

Unlocking Literacy: The Science of Reading for English Learners (EALS)

Angela Skene, 2024

angelakimskene@gmail.com

1

Teachers will identify and list key concepts of the Science of Reading (e.g., phonics, fluency, comprehension)

1

Teachers will understand the foundational components of the Science of Reading and how they apply to teaching English Additional Learners reading skills

Language and Content Objectives

2

Teachers will be able to summarize how specific Science of Reading strategies support EALs.

2

Teachers will reflect and evaluate their own instructional strategies, ensuring they align with the Science of Reading principles to better support English Additional Learners (EALs) in their classrooms.

Overview

- 01 Define Reading
- 02 Explore SOR fundamentals

- 03 SOR & implications for EALS/MLLs
- 04 Best practices: support EALs using SOR

Key Terms

- 01 Science of Reading
- 03 Comprehensible Input

02 Phonemic
Awareness &
Phonics

04 Oral Language Proficiency

Building Background Knowledge ...

• Take a few minutes to reflect and write down your own understanding of **what reading means**. Think about the process of reading and why it's important.

• Then, share your ideas with your group and work together to create one clear statement that defines reading. Be prepared to share your group's statement.

Reading is:

- the process of interpreting and understanding written or printed symbols/code, usually letters and words, to extract meaning from them. It involves not just recognizing the words, but also connecting them to prior knowledge, thinking critically about the content, and forming mental images or ideas.
- reading allows us to gather information, comprehend stories, and communicate ideas across time and space. It's a cognitive activity that engages our brain in making sense of language, which can be in various forms such as books, articles, signs, or even digital media.
- in simpler terms, reading is the way we turn symbols into thoughts and ideas that help us understand the world.



BUZZWORD: Science of Reading

The **Science of Reading** refers to a vast body of research from cognitive science, linguistics, psychology, and education that explains how the brain learns to read. It focuses on understanding the processes involved in reading















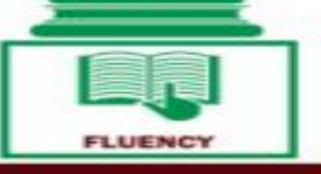
The National Reading Panel identified five key concepts at the core of every effective reading instruction program: Phonemic Awareness,

Phonics, Fluency, Vocabulary, and Comprehension.

Since the panel's report was released in 2000, these concepts have become known as the "five pillars" of early literacy and reading instruction.







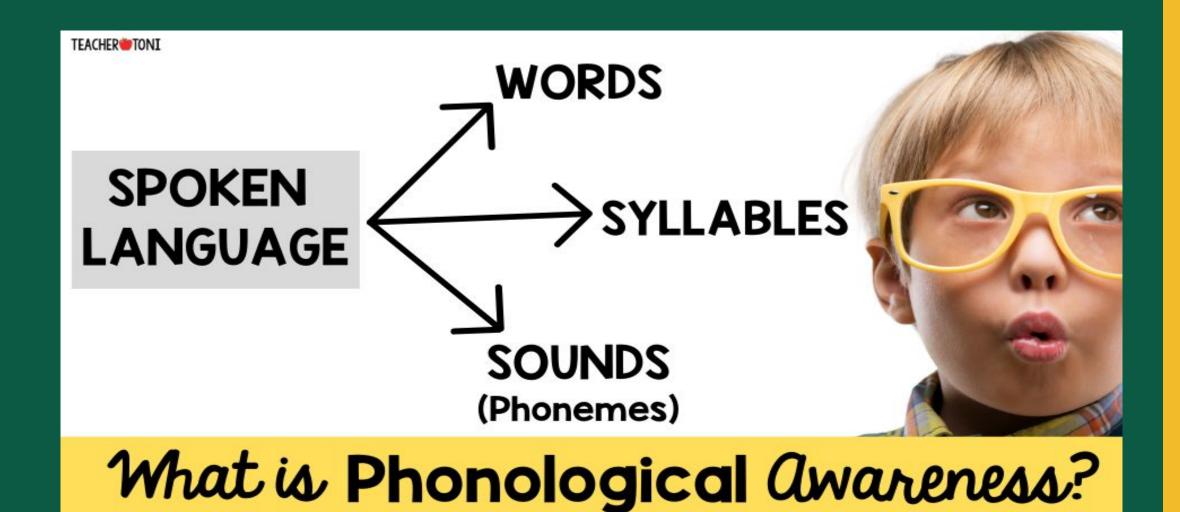




Phonological awareness involves noticing and/or manipulating the sound structure of spoken language

