severity** and persist even with instruction that is effective for the individual’s peers. The causes of dyslexia are complex and involve **combinations of genetic, neurobiological, and environmental influences that interact throughout development**. Underlying difficulties with phonological and morphological processing are common but not universal, and early oral language weaknesses often foreshadow literacy challenges. Secondary consequences include reading comprehension problems and reduced reading and writing experience that can impede growth in language, knowledge, written expression, and overall academic achievement.

Psychological well-being and employment opportunities also may be affected. Although identification and targeted instruction are important at any age, language and literacy support before and during the early years of education is particularly effective.”. © 2026 International Dyslexia Association



Dyslexia Definition

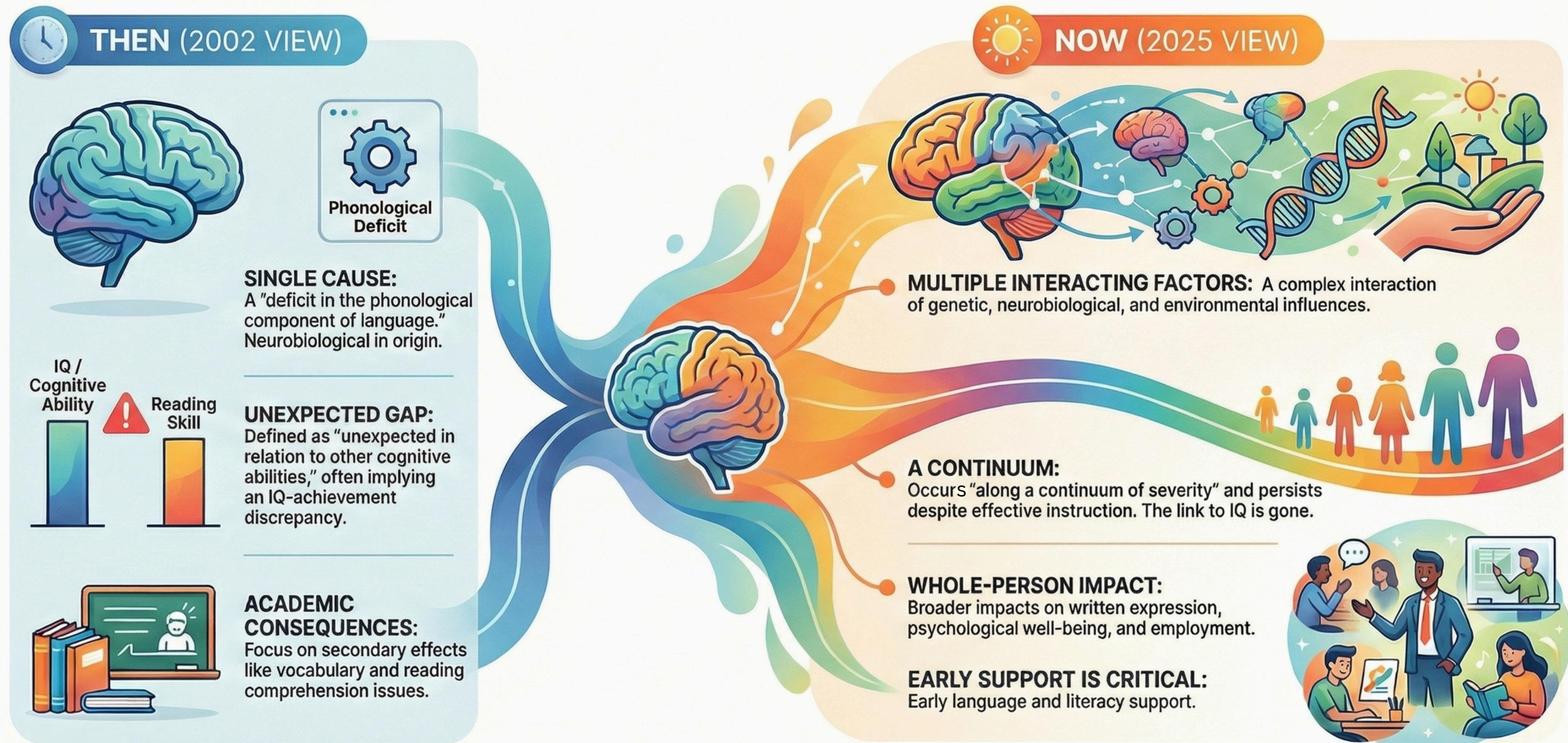
IDA updated the definition in 2025:

