


Boosting children's vocabulary and content knowledge through shared book reading

Susan B. Neuman, New York University

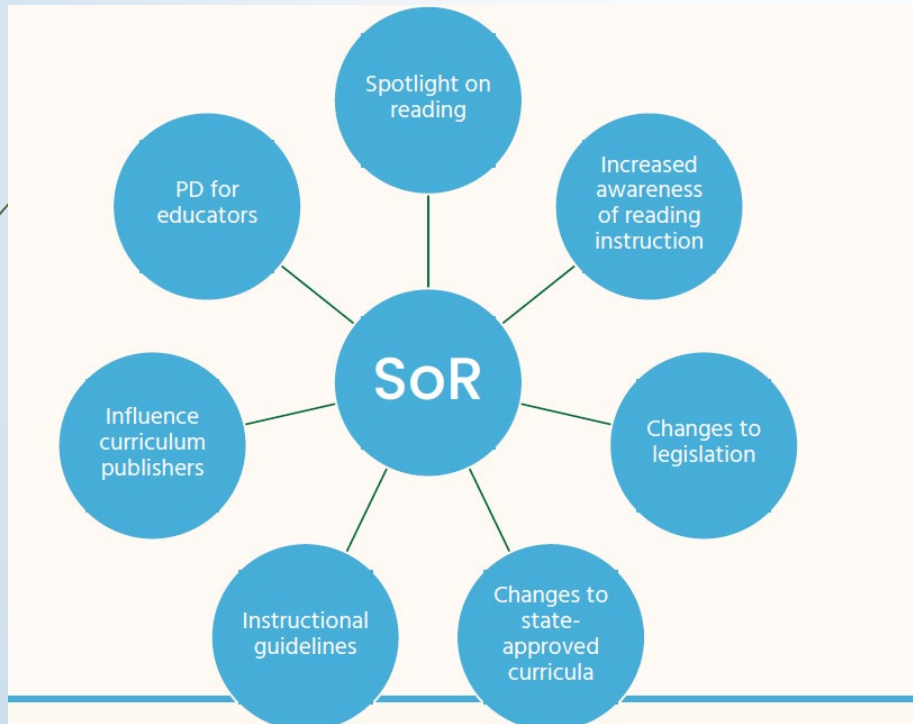


What we'll cover

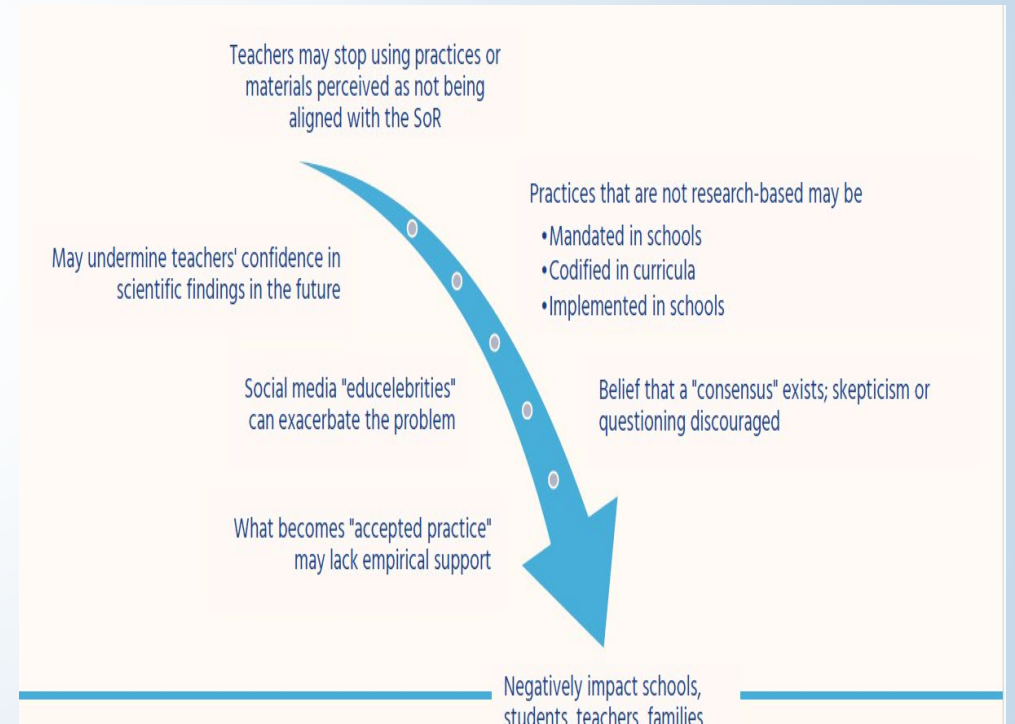
- ▶ Overview of the science of reading and language comprehension
 - ▶ Why vocabulary and knowledge-building in the early childhood classroom
 - ▶ Implications for classroom instruction
- 