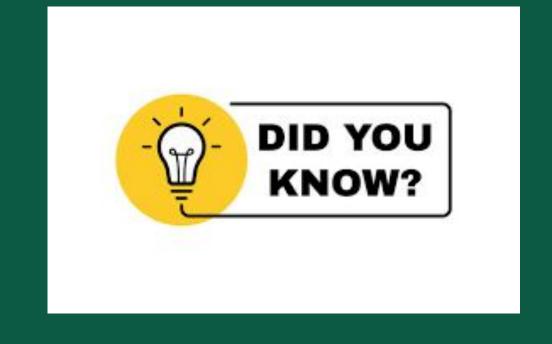
Understanding and identifying the sounds (phonemes) that make up words..

hear, identify, manipulate sounds in spoken words



The word phonology comes from Ancient Greek φωνή, phōnḗ, 'voice, sound', and the suffix -logy (which is from Greek λόγος, lógos, 'word, speech, subject of discussion

Phonemes are the smallest units of sound in a spoken language. Even though there are only **26 letters in the English language,** there are 44 phonemes. These include all the consonant sounds, digraphs, short vowel sounds, long vowel sounds, diphthongs, and r-controlled vowels.



Phonemic Awareness Skills

ISOLATING Sounds:

- What is the Ist sound in cat? (N/)
- What is the last sound in cat? (/t/)
- What is the middle sound in cat? (/s/)

BLENDING Phonemes:

- Blending onset and rime: s-at = sat
- Blending individual phonemes:
 /s/ /a/ /t/= sat

SUBSTITING Phonemes

- Say cat: What word do you get when we change the /k/ to /p/? (pat)
- Say sled. What word do you get when you change /l/ to /p/? (sped)

DELETING Phonemes:

- Say cat: What word do we get when we take away the /k/? (at)
- Say frog. Take away the /r/. What is left? (fog)

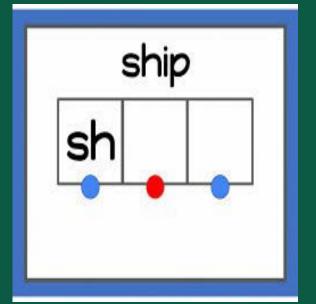
SEGMENTING Phonemes:

- Segmenting onset and rime:
 cat = k at
- Segmenting individual phonemes:
 cat= /k/ /a/ /t/

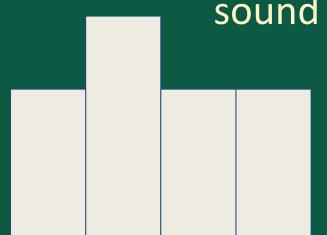
ADDING Phonemes:

- Say at: What word do we get when we add /s/ before at?(sat)
- Say sick. What word do you get when you add /l/ after /s/? (slick)