- Clarified
- Expanded
- Specified

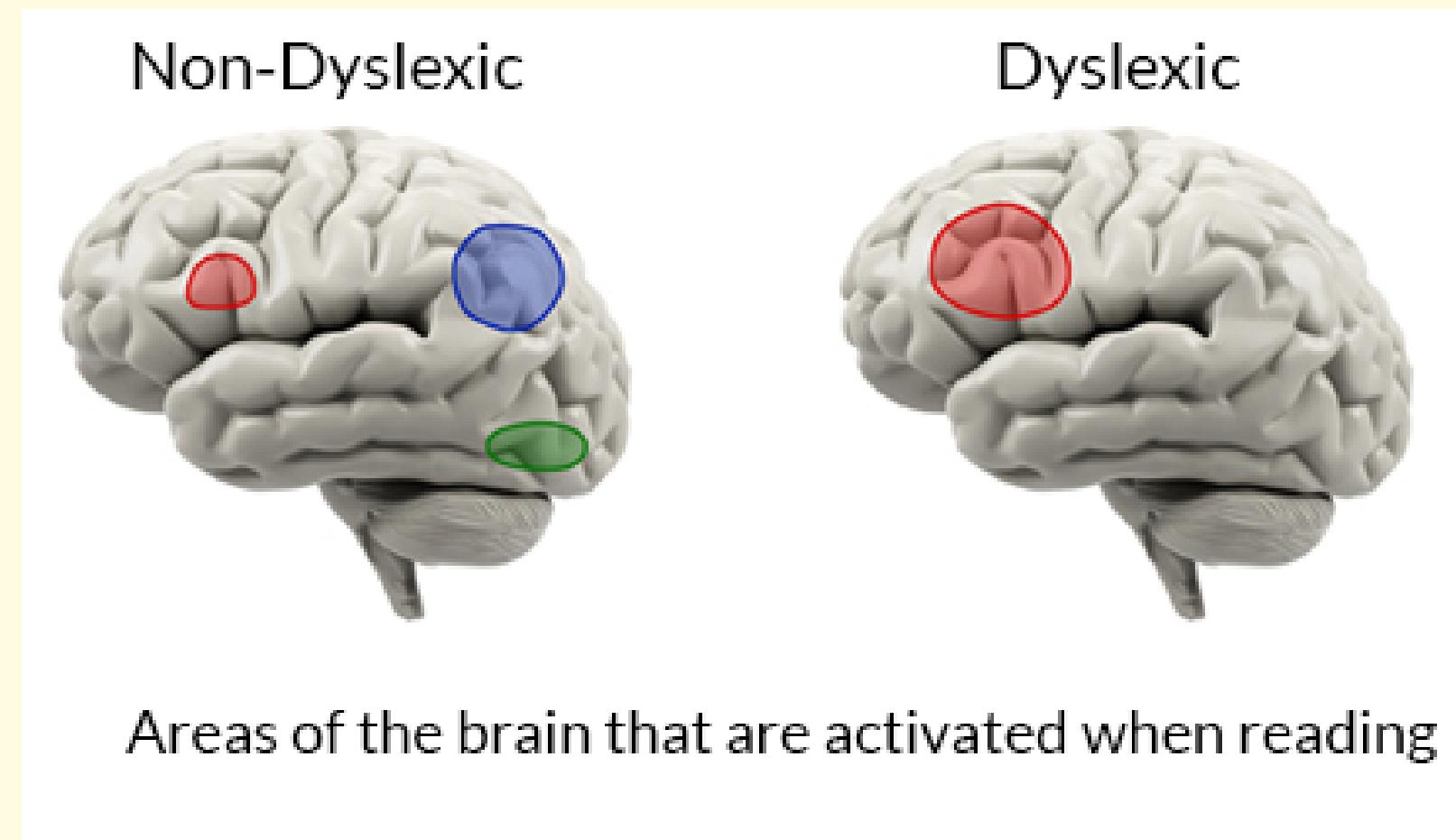


Dyslexia Redefined: Understanding the New 2025 Definition

Exploring the key shifts in the International Dyslexia Association's (IDA) definition, from a 2002 perspective to the 2025 comprehensive understanding



Understanding the Dyslexic Brain



Understanding the Dyslexic Brain

Verbal Reasoning: Knowledge of words, verbal concepts, verbal reasoning, and expression.

Visual Spatial: Understanding the spatial relationships between parts and a whole, and integrating visual and motor skills.

Fluid Reasoning: Seeing the relationship among visual objects and applying that knowledge using the concept; best indicator of innate intelligence.



Understanding the Dyslexic Brain

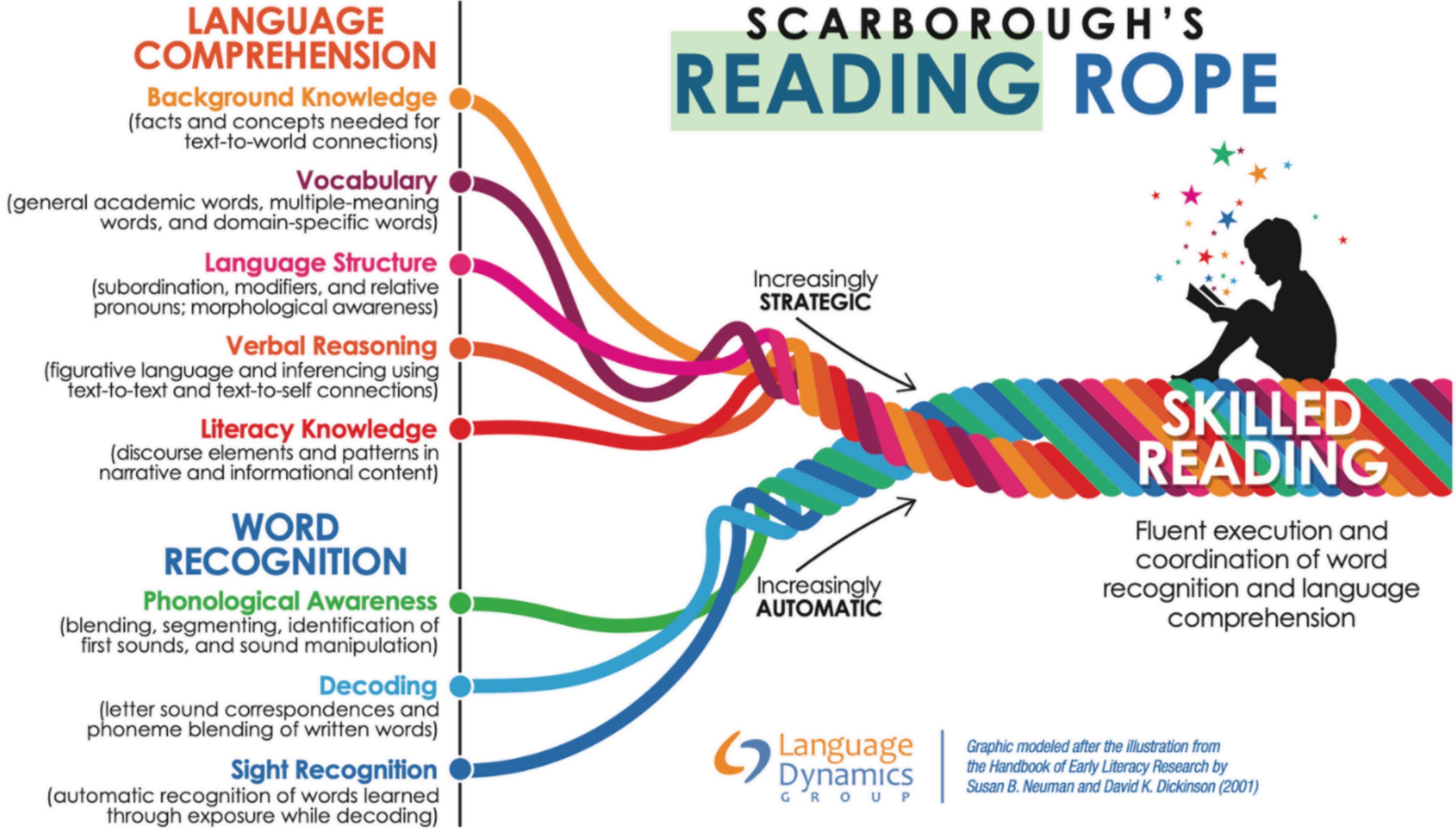
Working Memory: Holding information in mind while being able to work with information.

Processing Speed: Speed and accuracy of visual scanning and identifying visual objects, short-term memory, and visual-motor coordination.