The potential for the science of reading

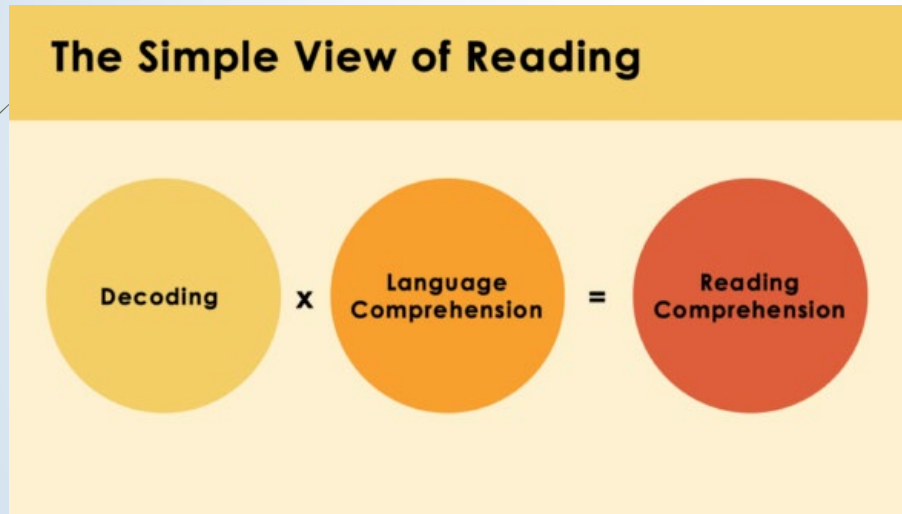
Potential benefits of SoR



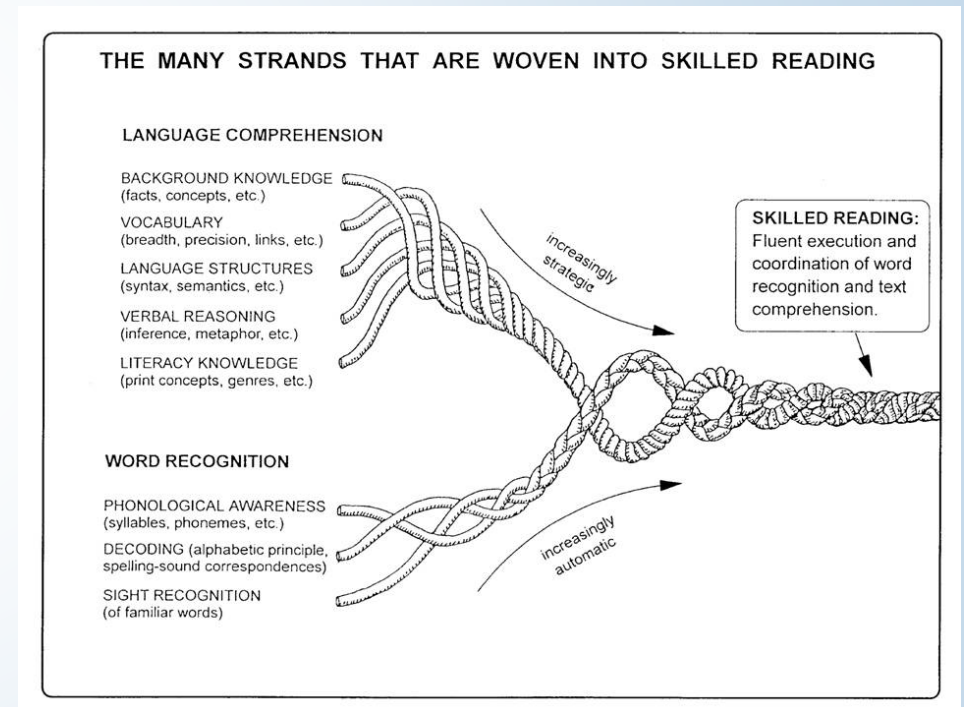
Potential concerns




Models of early reading



Gough & Tunmer, 1986



Scarborough, 2006



“The Five Pillars” of reading (National Reading Panel Report (2001))

Phonemic awareness

Phonics

Fluency

Vocabulary

Comprehension

“The Big 7”, 2024

Oral Language

Includes speaking and listening, providing the foundation for written language

Phonological Awareness

An awareness of speech sounds whereas phonemic awareness is the ability to identify and manipulate sounds

Vocabulary

A student's knowledge of words and their meanings

Background knowledge

Includes knowledge-rich experiences that engage children in thinking

Phonics

An instructional method that involves systematically matching sounds with the letters that represent the sounds

Fluency

The ability to read connected text with accuracy, expression, and at an appropriate rate

Comprehension


The complex process and ultimate goal of reading that involves constructing meaning from and interpreting texts




Vocabulary + background knowledge
predict reading comprehension



Why is knowledge-building so important?




Why is instruction in knowledge-building so important?

- ▶ Try this:
 - ▶ *Thomas Alva Edison lit up the world with his invention of the electric light. Without him, the world might still be a dark place. He got his first patent in 1868 for a vote recorder run by electricity. In 1870, he sold another invention, a stock-ticker, for \$40,000. A stock-ticker is a machine that automatically prints stock prices on a tape. He was then able to build his first shop in Newark, New Jersey.*
 - ▶ Questions:
 - ▶ 1) Who was Edison?
 - ▶ 2) What is a patent?
 - ▶ 3) What's a stock-ticker?
- 



What's a stock-ticker?

(Lexile: 3rd grade text)

- ▶ A **stock ticker** is a report of the price for certain securities, updated continuously throughout the trading session by the various **stock** exchanges.
- 

Strategy instruction also has its limitations

Activate my background knowledge?

Re-read?

Summarize?

Ask questions?

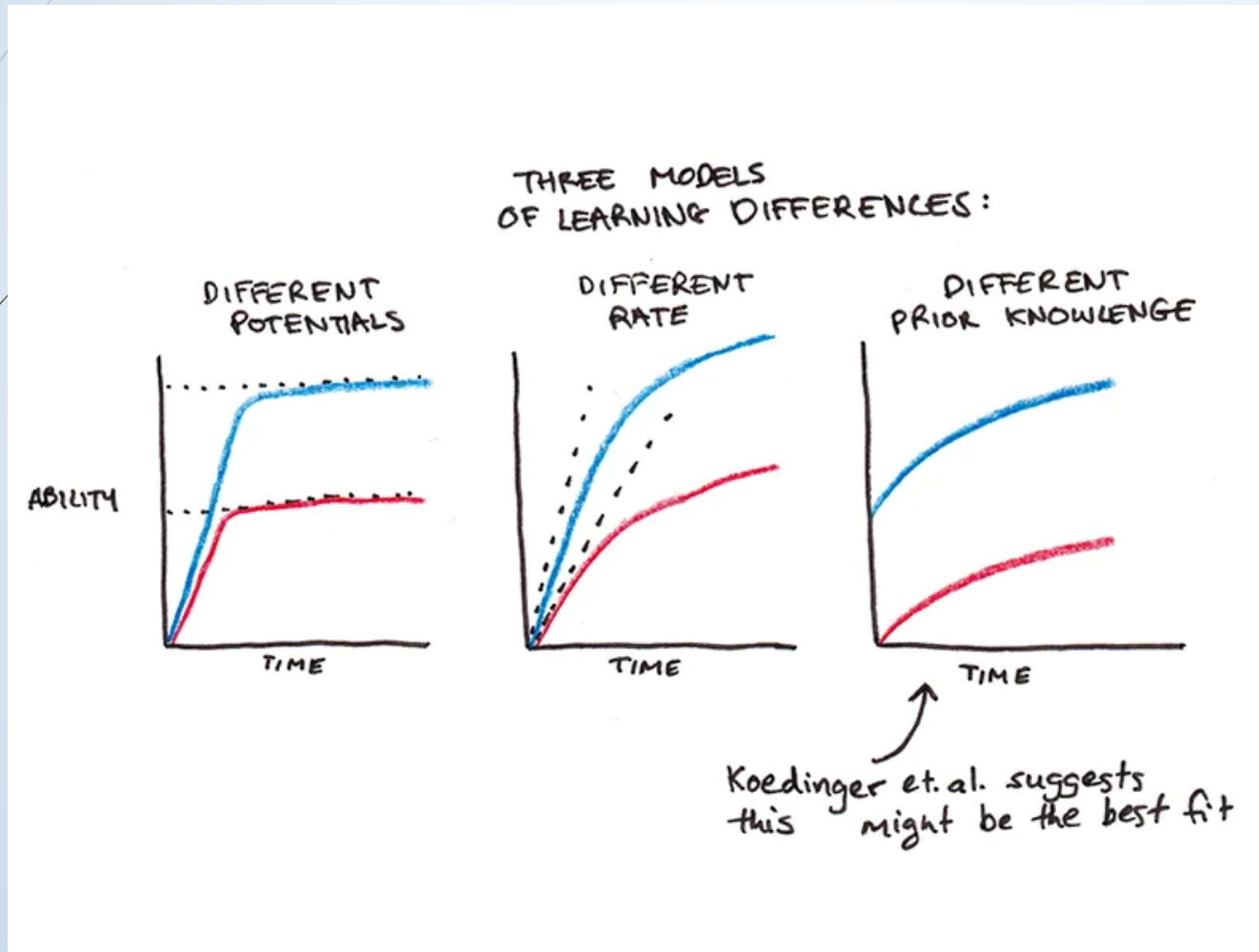
Monitor?