Orthographic mapping



sound mapping

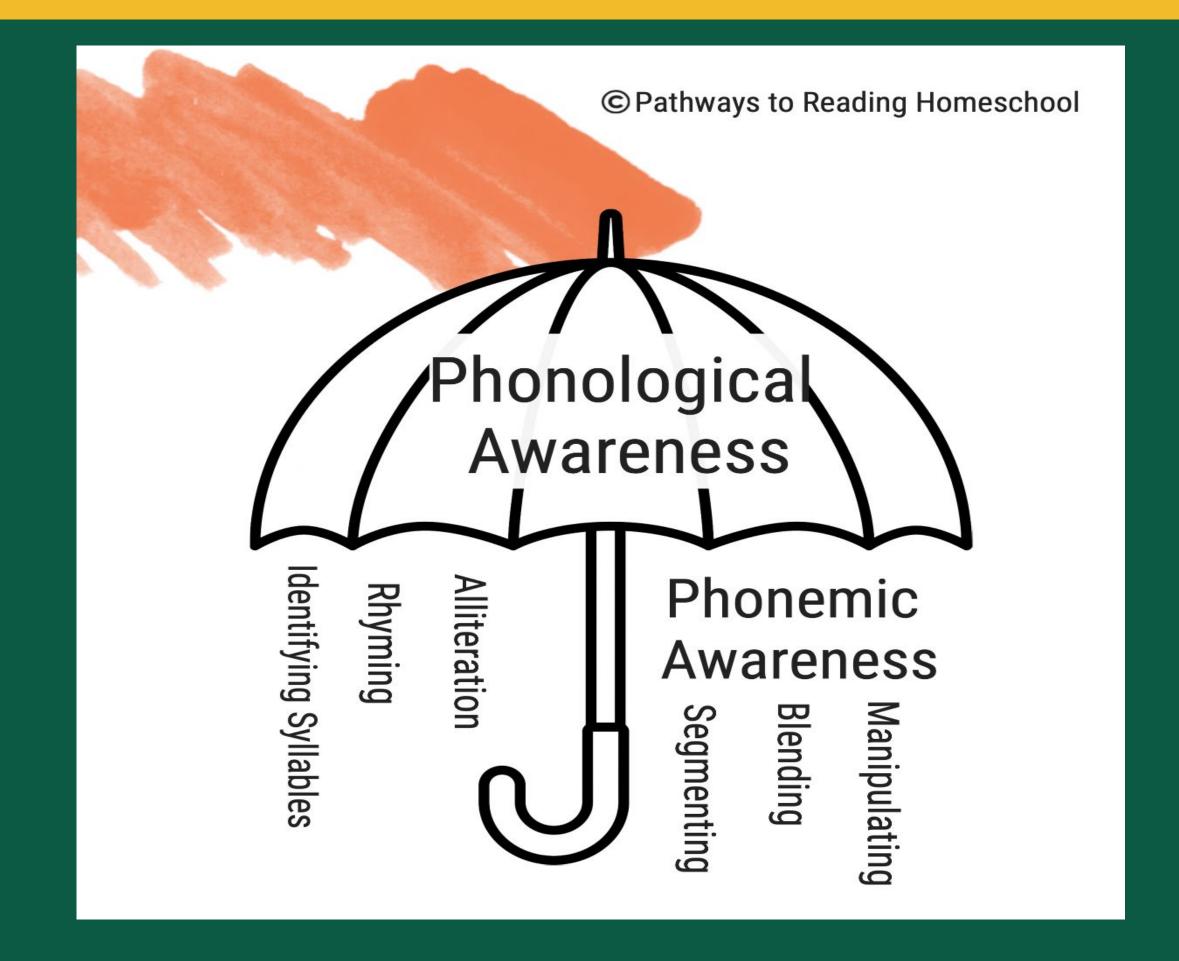


Phonics: The relationship between letters and sounds, helping learners decode words.

These skills are required for students to be successful in reading.

In fact, students who are not proficient readers by grade 3, are 4x likely to not graduate.

Proficient reading requires skills in BOTH decoding **and** comprehension, both are necessary, NEITHER alone is sufficient.



Fluency	Vocabulary	Comprehension
Fluency is the ability to recognize words and understand their meaning at	Vocabulary refers to the body of words a person understands and uses in both spoken and	Comprehension is the ultimate goal of reading—it's the process of understanding, interpreting, and making meaning from what is read. Comprehensio involves not just recognizing words and decoding
the same time. Fluent readers can:	written language.It is a crucial component of	them, but also engaging with the text to extract meaning, infer, and connect the content to prior knowledge.

- Instantly recognize words without effort
- Group words into meaningful phrases
- Read aloud smoothly and with ease
- Use expression to connect prior knowledge with the meaning of the text, leading to better comprehension

- reading comprehension because understanding the meaning of words is essential for making sense of what is being read.
- Receptive Vocabulary: The words a person can understand when they hear or read them.
- Expressive Vocabulary: The words a person can use correctly when speaking or writing.
- Explicit instruction, showcase words in context

- 1. Literal Understanding: Grasping the basic meaning of the text—who, what, where, when.
- 2. Inferential Understanding: Drawing conclusions or making predictions that go beyond the explicit content of the text.
- Critical Thinking: Evaluating the text, understanding the author's purpose, and forming judgments about the material.

Effective comprehension relies on multiple skills working together, such as fluency, vocabulary, background knowledge, and language structure. In the Science of Reading framework, comprehension is taught explicitly, with strategies that help students learn how to monitor their understanding, ask questions, summarize, and use context clues.

Why the Science of Reading Alone May Not Fully Address the Needs of EALs

- SOR does not take into account older readers and and their need to understand the
 words being used in texts, the role of L1, culture, BK, writing, motivation, comprehension,
 importance of oral language, integration of SLRW, How L1 and L2 learning are very
 different
- EALS require greater emphasis on oral language development, especially in listening comprehension skills as they progress thru the grades so they can attain sufficient language proficiency
- Accurate and fluent word recognition & adequate language proficiency to comprehend text
 - All stress the importance of oral language and vocabulary as strong pillars/ foundations to achieve comprehension, NOT phonemic awareness for EALS

Science of Reading for EALs:

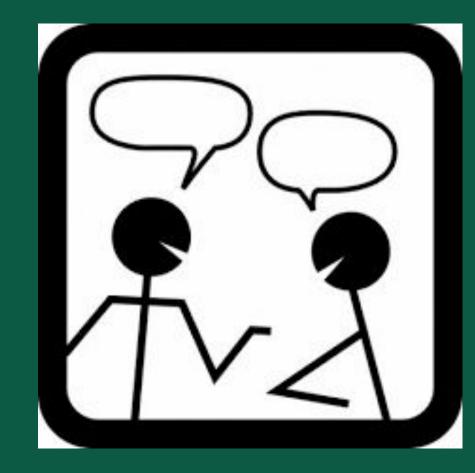
- An understanding that oral language is acquired naturally, but mapping oral language to written language requires explicit instruction to develop new neural pathways.
- There are differences between literacy development and language development; however, both must be attended to for students to comprehend texts. As such, instructional emphasis must also be placed on oral language development and English language development for English learners, (i.e., students learning to speak and understand English as they are learning to read and write) to ensure students are not simply decoding, or attempting to decode, words that they do not understand.

*The Reading League Summitt: Joint Statement Understanding the Difference: The Science of Reading and Implementation for ELs/EBs (2023)

- A student's home language is an asset that should be valued and nurtured because of its intrinsic value and because it can be used to leverage second language acquisition and second language literacy development. Instructional practices in which teachers' explicitly encourage students to make connections between their home language and English benefit their language and literacy development.
- Whenever possible, students should have access to dual language instruction in which a student is able to learn in their home language and in English to work towards the goal of positive literacy outcomes in both languages.

*The Reading League Summit: Joint Statement Understanding the Difference: The Science of Reading and Implementation for ELs/EBs (2023)

- There are differences between **literacy** development and language development; however, both must be attended to for students to comprehend texts. As such, instructional emphasis must also be placed on oral language development and English language development for English learners, (i.e., students learning to speak and understand English as they are learning to read and write) to ensure students are not simply decoding, or attempting to decode, words that they do not understand!!
- Really Great Reading



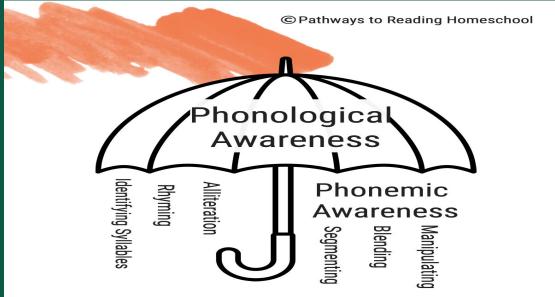
I think the main idea of the paragraph is...

I agree/disagree with the points in the paragraph because...

This paragraph reinforces/connects to SOR

Recognizing the connection between sounds and letters (print) is a key skill for learning to read. This is especially important for English Additional Learners (EALs) because English has many different ways to spell the same sound. Unlike some languages where one letter always represents one sound, English letters can have multiple sounds. That's why explicit instruction on the various ways English sounds are spelled is crucial for

EALs to develop strong reading skills.



Why Both Literacy and Language Development Matter for Comprehension

For students to comprehend texts, they need both strong literacy skills (reading and writing) and robust language development. Here's why:

- **Oral Language as a Foundation**: Oral language is a precursor to reading comprehension. Students who are strong in listening and speaking can more easily connect spoken words to their written counterparts, facilitating decoding and vocabulary development.
- **Vocabulary Growth**: Understanding and using vocabulary in spoken language helps students grasp meaning when they encounter these words in texts. For ELs, building vocabulary through both oral practice and written text exposure is essential.
- **Grammar and Syntax Knowledge**: Knowing how sentences are structured in spoken language can help students understand sentence structures in written texts, aiding comprehension. For ELs, this means learning both the structure of English and how to apply that to their reading.

Vocabulary Development

EALS & SOR

Phonological
Awareness
and Phonics

Oral Language
Development

Comprehensibility



Fluency

Comprehension

- Comprehensible input is a prerequisite for English acquisition (and learning to read in English) 1= the linguist cometterce already required. Incrementally challenge the learner. (stretch, stretch and stretch the learner) ZPD, motivation
- Comprehensible input (language that is understandable to the learner) is a prerequisite for language acquisition (Krashen, 1985)
- Learners must understand the meaning of new language through nonverbal cues or through language they already understand
- Involves scaffolding and other prewriting strategies

- Oral language proficiency: must be developed in EAL students. Oral development directly relates to connection to reading. Students comprehension of spoken language is a defining factor for their reading comprehension-the ultimate purpose of reading as well as for writing ability
- EALS require greater emphasis on oral language development