***These two components are often impacted in those with Dyslexia.**

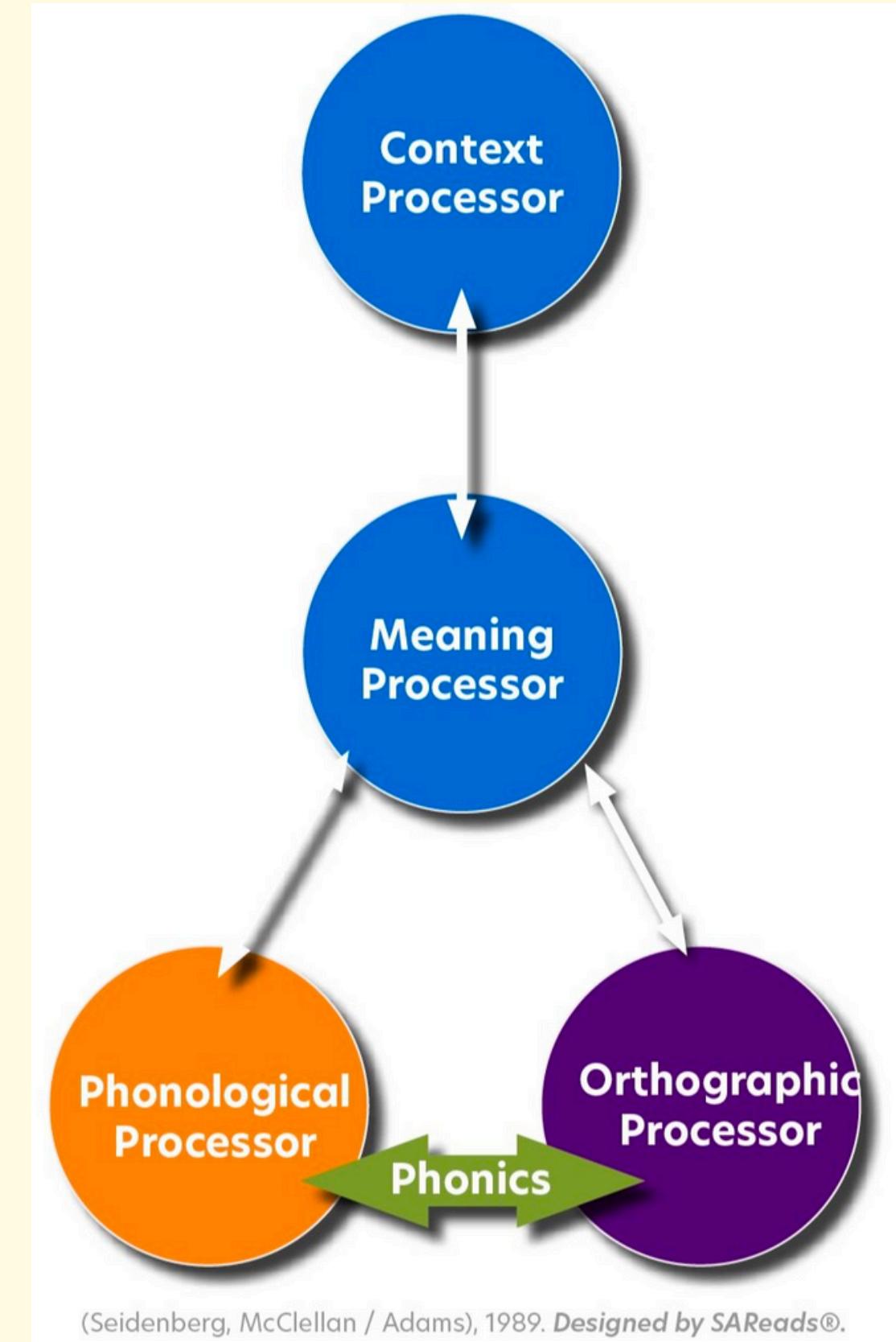


SCARBOROUGH'S READING ROPE

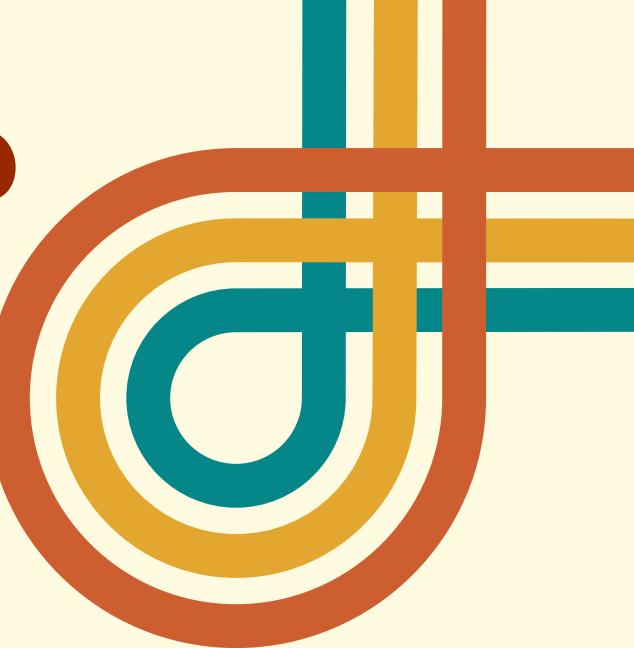


Four Reading Processors

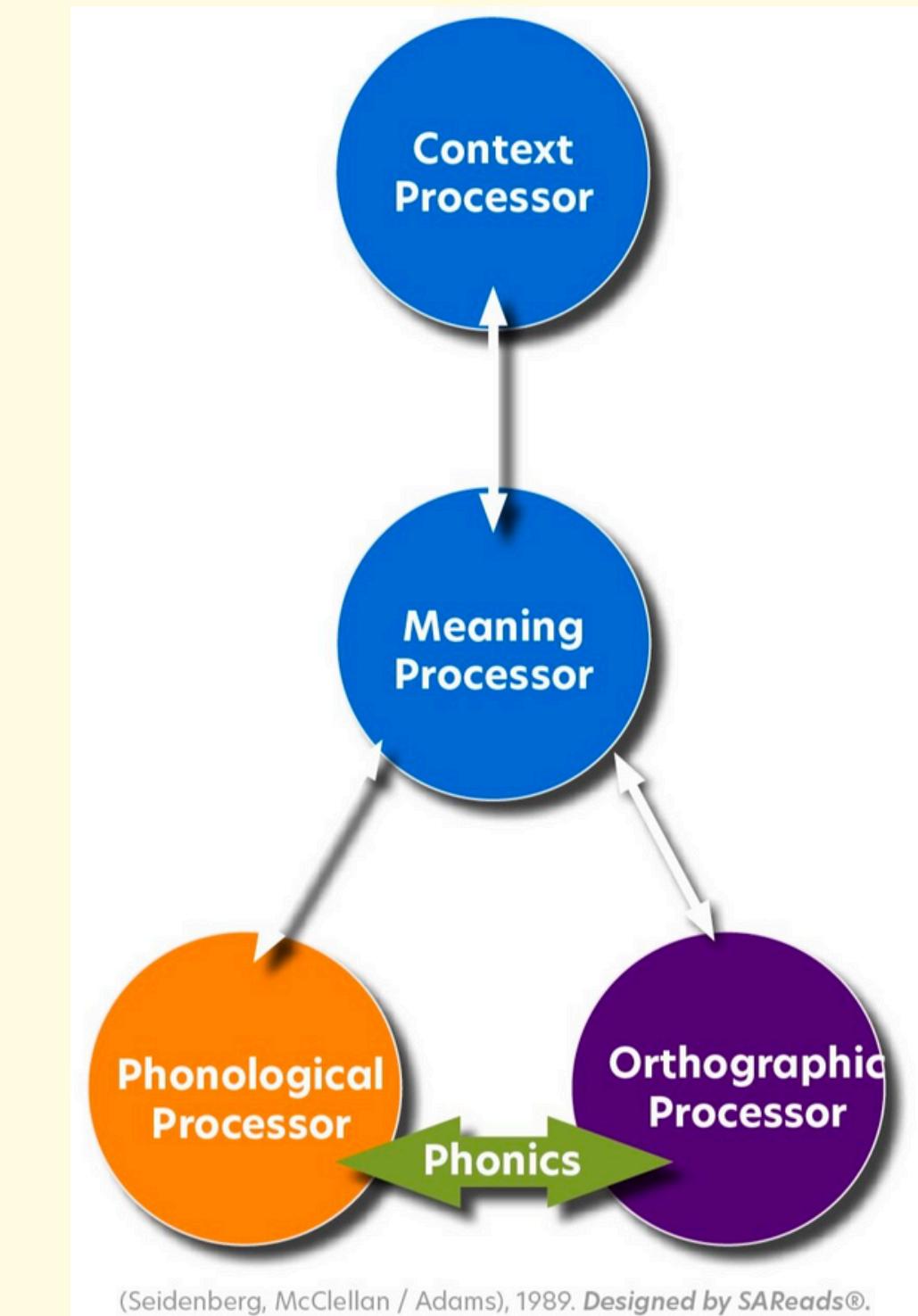
This Four-Part Processing Model is a simplified representation of the cognitive processing systems involved in reading.



