Part 7: Comprehension

RAPID Initiative

New Jersey Department of Education

2023-2024 School Year

Part 7 Objectives

✓ Identify the necessary subskills needed for reading comprehension

✓ Review the research findings

✓ Examine the role background knowledge, strategy work, and writing instruction in reading comprehension

What is Comprehension?

It is the understanding and interpretation of what is read.

Comprehension is the **outcome** of strong word recognition, fluency, vocabulary, background knowledge, and language ability.

Scarborough's Reading Rope

THE MANY STRANDS THAT ARE WOVEN INTO SKILLED READING

LANGUAGE COMPREHENSION

BACKGROUND KNOWLEDGE
(facts, concepts, etc.)

VOCABULARY
(breadth, precision, links, etc.)

LANGUAGE STRUCTURES
(syntax, semantics, etc.)

VERBAL REASONING
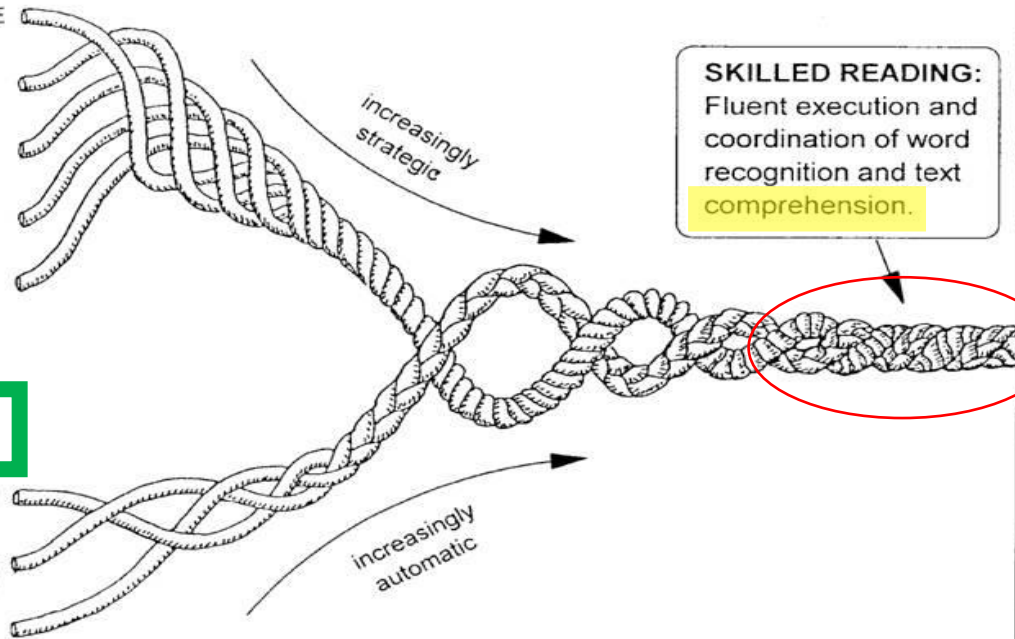(inference, metaphor, etc.)

LITERACY KNOWLEDGE
(print concepts, genres, etc.)

increasingly strategic

SKILLED READING:
Fluent execution and coordination of word recognition and text comprehension.

WORD RECOGNITION

PHONOLOGICAL AWARENESS
(syllables, phonemes, etc.)

DECODING (alphabetic principle, spelling-sound correspondences)

SIGHT RECOGNITION
(of familiar words)

increasingly automatic

- 2014 Mercedes Spencer et al.

- 425,000 students in grades 1-3 with poor comprehension

- **Goal of study:** Investigate the nature of poor comprehension

- Three areas were assessed: *decoding, vocabulary, reading comprehension*

What percentage of students who scored *"poor"* in **reading comprehension**

had *adequate* **decoding** and **vocabulary**?

Less than 1%

of students who scored *"poor"* in **reading comprehension**

were *adequate* in both **decoding** and **vocabulary**

"Individuals with problems in reading comprehension that are not attributable to poor word recognition have comprehension problems that are general to language comprehension rather than specific to reading."