Predict?

Misty Copeland spends most days twisting, twirling, and leaping. She practices and perfects the graceful movements of her art. When she isn't performing, she is practicing. When she isn't practicing, she is stretching. She takes classes almost every day. She takes care of her body so she doesn't injure it when she goes to work as a soloist **1** with American Ballet Theatre, one of the most famous ballet companies in the world.

“An astonishing regularity”

(Koedinger et al., 2023)



Analyzed 6,000 students, ranging from K-16 in math, science, language learning

Students with prior knowledge needed 4 opportunities to master new knowledge

Students with less prior Knowledge
More than 13 times

Comprehension is not a generic skill

*Comprehension is dependent on
vocabulary and background
knowledge*

Questionable practices:

Can you find the main idea?

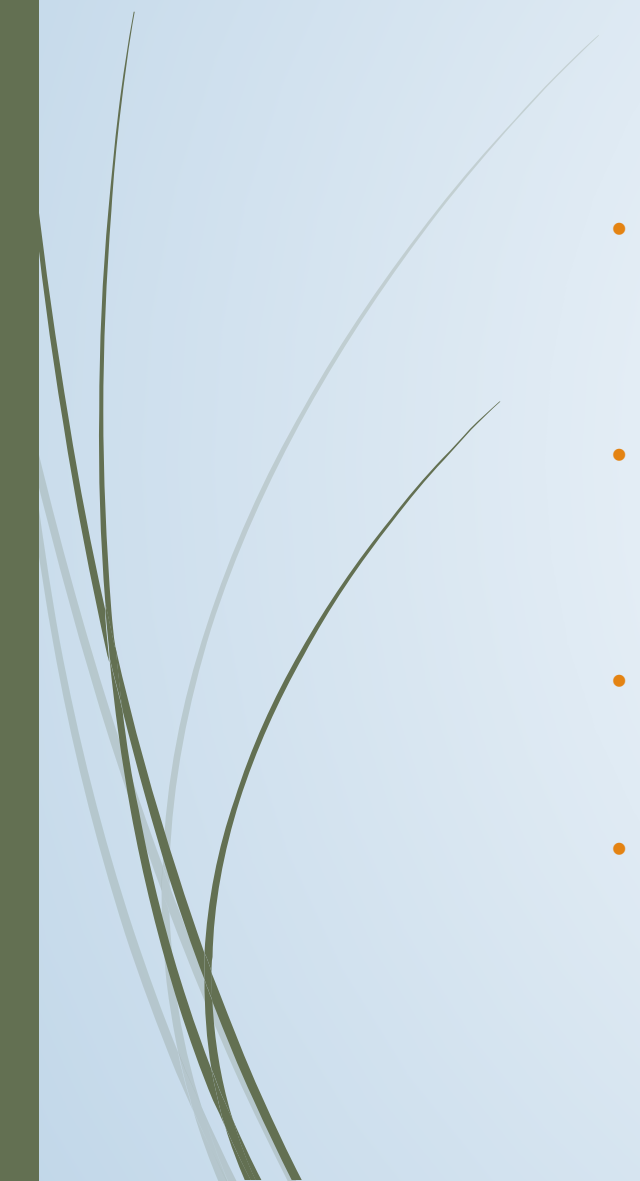
Can you read between the lines?

Can you guess from the pictures or the
context?