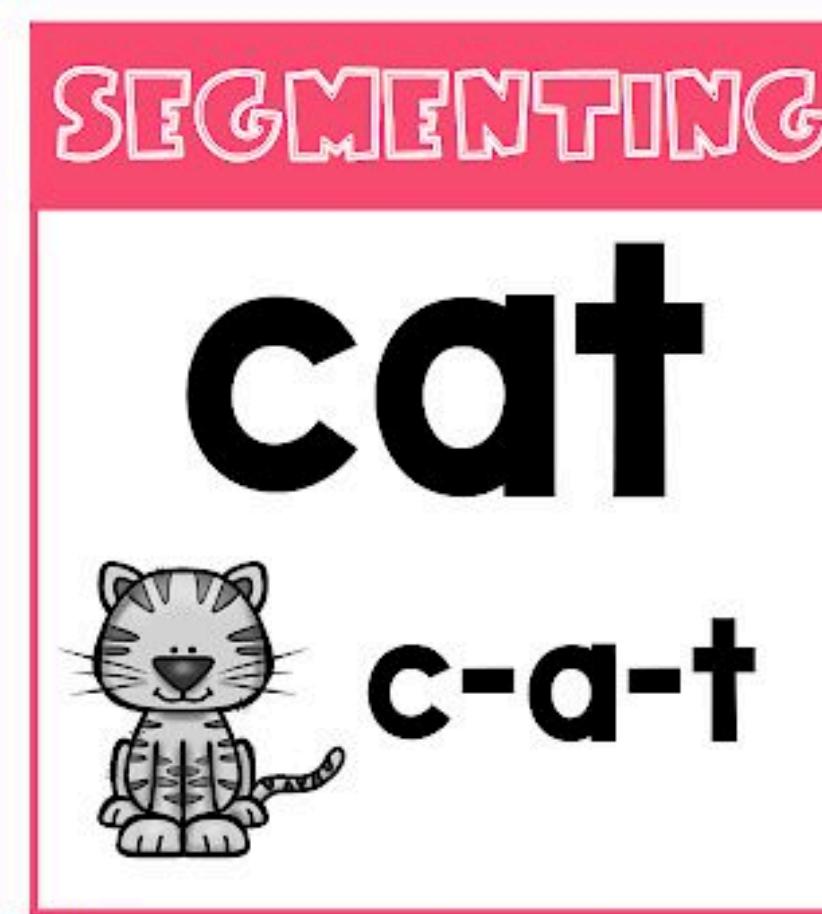
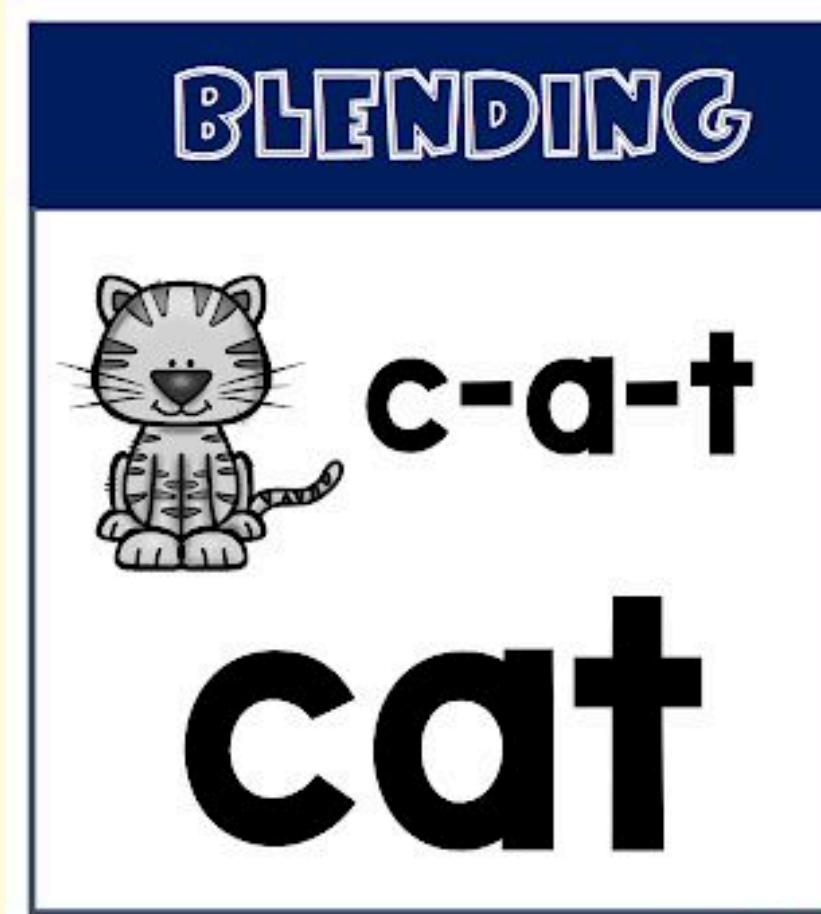
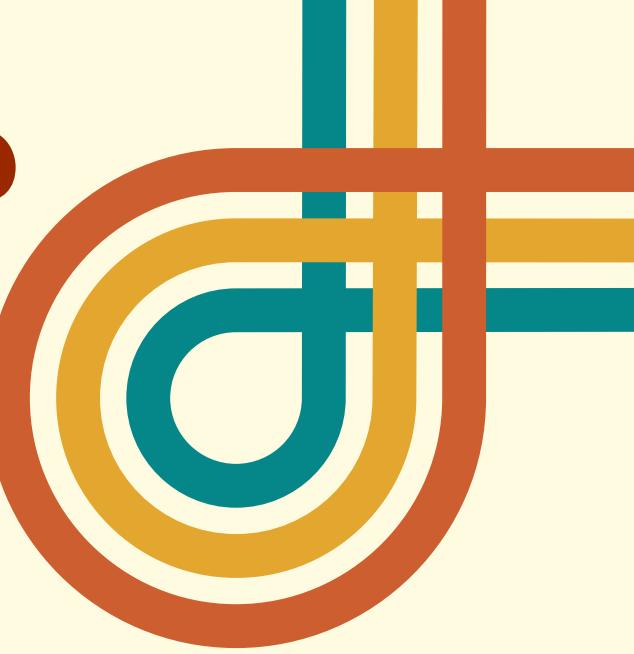
Phonological Processor