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- Nearly all **first-grade** students who were poor in reading comprehension were also poor in **decoding**

- Approximately ½ of second-grade students who were poor in reading comprehension were adequate in decoding

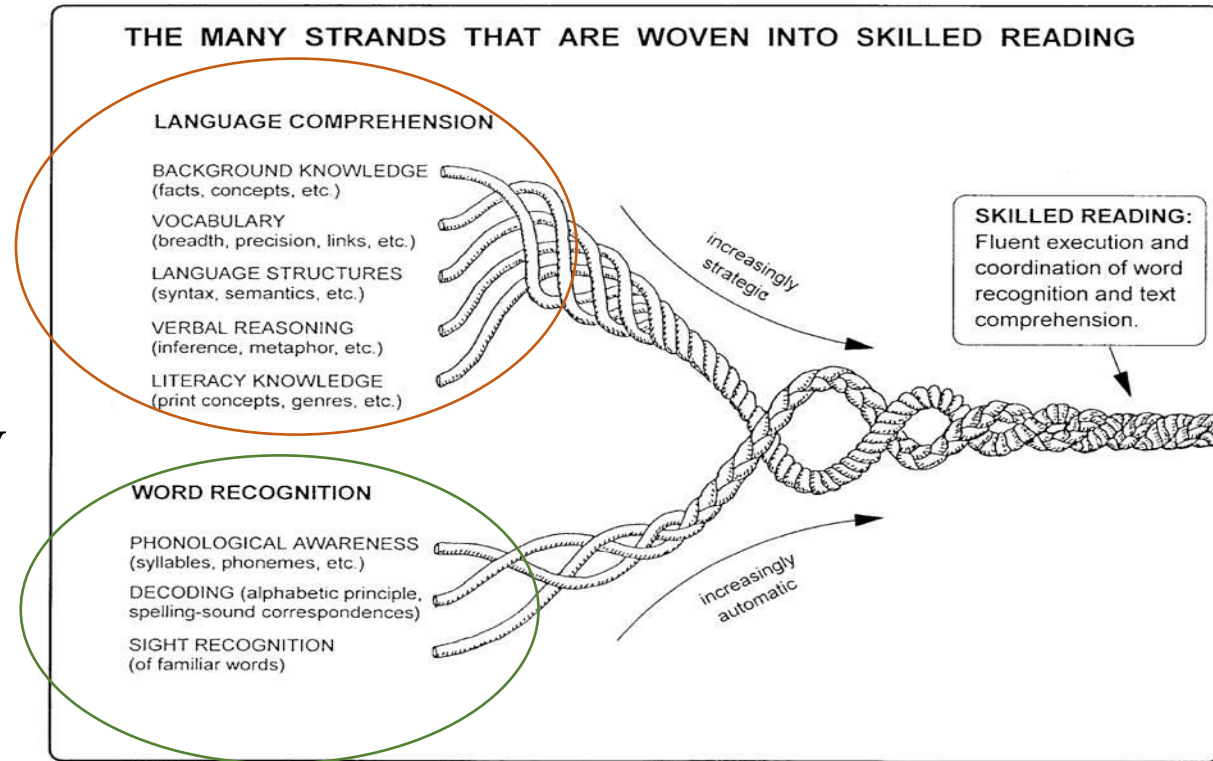- Those adequate 2nd-grade decoders had poor vocabulary

Other Research Findings

- Instruction aimed at improving students' word reading, including phonemic awareness and phonics instruction, often has a positive impact on reading comprehension (Suggate, 2016).

- Cognitive strategies such as monitoring, questioning, and summarizing improve comprehension (Berkeley et al., 2009)

- Vocabulary and background knowledge play a critical role in reading comprehension (Catts et al., 2016)

- Morphological awareness instruction positively affects reading comprehension (Goodwin & Ahn, 2013)

- Aspects of reading fluency have been shown to positively impact reading comprehension (Kuhn, 2020; Turner, 2010)

- While initial reading instruction focuses on word recognition, instruction must also include the upper portion of rope

- Primary students have a large discrepancy between their reading and listening comprehension

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- Use read alouds as the main vehicle for teaching comprehension

- Build knowledge and vocabulary by studying:
  - different content areas
  - literacy genres

- Model through think alouds

- Comprehension instruction should also occur with decodable text but has limitations

Improving Comprehension

"There is current scientific agreement on at least three principles that have useful implications for improving students' reading comprehension."

1. **Fluency** allows the mind to concentrate on comprehension

2. **Breadth of vocabulary** increases comprehension and facilitates further learning

3. **Domain knowledge**, the most recently understood principle, increases fluency, broadens vocabulary, and enables deeper comprehension.