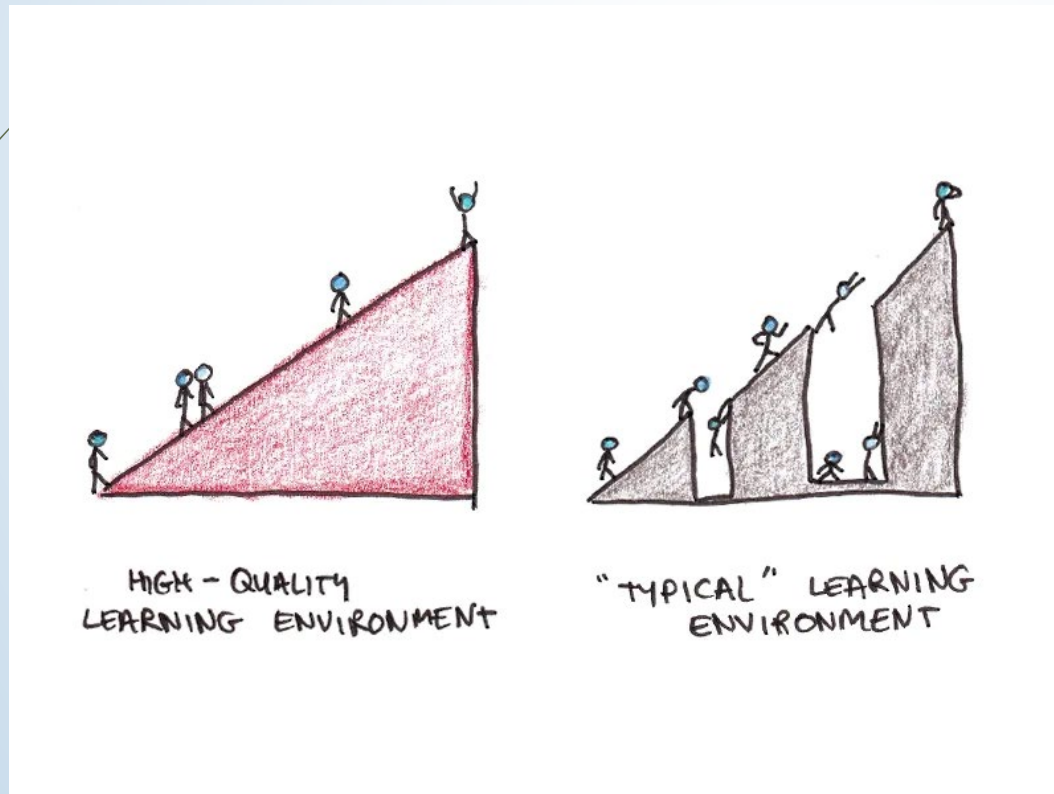


How do we build knowledge?

- Children will need to understand how factual information relates to a conceptual framework—a knowledge network
 - Subject matter is meaningful, relevant and culturally and linguistically responsive to children's interests and needs
 - Subject matter is presented in depth, providing many examples at work
 - Children are given time to actively engage in language rich experiences that make knowledge their own.
- 

Principle #1: Knowledge-building must be systematic and coherent

Differences in trajectory
(Koedinger et al., 2023)



Buyer beware: Not all curriculum is knowledge-building

➤ Coherent? Knowledge-building?

Grade	Units of instruction 1	2	3	4	5
First grade	Seven continents	Amazing Animals	Inspiring artists	Movements for equality	Ancient Egypt
	Being a good friend	Folktales around the world	Love makes a family	Making old stories new	The power of reading



Principle #2: Topics build knowledge more than themes

▶ Topics

- ▶ All about space
 - ▶ Focuses on domain specific words
 - ▶ (Tier 3)
 - ▶ Likely to be related to other concepts related to science

▶ Themes

- ▶ Ex: “Getting from here to there”
 - ▶ Week 1: Cultural exchange
 - ▶ Week 2: Being resourceful
 - ▶ Week 3: Patterns
 - ▶ Week 4: Team work
 - ▶ Week 5: Time for Kids

Key Point: Topics are more tightly structured than themes
Topics rely ‘less’ on background knowledge

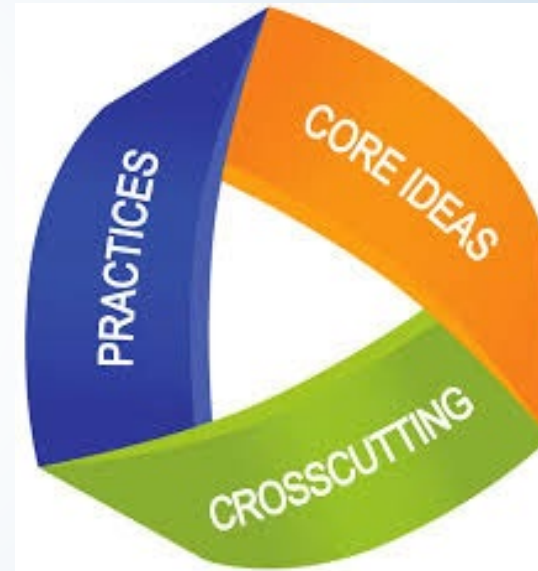
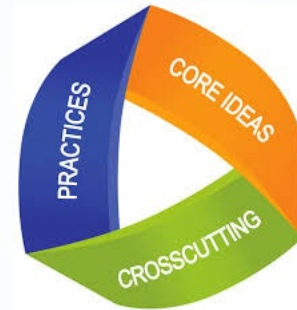


The shared-book reading experience

- ▶ The most powerful way to build vocabulary and content knowledge
- ▶ Highly motivating to young children
- ▶ Children are introduced to words and concepts that are outside their colloquial language
 - ▶ Literary language
 - ▶ Academic words
 - ▶ Text structures that promote comprehension
 - ▶ Social pragmatics, asking and answering questions; engaging in conversational turns