- Sound system of language (phonemes)



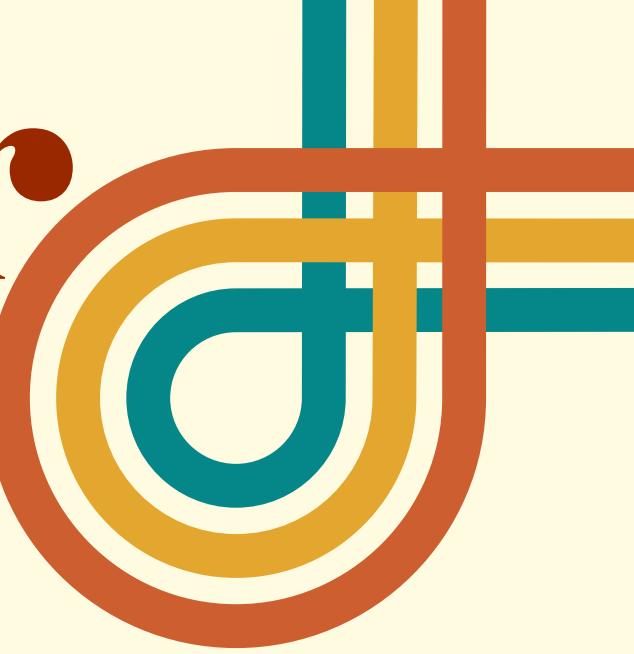
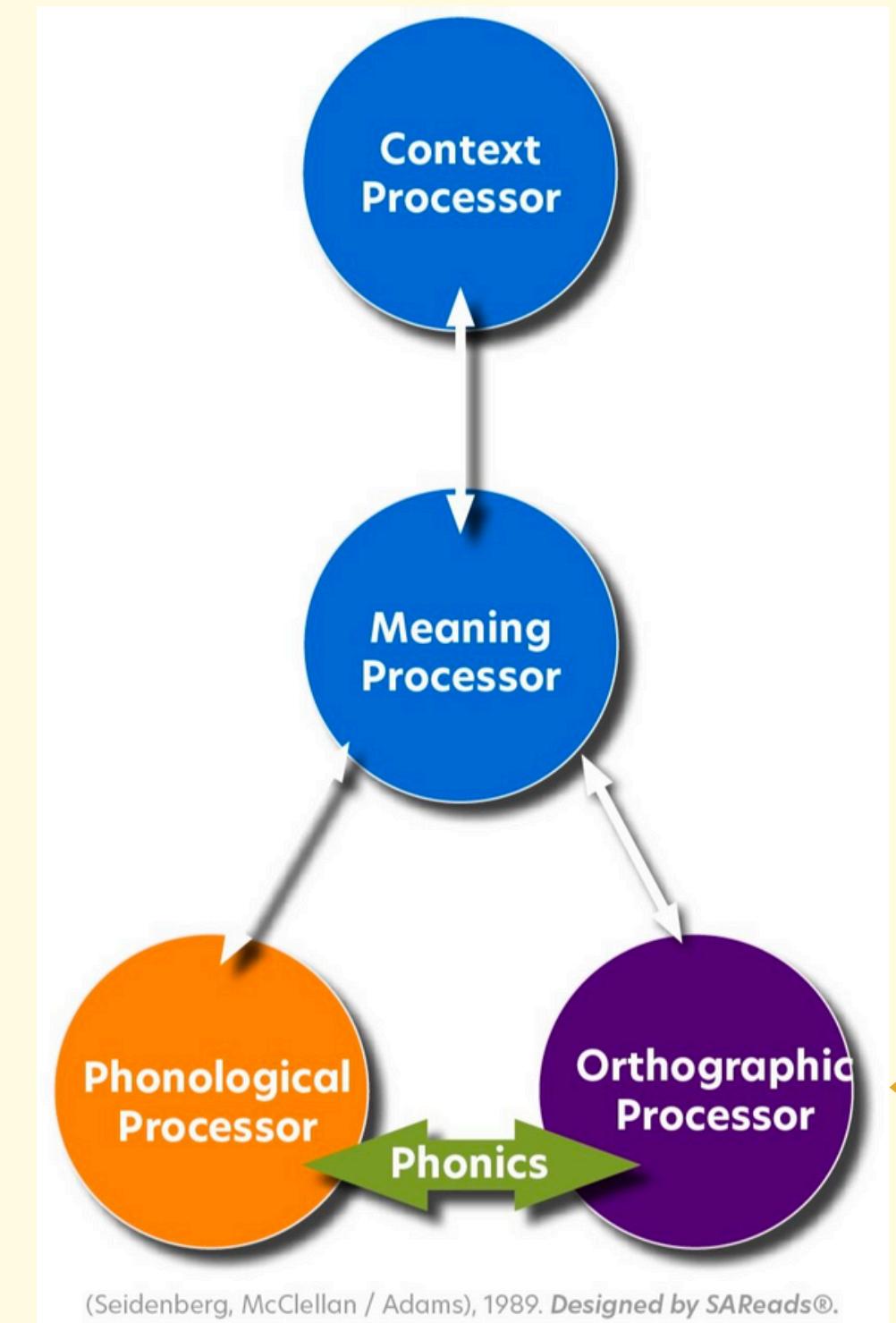
Phonological Processor



- Includes **phonemic awareness**, which is essential for blending (reading) and segmenting (spelling)