- Vocabulary involves connecting meaning to spoken language cues or signals.
- Conversation with explicit focus on vocabulary
- In the context of the Science of Reading, building vocabulary is vital for reading comprehension, especially for English Additional Learners (EALs). Effective instruction focuses on both teaching individual words explicitly and providing opportunities for students to learn new words through context, helping them make connections between spoken language, written words, and meaning.
- Cognates, Root & Affixes
- Purposeful, 3-4 words at a time

- Phonemic Awareness: some phoneme do not exist in a students L1, all students benefit most from phonics that is connected with meaning making and is applied in purposeful reading and writing.
- Introduction in PA that eventually includes letter-sound associations (phonics) are more likely to be productive that teaching speech sounds alone
- Teaching students explicitly mini phonics (5 mins) lessons during content lessons is MORE effective that teaching phonics in isolation, especially for older students (science picture in folder)

Fluency

- Draw on their background knowledge and experiences
- Make predictions from context
- Decode words
- Use L1 to assist L2 (cognates/roots)
- Concept of print
- Fluency is NOT a stage of development, but part of a developmental process.
- Els may struggle with reading fluency which might appear at first to be due to the struggles with word recognition (phonemic awareness and phonics) However in many cases these struggles are due to weakness in vocabulary, limited knowledge of sentence structure and phrasing (syntax) and insufficient exposure to target print

Comprehension is sometimes impeded by reading aloud (attention changes to pronunciation and decoding and not comprehension)

 EALs have less opportunity to read aloud in English with feedback than their native speaking peers (NLPR) ELs should read silently, aloud, then feedback, then they have the opportunity to recast (try again)

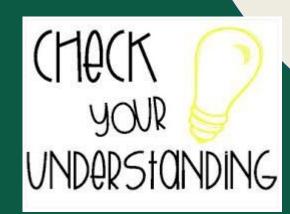
We need students to decode (phonics) but they also need to recognize words

Reading Instruction for EALS

- Focus on Oral Language Development: Teachers should provide ample opportunities for ELs to speak and listen in English. This can include classroom discussions, partner work, and explicit instruction in listening and speaking skills. These activities help students practice new vocabulary, syntax, and pronunciation.
- Integrate English Language Development (ELD): Teachers must explicitly teach English grammar, vocabulary, and sentence structure while also focusing on reading and writing. This might mean pulling out specific language features within the texts students are reading and teaching them in an accessible way.
- Use Literacy Instruction to Support Language Development: Texts chosen for reading should not only develop literacy skills but also reinforce language acquisition. For example, reading texts that incorporate vocabulary or grammatical structures being taught orally can bridge the gap between literacy and language development.
- Provide Contextualized Learning: Teachers should connect reading materials to students' backgrounds, interests, and existing knowledge. This contextualization aids comprehension and allows for more meaningful language practice. CRT

Science of Reading

Science of Reading EALS



1

Teachers will identify and list key concepts of the Science of Reading (e.g., phonics, fluency, comprehension) using clear, academic language

1

Teachers will understand the foundational components of the Science of Reading and how they apply to teaching English Additional Learners reading skills

Language and Content Objectives

2

Teachers will be able to summarize how specific Science of Reading strategies support EALs.

2

Teachers will reflect and evaluate their own instructional strategies, ensuring they align with the Science of Reading principles to better support English Additional Learners (EALs) in their classrooms.

References

- IMSE Journal. (2023). The essential components of literacy instruction, part 1 of 6. IMSE Journal. Retrieved from https://journal.imse.com
- Teacher Toni. (n.d.). What is phonological awareness? (v. Phonemic awareness & phonics). Teacher Toni. Retrieved from https://www.teachertoni.com
- Pathways to Reading Homeschool. (n.d.). What is the difference between phonological awareness and phonemic awareness? Pathways to Reading Homeschool. Retrieved from https://www.pathwaystoreading.com
- The Literacy Bug. (n.d.). 5 effective strategies to use orthographic mapping for reading success. The Literacy Bug. Retrieved from https://www.theliteracybug.com
- Young, C., Paige, D., & Rasinski, T. (2022). *Artfully Teaching the Science of Reading*. Shell Education.
- Lindsey, J. (2022). Reading Above the Fray: Reliable, Research-Based Routines for Developing Decoding Skills. Scholastic
- Center for Applied Linguistics. (2007). What's different about teaching reading to students
 learning English? Center for Applied Linguistics. Retrieved from https://www.cal.org
- The Reading League. (2023). Joint statement: Understanding the difference: The science of reading and implementation for ELs/EBs. The Reading League Summit. Retrieved from https://www.thereadingleague.org