Topics that build knowledge

- Topics aligned:
- Wild animals
- Marine mammals
- Pets
- Birds

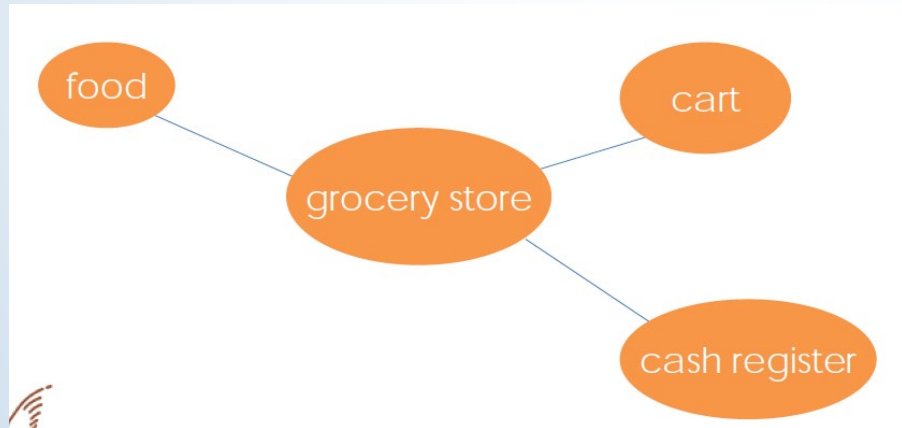


- Concepts that underlie: habitats, survival, needs

Getting started: Develop units based on topics rather than themes

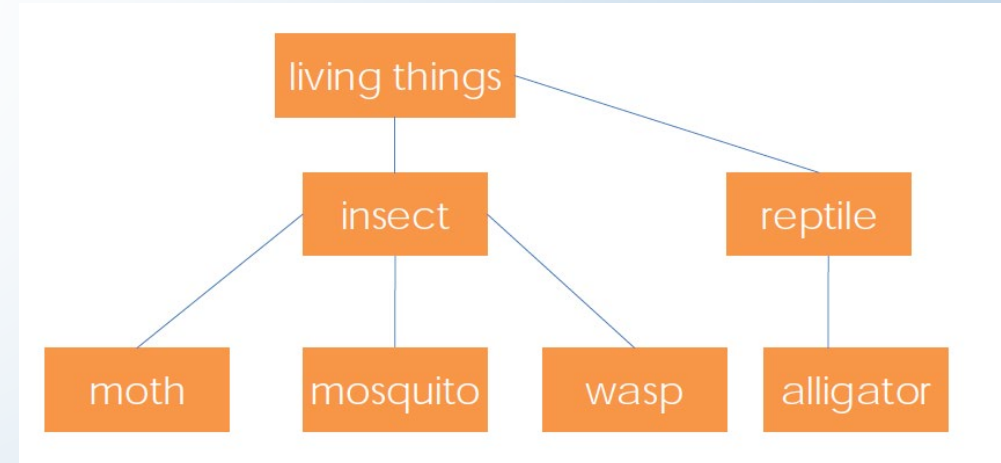
Themes


- ▶ Traditionally we have focused on 'activating' background knowledge



Topics

Topics provide a more coherent develop content knowledge





Principle #3: Different text genres can support vocabulary and knowledge-building

Developing Textsets

Collections of different genres to support our vocabulary teaching and content knowledge.

Focus on a central topic.

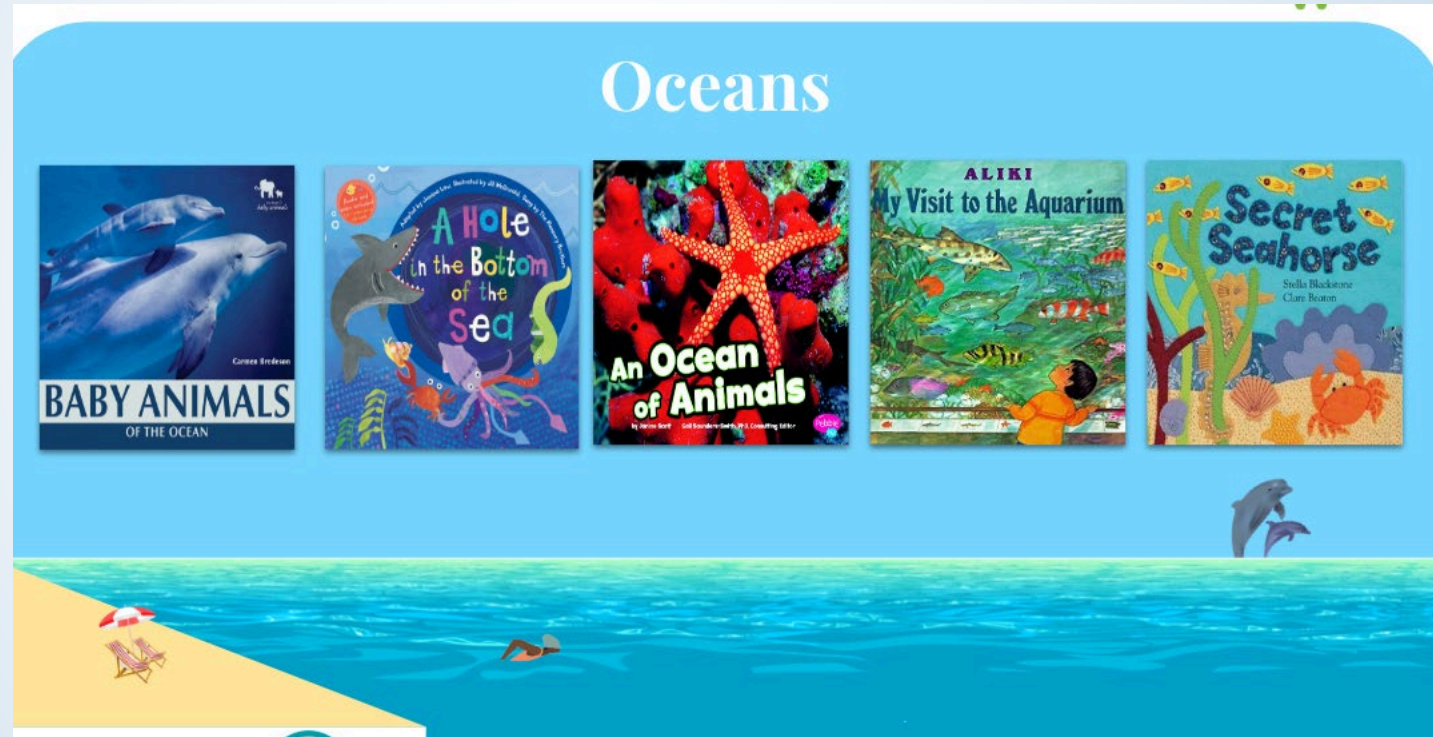
5 books on a common topic

Topic Study

Consider what fascinates children in the early years:

- ❖ Different habitats of animals?
- ❖ Mysteries of space?
- ❖ Wild weather?
- ❖ Taking care of our environment?

Focus on a common topic



Different genres of books influence different ways of responding to books



01	Predictable Books	Books with repetitive language; common phrases repeated frequently. Often introduced through song.
02	Narrative (nonfiction)	Books with a narrative structure (ex. Setting, characters, plot, resolution)
03	Information Books	Nonfiction books that provide factual information.

Watch: Predictable Books



Take a look.