Orthographic Processor

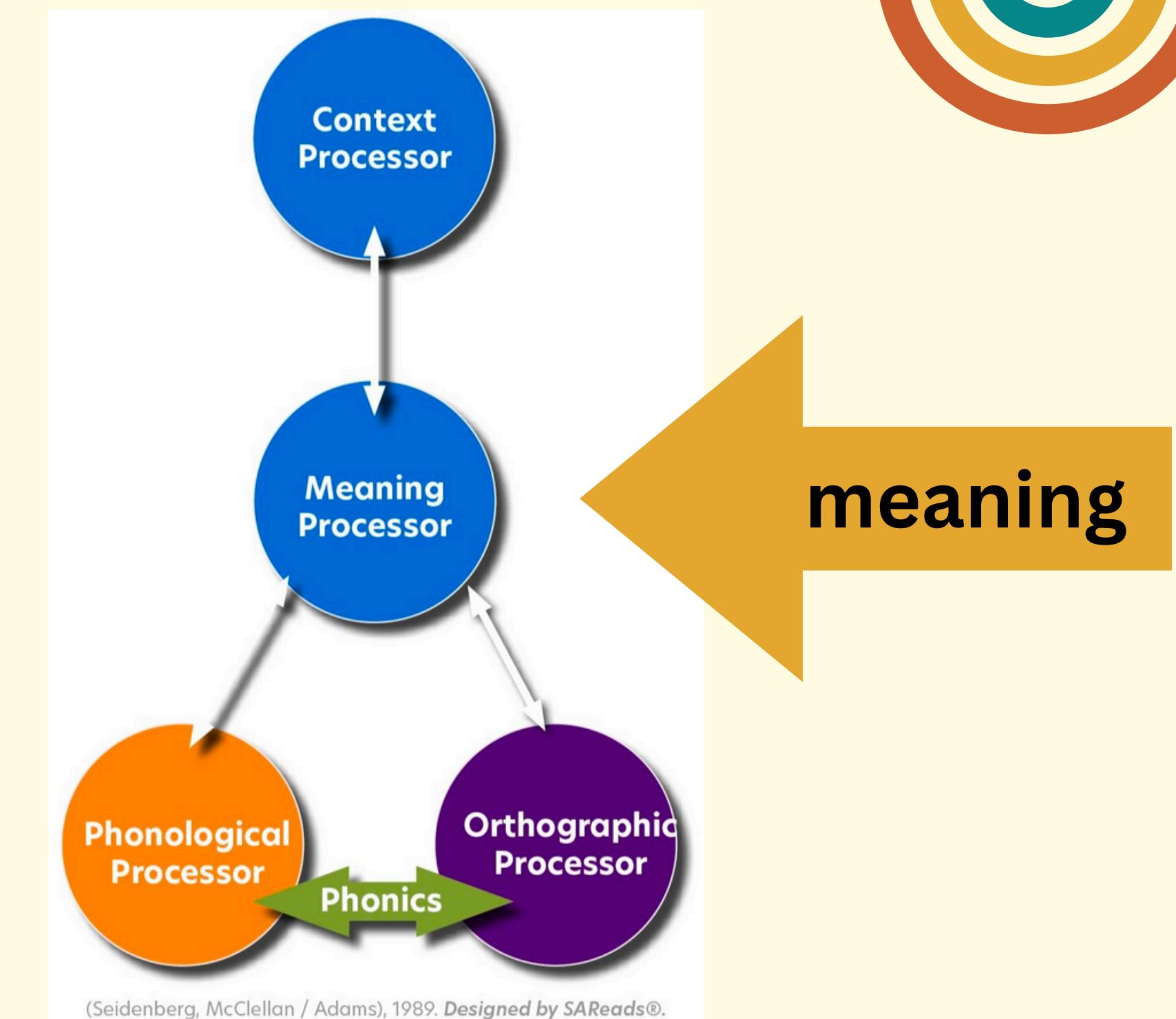
- **Letters**, letter patterns, spelling conventions
 - e.g., -ck at the end of short words after a short vowel
- Stores the visual representation of words for quick recognition



letters

Meaning Processor

- Meanings of words
- Morphological knowledge
 - prefixes, suffixes, base words



Examples:

- **Heal and health:**

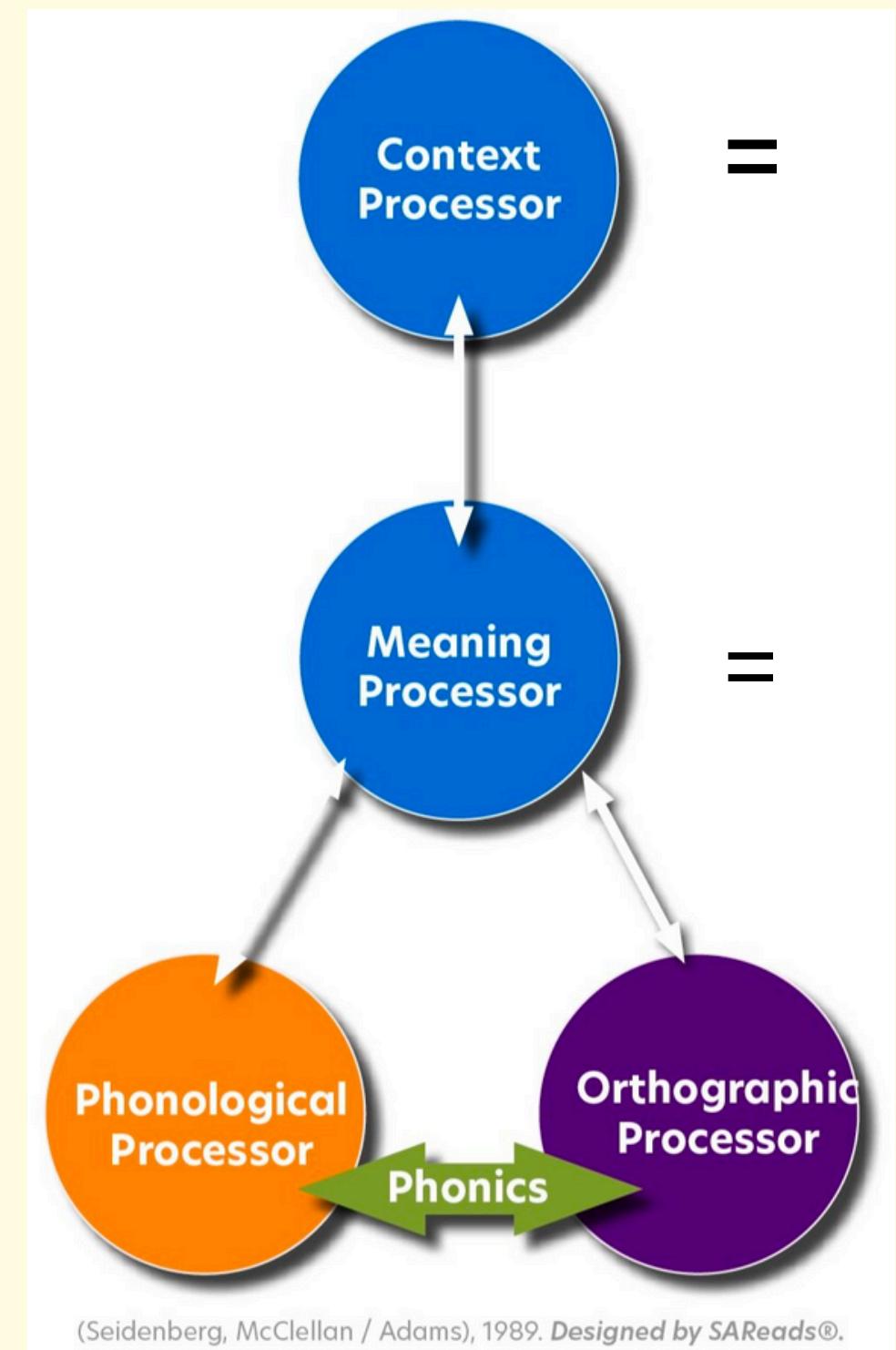
- Related in meaning and share a common base
- Spelling reflects this connection, even though the vowel sound changes.

- **Sign and signal:**

- Sign has a silent g in pronunciation
- The g is kept in the spelling to show its relationship to words like signal and signature, where the g is pronounced.