(Hirsch, E.D., Jr. , 2003)

The Role of Background Knowledge

Pitch and Conditions: A day game in Lucknow

The Lucknow surface in the matches played there so far this tournament has shown a propensity for some uneven bounce, rewarding bowlers that stick to a good length or just short of one. Spinners too have found some assistance. But this one is expected to have a touch more grass on it and will perhaps offer a little more to the seamers. The weather is expected to clear and sunny, and with it being a day game, both sides should get similar conditions to play with.
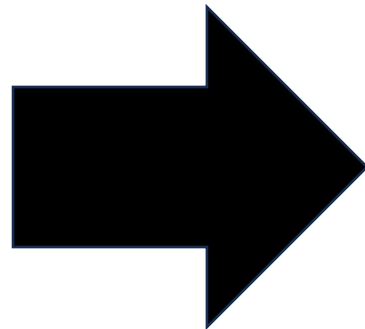
How can we Build Knowledge?

- robust social studies and science curricula

- knowledge building language arts curriculum

- staying on the same topic for at least several weeks to build a deeper understanding

- make learning content the focus (rather than strategies) during instruction

- teaching strategies in service of learning – the strategy is NOT the focus of the lesson but rather a vehicle to access meaning

Reading Skills vs. Strategies

Skills: cognitive abilities or processes done automatically and unconsciously; one requires practice to become skilled

Strategies: deliberate actions taken to help a reader facilitate the learning and recall the information from a text

✓ Visualizing

✓ Self-Monitoring

✓ Inferencing

✓ Questioning

✓ Predicting

The strategy is HOW students will become skilled.

✓ Stop and sketch what you visualized

✓ Reread if something doesn't make sense

✓ Turn the heading into a question; read to answer it

Teaching Strategies

- Comprehension strategies describe mental actions readers take to help them understand the text

- Strategies foster metacognition (thinking about thinking)

- Should be used in a natural way – *What can help students understand this part of this text?*

- Teach a few strategies that can be used when needed and can become reading habits/skills

Knowledge Focused Lesson

Instead of…

Strategy focused Instruction

Purpose: teach text features

Teacher Talk: *Today we're going to learn all about text features and how they can help us better understand informational books. One kind of text feature is called a caption. They tell us about the pictures. Let's notice the pictures and captions as we read.*
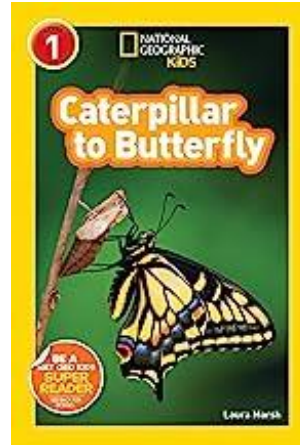
Try…

Knowledge focused Instruction

Purpose: learn about butterfly metamorphosis

Teacher Talk: *We've been learning a lot about insects. Today we're going to read a book about butterflies and how they change throughout their lives.*

Look at this picture. Do you see how there are words under it? This is called a caption. Let's read the caption to learn what's happening in the picture.

Comprehension Skills/Strategies

- **Self-Monitor** - readers must be aware of their understanding or misunderstanding

- **Visualize –** Create mental images while reading

- **Make Predictions –** readers think about what will happen and then confirm or adjust their predictions as they read

- **Ask and Answer Questions –** readers stop throughout the story to ask questions about what is happening and why; they answer questions to reflect on important ideas and events

- **Infer –** readers reach a conclusion based on text evidence and background knowledge

- **Summarize –** readers identify and write the most important ideas; use who, what, when, where, why, how questions to summarize

- **Identify Text Purpose and Structure –** readers recognize the purpose of a text and how it is organized

Teach Self-Monitoring

readers must be aware of their understanding or misunderstanding

- Use a sticky note to check for understanding

- Stop when meaning breaks down; slow down and reread

- Partners can keep one another on track by stopping to talk about what's happening at certain points in the text

Who?
What?

?
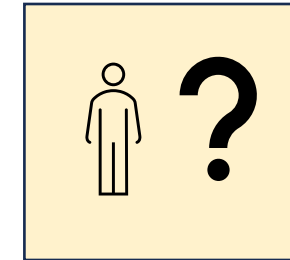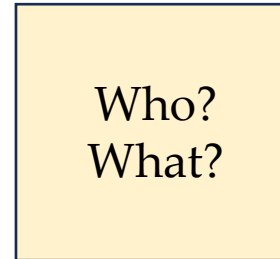
Teach Visualizing

- Ask students share mental images of the story during reading alouds

- Ask students to describe how they picture even simple words like "cat": *What color was it? What was the cat doing?*

- Students draw pictures to show what they are visualizing

- Ask questions:
  - What color?
  - What size?
  - What shape?
  - What texture?
  - What action?