- *Highly memorable language*
- *Often lyrical*
- *Engages the whole group at a time--'collaborative reading*
- *Supports phonological awareness*



Predictable Books



- ★ Should be read straight through, without necessarily stopping (for questions)
- ★ Great for repeated reading (consider 3 times, but not at one seating)

Narrative Texts: Storybooks



- ▶ Narrative stories can help children develop an understanding of story structure, the common features of a story.
- ▶ They can also 'blend' information in a narrative structure: 'narrative nonfiction,' helping children learn about a topic



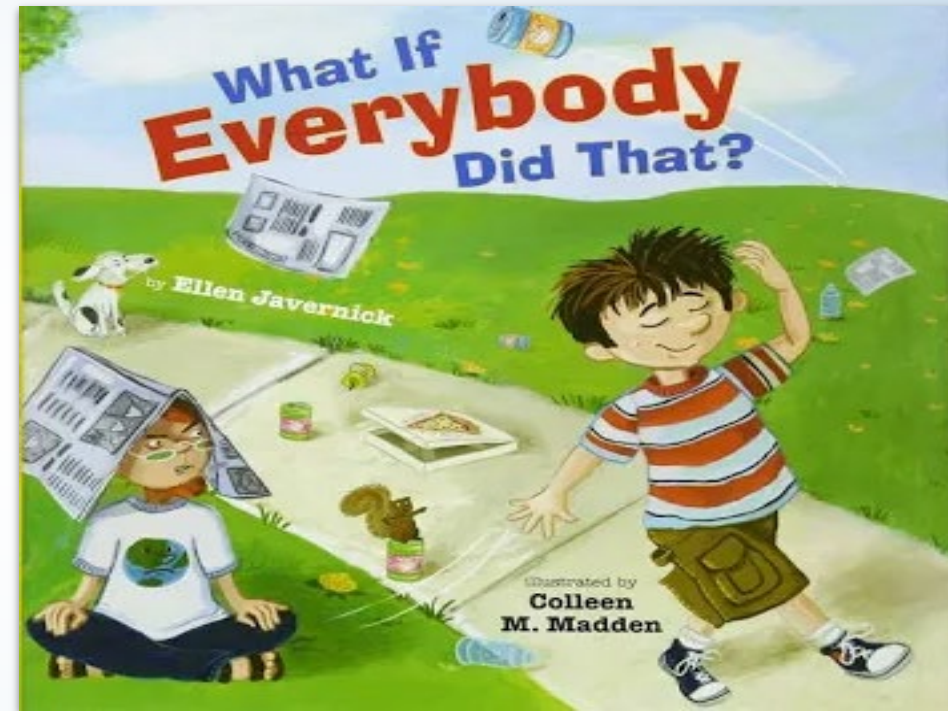
As you read, create 2 or 3 stopping points to help children focus on:

- ↓ Setting
- ↓ Characters
- ↓ Events and plot

Information Books (nonfiction)



- Vocabulary will be much more dense and conceptual than narrative books
- Technical vocabulary
- Consider the relationship between pictures/print to support the text



Reading Information books




- Be sure to introduce key vocabulary before reading
- Consider reading only a portion of the book at one time
- Provide background knowledge if necessary:
Video can be a great support

Focus on:

- ★ Stopping more frequently to check for understanding
- ★ Closed-ended questions are important to help children understand text.
- ★ Follow with open-ended questions only after children are confident of the content (otherwise they can lead to lots of misconceptions).



The power of “big ideas”



- ▶ *Cross-cutting concepts that you want children to learn)*

- ▶ **You'll return to these again and again**

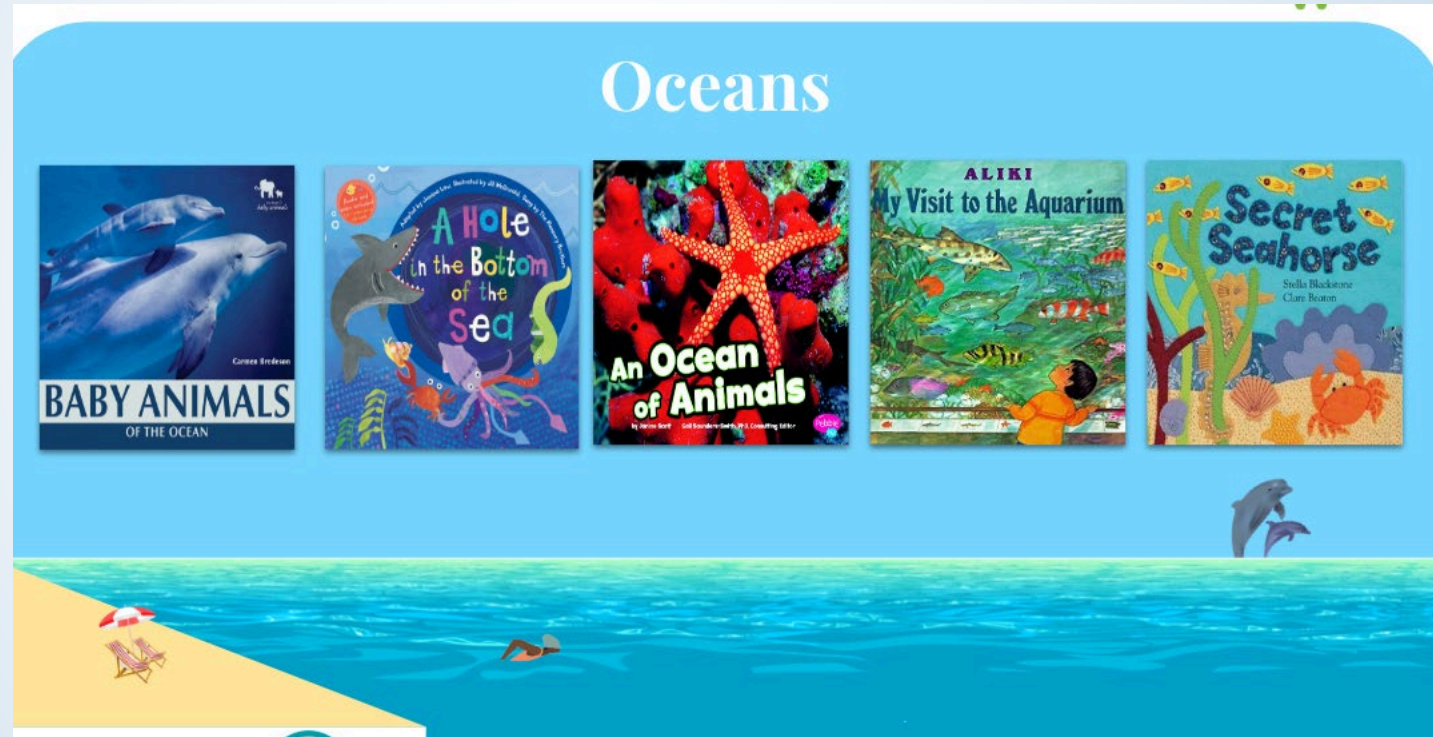
- ▶ **Big ideas:**

- ▶ **Marine Animals** have life cycles.