Examples:

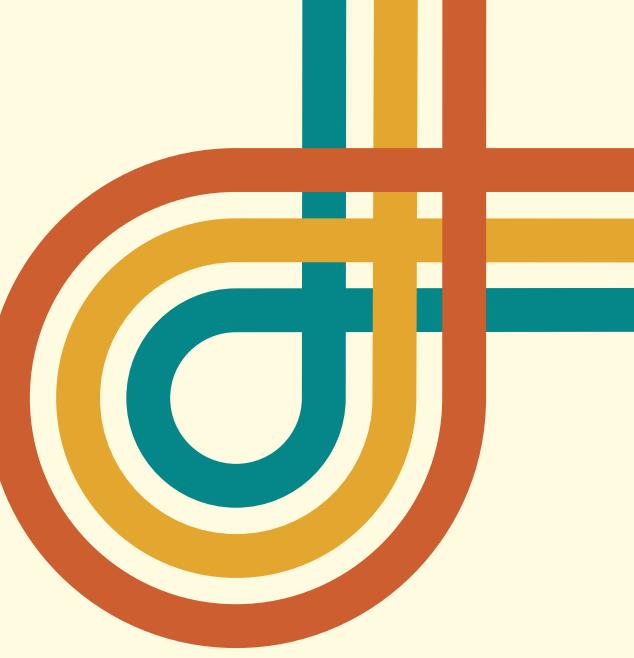
/kup/ =



= I need a cup
of coffee.



= cup



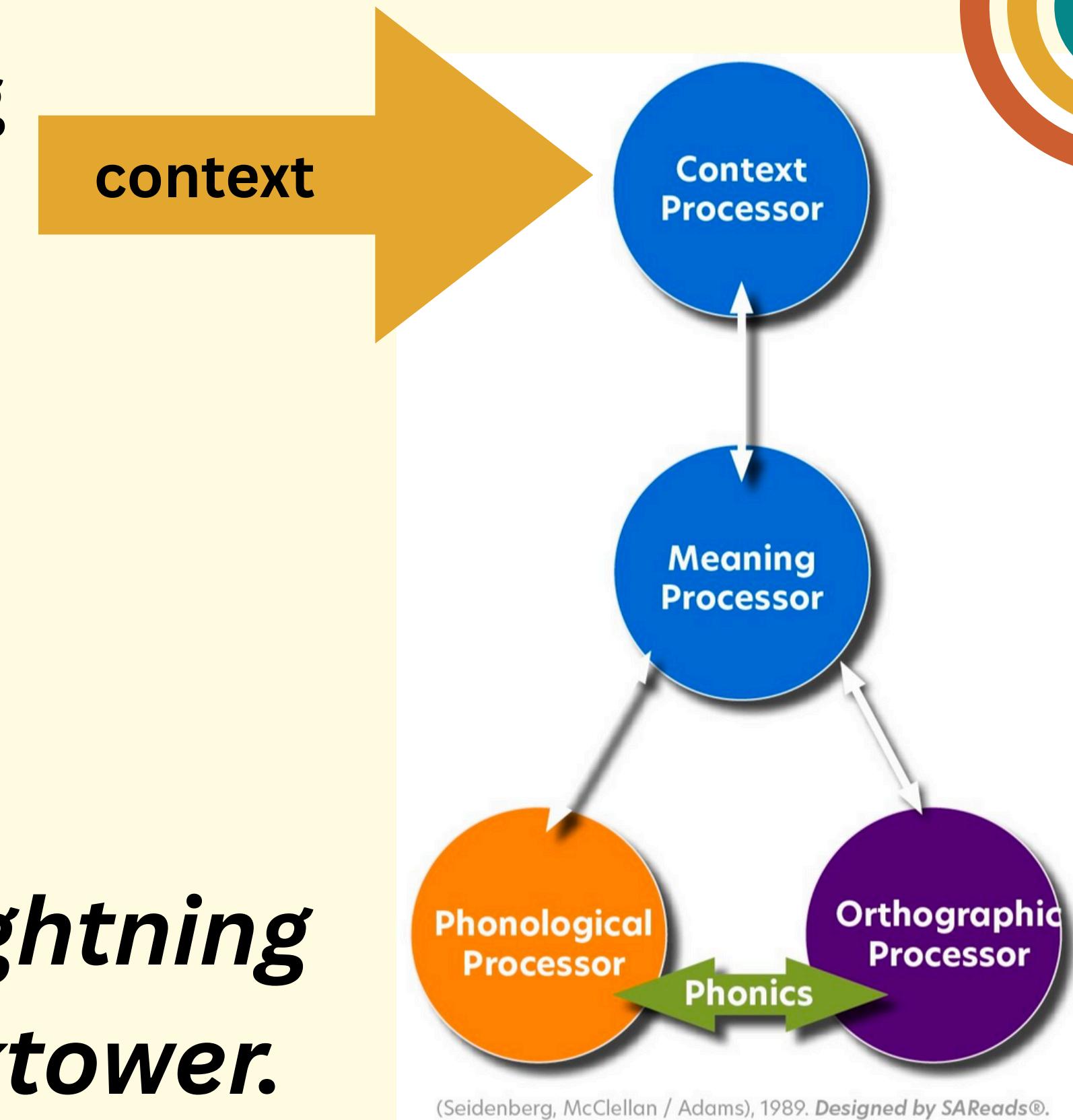
Context Processor

Provides support to the meaning processor by interpreting words based on:

- language in a sentence
- experience or circumstances
- knowledge of a concept



*The **bolt** of lightning
hit the clocktower.*



Context is Crucial!