Make Predictions

Prereading:

- Use the title to generate predictions

During Reading

- Confirm or adjust predictions while reading
- Use turn and talk during read alouds

After Reading

- Imagine what might happen after the story
- Write about predictions

Ask & Answer Questions

Prereading:

- turn chapter tiles or subheadings into questions
- students read to find out the answer
- pose questions orally

During Reading

- stop to foster discussion through questioning
- stop and jots on sticky notes

After Reading

- Incorporate writing tasks
- Students write questions or answer questions
- Given the answer, the students generate the question

Teach Summarizing

Use the 5 W's

- Who or what?
- Is doing, feeling, thinking what?
- When?
- Where?
- Why?
- How

Provide thinking stems:

- This was mostly about…
- The most important idea was…

Create Keyword Summaries

1. Circle the 2-3 most important words in each sentence.
2. Use the circled words in the paragraph to summarize the paragraph.

Sentence Summary with Writing

Who/What?.................. Charlotte ....

Did/Will do What? .... wrote words ....

When? .... during fair ....

Where? .... in her web ....

Why? .... to save Wilbur ....

How? .... cleverly ....

Summary Sentence: <u>During the fair, Charlotte cleverly wrote words in her web in order to save Wilbur's life.</u>

The Writing Revolution, Hochman & Wexler

Students use what is stated in the text along with what they know from their life experience to draw conclusions (read between the lines)

- Begin with everyday examples to teach the meaning of "inference"

- Use read alouds to lead students through inferential thinking

- Provide an inference chart:

What the text says…	What I already know…	What I can infer…

Teach Inferencing

Students cannot infer without background knowledge

Seth sat on a thick log to rest. Rags sniffed and sniffed.

Then he dashed off! He ran up the path. Seth ran to get him.

Text says…

Rags sniffed and sniffed.

Necessary knowledge…

Many dogs like to hunt and sniff animal scents.

Narrative Purpose & Structure

Purpose: to entertain; provide an account of events

Structure: Story grammar
- Setting (time and place)
- Characters
- Initiating Event/Problem
- Characters' Reactions
- Important Events
- Outcome/Resolution

Features:
- Beginning, Middle, End

Signal Words:
- In the beginning, then, next, in the end

The Reading Comprehension Blueprint by Nancy Hennessy

Comprehension Graphic Organizer for Fictional Text

Title_____

Setting	Characters
Time:	Main:
Place:	Secondary:
Kick-off Event	Characters' Feelings about Kick-off Event
Plan of Action	Important Events
	1.
	2.
	3.
	4.
Resolution	Final Feelings

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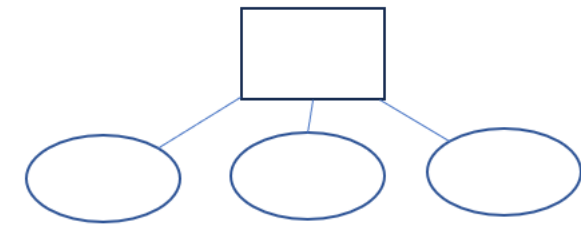RAPID
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Informational Purpose & Structure

Purpose: to inform, explain, report

Structure:

- Cause and Effect
- Sequence
- Compare/Contrast
- Describe
- Problem and Solution

Cause	→	Effect

First	Then	Next
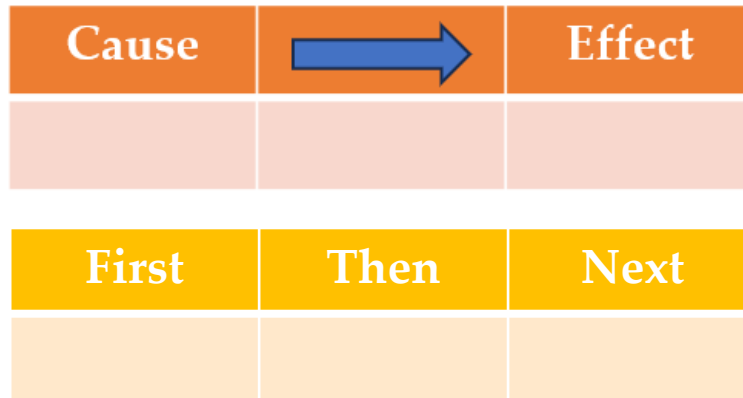
Features:

- paragraphs, table of contents, headings, photos, captions, charts/diagrams, index, boldface

Signal Words:

- For example, in comparison, as a result, in contrast, on the other hand, for example

The Reading Comprehension Blueprint by Nancy Hennessy

Whale	Both	Shark

Problem	Who/What	
Solution	Possible Solutions	
Final Solution		

- **Embedding** writing instruction **in content** and having students **write about what they are learning** in all content areas has **boosted reading comprehension** and learning across grade levels. (Graham et al., 2020; Graham and Hebert, 2010)

- Teaching **sentence-construction** and **expansion** has **improved reading fluency** and **comprehension**. (Graham and Hebert, 2010) (IES Practice Guide, 2018)

- Constructing complex sentences improves sentence level comprehension

  *The capital of France, **Paris**, is a popular destination for tourists from across the world.*

- Improves understanding of syntax, the correct arrangement of words in a sentence

- Prevent pronoun confusion *The cat snatched the rat from its home.*

- Helps students reflect and refine their thinking

Teach Sentence Level Writing

The Writing Revolution, Hochman & Wexler

- sentence combining (**Jack sang. Mike sang. Jack and Mike sang.**)

- sentence expansion (**Beth ran. After school, Beth ran to the park to play.**)

- construct sentences with basic conjunctions (**because, but, so**)

- construct sentences with subordinating conjunctions (**While the baby slept, Mom finished the laundry.**)

- construct sentences with appositives (**James, an avid reader, loves science fiction**).

Comprehension Recap

o Phonemic awareness and phonics are critical skills needed for decoding

o Fluency is a bridge between word decoding and reading comprehension

o Vocabulary knowledge impacts comprehension

o Building background knowledge improves comprehension

o Teaching key reading strategies in the service of learning improves comprehension

o Having students write about their reading fosters deeper thinking about text

Assessing Comprehension

"The multidimensional nature of reading comprehension presents a significant challenge for assessment. Because of the numerous factors in play, a reader's comprehension ability is more fluid than often thought. In other words, any one individual will have different levels of ability depending on what is read and for what purpose."

Hugh Catts, Florida State University

Evaluate Current Tools

Is your current assessment tool serving you and your students?

- Does it help you identify kids below benchmark using valid and reliable measures?

- Is it efficient? Does it provide useful information in a short amount of time?

- Is it providing insight into the root cause of students' poor comprehension?

- Is it assessing specific foundational skills?

MAZE Screening Tool:

- Students read silently for 3 minutes

- Words are left out of the text

- Students choose the correct word from three possibilities

Before leaving his house, Frank grabbed his

home
coat
puppy

- Screener will only identify those at risk, but will NOT tell *why* they are at risk

Poor performance may indicate:

- ✓ Poor decoding/phonics skills

- ✓ Difficulty with multisyllabic words and/or morphemes

- ✓ Slow reading rate/ORF

- ✓ Challenges with complex sentence structure/syntax

- ✓ Inattention/weak executive functioning skills

- ✓ Slow processing speed

Next, administer a diagnostic assessment/s

1. Word Reading that includes:
   - phonics knowledge
   - multisyllabic decoding
   - morphology (prefixes/suffixes)
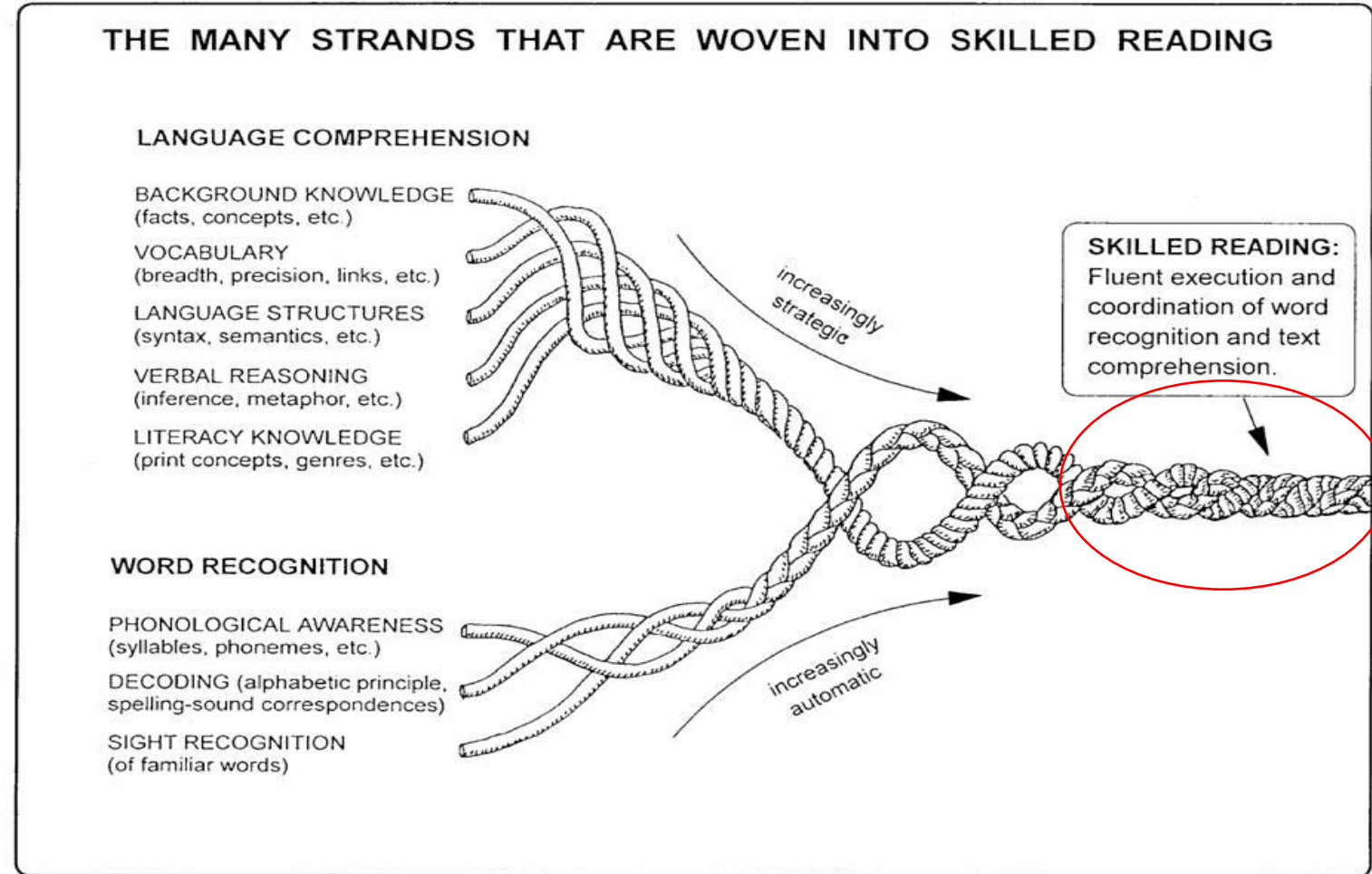
2. Phonemic Awareness

Curriculum Embedded Assessment

- Passages are related to the content that has been taught

- Can be created by the school/district

- Creates an even playing field since all students have been taught the content
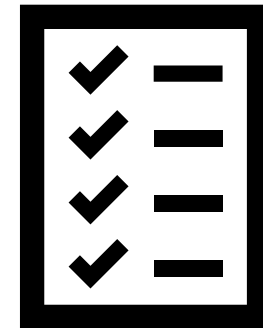
Comprehension is an Outcome

All parts of the Reading Rope contribute to reading comprehension along with executive functioning sills

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Chat Check

- Is comprehension a skill or an outcome?

- Should instruction include teaching strategies, building knowledge, or both?

Q & A

References

- The National Reading Panel Report, 2000.

- Hennessy, Nancy Lewis. *The Reading Comprehension Blueprint*. Baltimore, Brooks Publishing, 2021.

- Hochman, Judith, and Wexler, Natalie. *The Writing Revolution*. San Francisco, Jossey-Bass, 2017.

- Birsh, Judith. *Multisensory Teaching of Basic Language Skills*. Baltimore, Brookes Publishing, 2011.

- Wexler, Natalie. *The Knowledge Gap*. New York, Penguin Random House, 2020.

Professional Development Hours

To access your professional development certificate, click on the link in the chat.

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