- ▶ **Marine Animals** have certain habitats based on their needs.

- ▶ **Marine Animals** have ways of protecting themselves

Principle #4: What are the words that commonly thread across my topic?






Word selection

Since we can't directly teach all the words children need to learn:

- 1 We need to carefully consider what words to teach
- 2 We need to provide explicit jargon-free definitions of words and place them in a meaningful context
- 3 We need to increase multiple exposure to words in different contexts



Vocabulary words that help children learn about the topic (Tier 3 words)

- ▶ Words about the topic

- ▶ Manatee

- ▶ Shark

- ▶ Whale

- ▶ Dolphin

- ▶ Words that help us talk about the topic

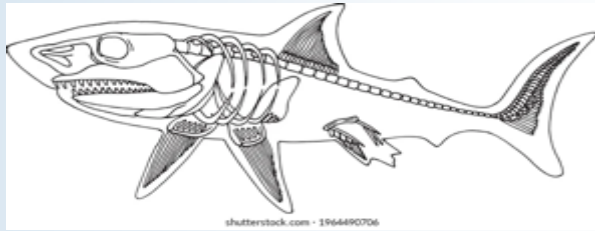
- ▶ Ocean

- ▶ Water

- ▶ fins

Notes About Word Learning

Nouns are easier to teach than adverbs, verbs, and adjectives (supports memory through mental imagery).



Picture supports enhance learning

Gesturing supports word learning



Focus on Tier 3: Content-specific words

Language skills



**Receptive
Vocabulary**

Words that a child can comprehend and respond to, even if the child cannot produce those words.

**Expressive
Vocabulary**

Words that a child can express or produce, for example, by speaking and writing. words that a person can express or produce, for example, by speaking or writing.



Book Reading Routine

- Make it a centerpiece of your morning meeting
- 10-12 minute is often a useful 'sitting time' for young children
- Pre-read the book you plan to read; use sticky notes to remind yourself of important points to explore



Book Reading Routine



1

Talk Together. Introduce vocabulary words and child friendly definitions (consider about 3 words). Use picture supports if you can.

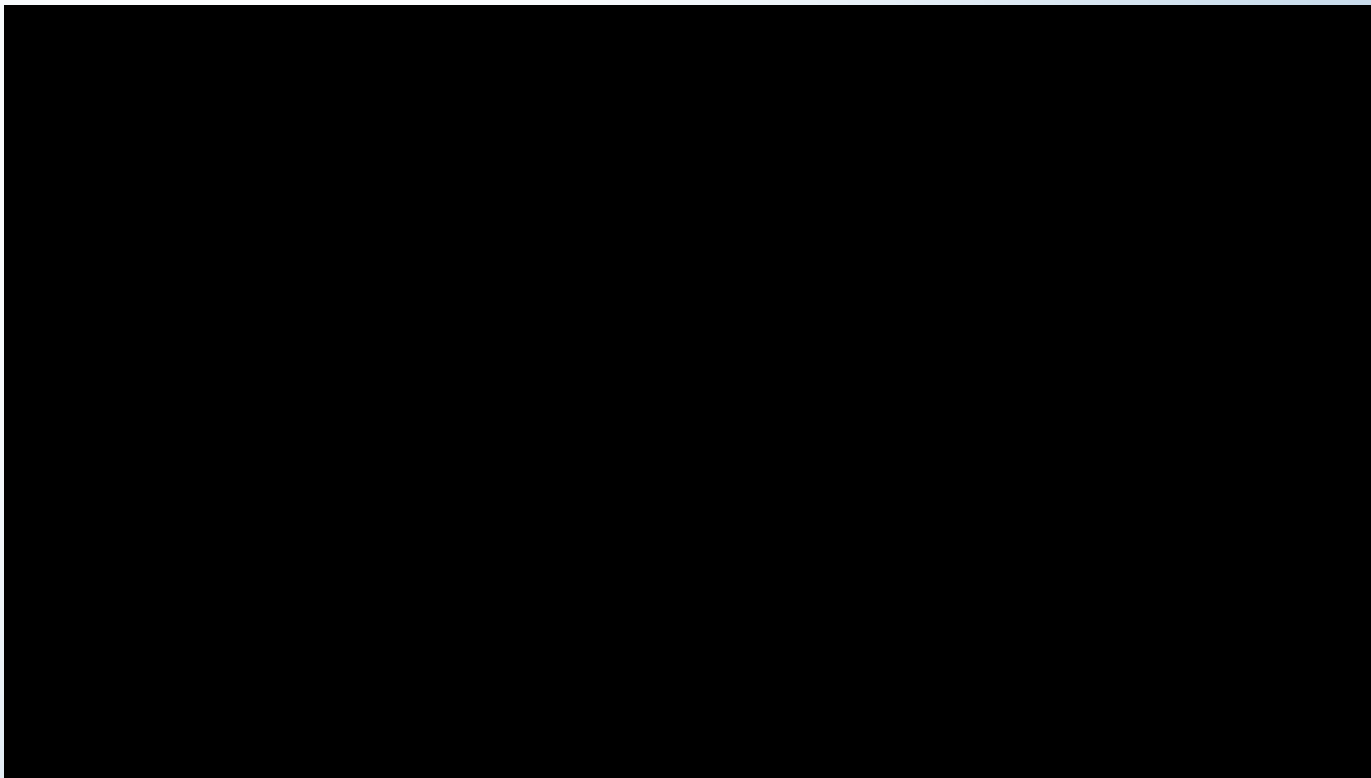
2

Read Together. Engage children in interactive reading.

3

Reflect Together. Review the vocabulary words, and ask questions that help children think about the book.