mints

ode

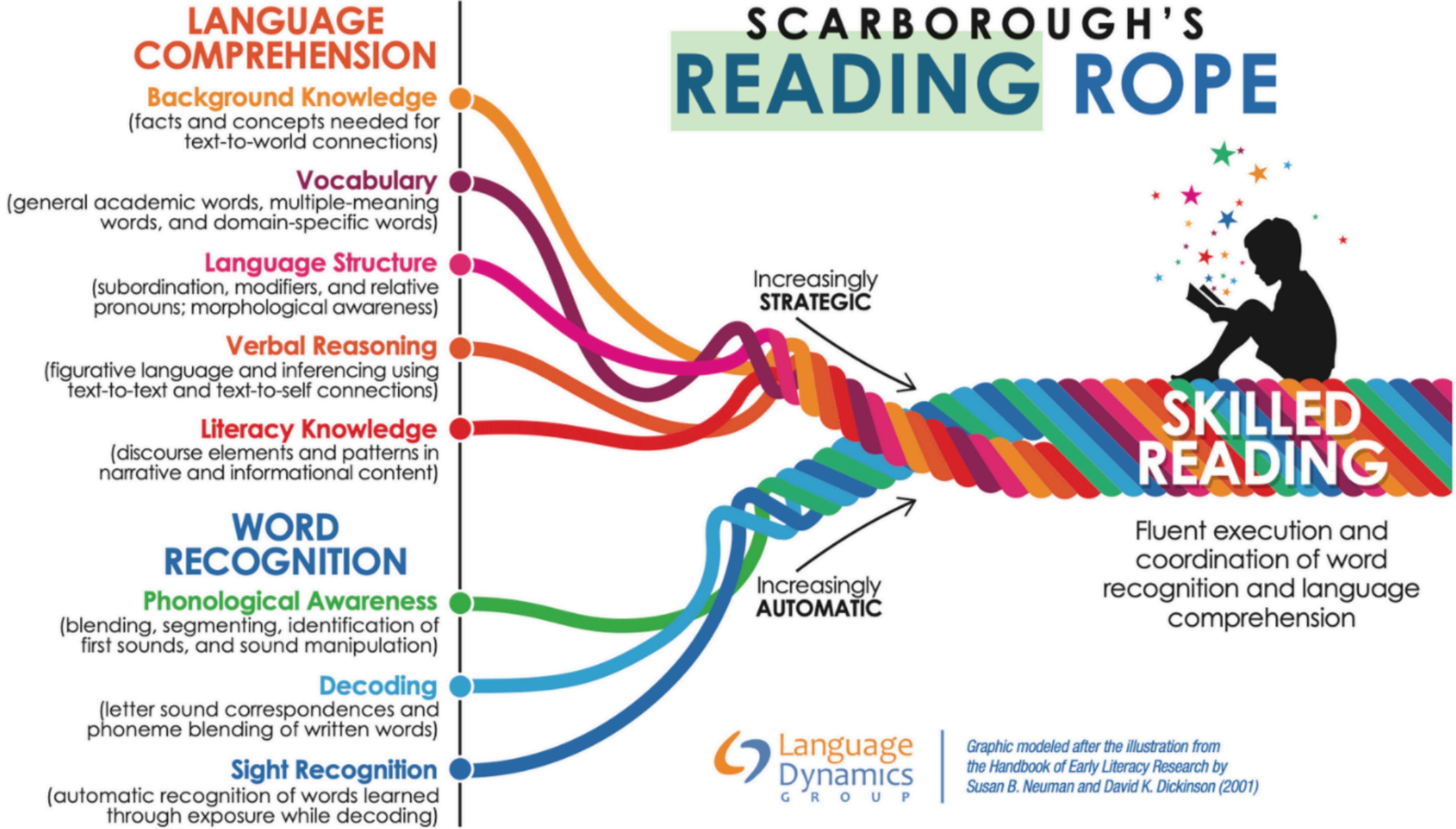
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SCARBOROUGH'S READING ROPE



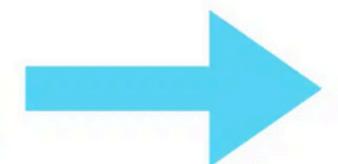
Structured Literacy

- Systematic & Explicit
- Diagnostic & Prescriptive
- Multisensory
- Builds strong neural pathways

“Structured Literacy is the embodiment of the Science of Reading in the classroom.”

~Suzanne Carreker

The Science of Reading
Evidence



Structured Literacy
Application

Source: Structured Literacy: Applying the Science of Reading in the Classroom

What can I do
to help support students
with learning differences?



Turn Empathy Into Action



School-Wide

- Structured Literacy
 - Components taught - Phonology, sound symbol association, syllables, morphology, syntax, semantics
- Multisensory Instruction
 - Integrating visual, auditory, tactile, and kinesthetic activities
- Assistive Technology
 - text-to-speech, speech-to-text, audiobooks, graphic organizers, visual timers, digital planners, AI, etc.
- Honor Accommodations
 - Extended time, scribes, read aloud, large print, quiet space/headphones, etc.



Teachers

- Wait time
- Non-verbal cues
- Reduce cognitive load
- Using the correct terminology
- Remembering the purpose of the assignment



When struggling to read a word

- Point to the word with the mistake and allow your student time to self-correct.
- Ask child: “What strategies do you have to figure out this word?” “Do you notice any patterns in this word?”
- If they are still stuck, give them the word.



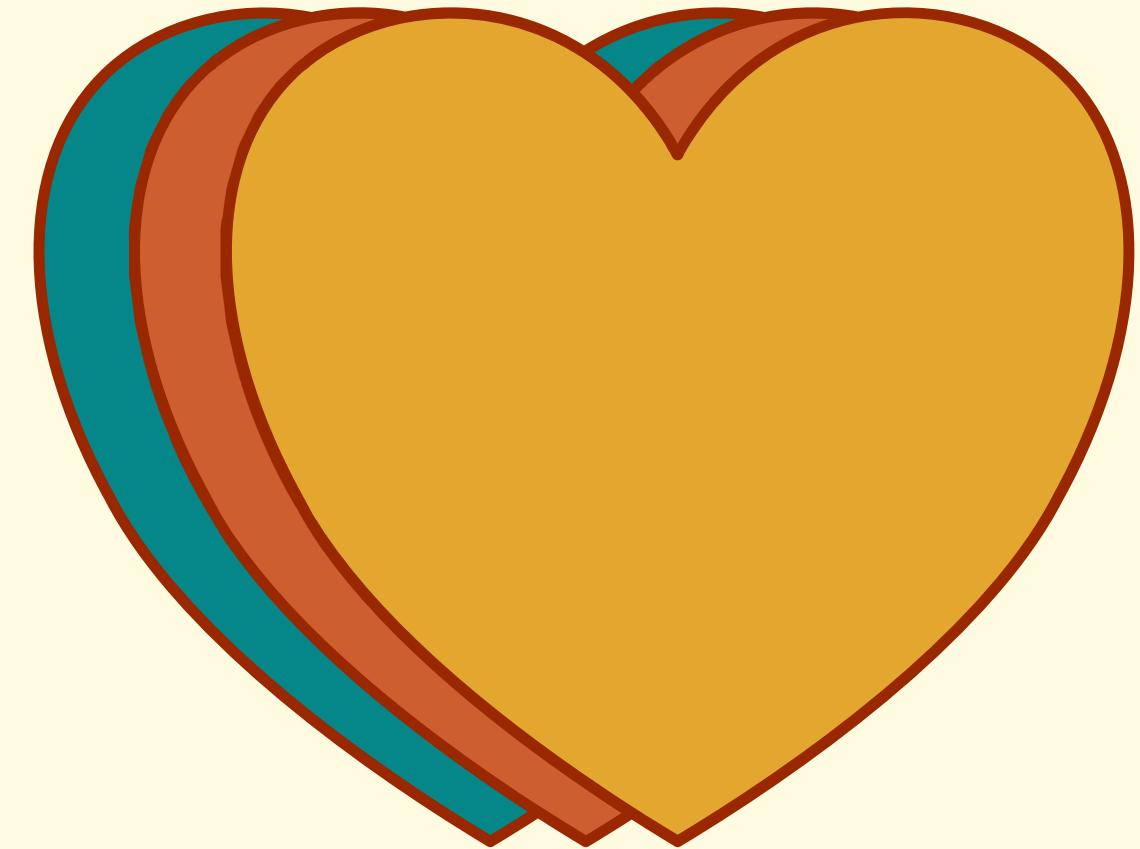
When struggling to understand

- Intentionally expose struggling readers to texts that are above their independent reading level.
 - Helps them engage with complex language
- Engage in meaningful conversations about the book
 - The 5 Ws: Who, What, Where, When, Why
 - Problem/Solution: Identifying the conflict and its resolution
 - Character Motivation: Understanding why characters act as they do



Resources

- International Dyslexia Association
- Understood.org
- Reading Rockets
- Orton-Gillingham Academy



Thank you!

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