Watch: Ms. Jay: See how children introduces vocabulary words



Discuss: *Take a moment to discuss how Ms. Jay promoted vocabulary*



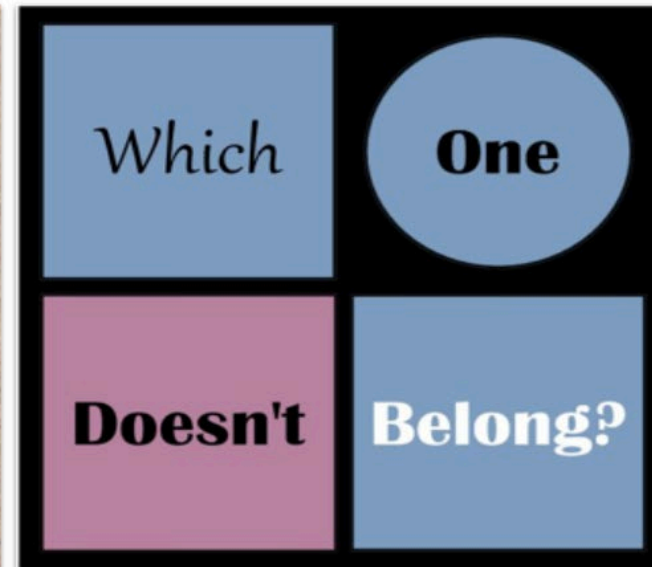
- ↓ How did she help children become aware of and interested in words?
 - ↓ How did she show a positive attitude or disposition towards words?
 - ↓ Why 'turn and talk'?
-

You and your partner have 2 minutes to discuss



Categorizing

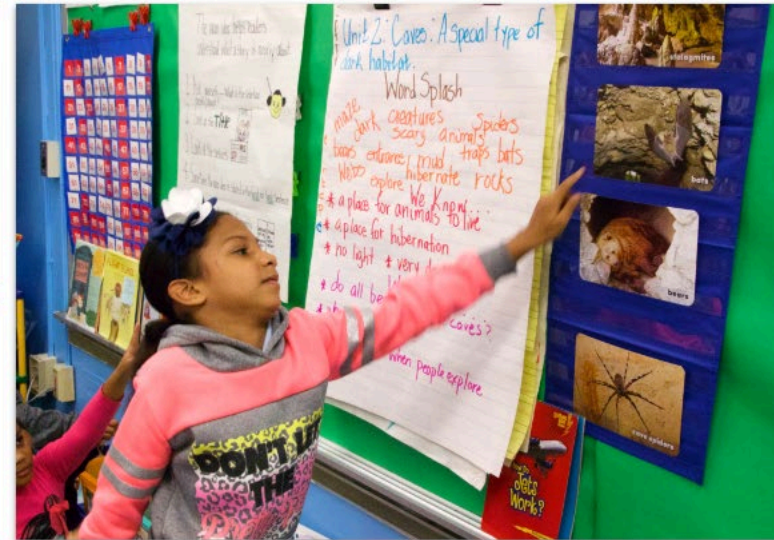
Ways to support category development



Why is categorization so important for knowledge building?

Understanding similarities of phenomena helps to develop depth of vocabulary knowledge

Understanding differences between phenomena helps to build new knowledge





Engaging in interactive reading

- ▶ Keeping in mind:
 - ▶ Timing
 - ▶ No. of stops along the way
 - ▶ Be aware that the 'book language' will support children's listening skills

Watch: Ms. Kurz

Let's take a look.

Ex. Ms. Kurz is introducing a new book on a topic that the children have been reading about

As you watch, Look for:

- How does she engage children's responses?
- Why does she 'repeat/rephrase' a child's response?
- Notice her use of individual responses and group responses. Why?

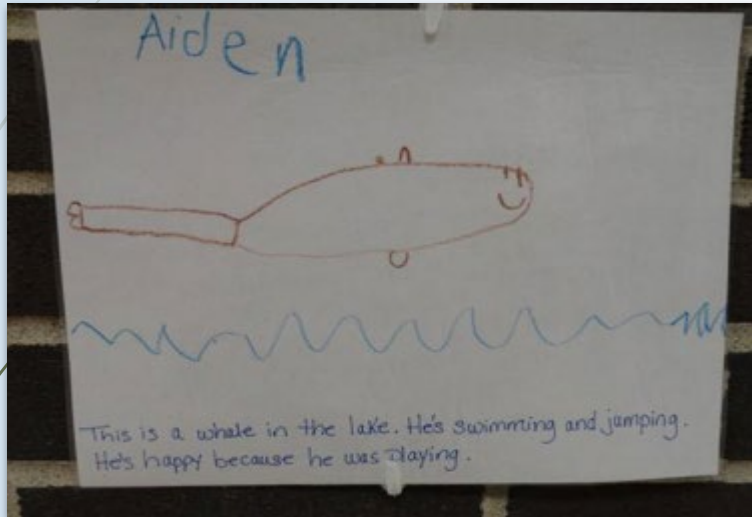




Building knowledge

- ▶ Developing networks of knowledge allows children to accelerate their vocabulary and comprehension knowledge by engaging with:
 - ▶ Different genres
 - ▶ Different approaches to content knowledge
 - ▶ Frequent exposure to words in multiple contexts
 - ▶ Many opportunities to develop inferences in interactive discussions that highlight word and world knowledge

Reflecting on storybooks



- ★ Vocabulary will be more 'literary'
- ★ Ideal for helping children retelling the story in their own words
- ★ Ideal for writing a summary about the story in picture/print

Principle #5:

Give children time to read about the topic through independent reading



- Children need to read a lot and talk about what they read.
- Choose books related to the topic from a variety of genres
- Make sure you have books at different reading levels
- Consider having multiple copies of favorite books



The classroom library

An attractive classroom library makes a difference



In Summary



- ✓ Although vocabulary often begins at the word level, instruction must go beyond it to increase depth of word understanding
- ✓ Developing networks of knowledge through shared book reading allows children to accelerate their vocabulary knowledge by engaging with:
 - Different genres
 - Different approaches to content knowledge
 - Frequent exposure to words in multiple contexts
 - Many opportunities to develop inferences in interactive discussions that highlight word and world knowledge

For more information, Neuman & Wright, *All about words*, Teachers College Press, 2013.

