



The Meadows Center  
FOR PREVENTING EDUCATIONAL RISK



# Evidence-Based Practices for Comprehension Instruction



## What Is STRIVE?

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The **Strategies for Reading Information and Vocabulary Effectively (STRIVE)** professional development (PD) model was developed through funding from the Institute of Education Sciences, U.S. Department of Education. As part of this research project, a cadre of upper-elementary school teachers worked closely with researchers at The University of Texas at Austin and Texas A&M University to design evidence-based practices for social studies instruction in grades 4 and 5. The STRIVE PD model featuring these practices was refined through researcher-practitioner collaboration, the latest developments in reading research, and the results of pilot studies. **Several efficacy trials have reported positive outcomes in teacher quality and student vocabulary and comprehension development** as a result of participation in STRIVE PD.<sup>1,2,3</sup>

This research brief provides in-depth descriptions of the **STRIVE evidence-based comprehension practices** and the research that supports them.

## Reading to Learn in the Upper-Elementary Grades

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The upper-elementary grades represent a critical time in students' academic learning, as they transition from **learning to read** to **reading to learn**. By fourth grade, standards for reading extend beyond foundational aspects (word reading and fluency) to include readers' skills in identifying how meaning is used both explicitly and implicitly in complex texts.<sup>4</sup> Additionally, upper-elementary students read **an increasing amount of informational texts** and are expected to access important academic ideas, concepts, and vocabulary from these texts—all essential to developing knowledge in different subject areas. For these reasons, educators often face the challenges of making texts in their subject area more accessible and **supporting students' development in reading comprehension** during content area instruction.

## Reading Comprehension: What Educators Need to Know

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Research over the last several decades indicates that reading comprehension involves a complex set of cognitive and linguistic processes. Paul Van den Broek, a cognitive scientist, theorized with his colleagues<sup>5</sup> that reading comprehension incorporates a “landscape” of concepts that are activated across a reading cycle. Essentially, readers relate their background knowledge to new information to form a coherent mental model of the ideas in the text. This mental model is dynamically and gradually constructed, and it is continually restructured as readers process new information in text. Similarly, Walter Kintsch’s content-integration model<sup>6</sup> emphasizes that readers construct new ideas from text and then integrate this new understanding with previous knowledge.

As these perspectives demonstrate, fundamental inferential processes are involved in constructing meaning from text.<sup>7</sup> Readers draw on different sources of knowledge—including linguistic knowledge, orthographic knowledge, and general background knowledge—to support a coherent mental structure of the ideas presented. Essentially, these different sources of knowledge support readers in making inferences, or filling in information that is not made explicit in text.<sup>8</sup>

Although research has shown an underlying structure by which all readers comprehend text,<sup>5,6</sup> not every reader processes and understands a text in the same way. Students bring a range of background knowledge and experience to the classroom, and students differ in their attentional capacities and use of strategies to support comprehension. To address students’ different literacy needs, educators can incorporate high-impact comprehension practices during content area instruction.

## High-Impact Comprehension Practices in Social Studies Instruction

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The STRIVE comprehension instructional practices were designed to align with the models by Van den Broek and Kintsch of reading comprehension.<sup>5,6</sup> Teachers use the STRIVE practices to aid students in building and updating a mental model of the text while reading. We combine strategy and content approaches to provide teachers with a well-rounded set of instructional practices to improve comprehension.

### Features of STRIVE Instruction

The STRIVE instructional practices occur **before, during, and after reading to support students’ development of vocabulary and comprehension skills** necessary to learn new information from text. Teachers explicitly explain and model each practice, engage in guided practice with students, and provide corrective feedback. As students master new skills, teachers provide meaningful opportunities for students to use the strategies independently until the strategy use becomes habit. A unique feature of STRIVE is that students are introduced to the strategies over time across multiple social studies units, with opportunities to practice initial strategy use before being introduced to others.

Content approaches focus on the text's content as the vehicle for instruction, using text-based discussion framed by questions to help students build accurate mental models of the text. Several studies show that content approaches applied to social studies text are highly effective.<sup>9,10,11</sup>

In STRIVE, content approaches are coupled with comprehension strategies. These procedures help students to become aware of their level of understanding while reading.<sup>12</sup> Several studies have revealed that **students benefit when taught comprehension strategies** and how to apply them in reading across content areas<sup>13,14,15,16,17</sup> and, specifically, in social studies.<sup>2,9</sup> Evidence-based practices that educators implement **before**, **during**, and **after** reading text are described below.

## Before Reading

### Activating and Building Students' Background Knowledge

Research supports the importance of background knowledge in reading comprehension.<sup>4,18,19</sup> Educators are key in helping students activate that knowledge and make meaningful connections to text.

To activate and build background knowledge using STRIVE, educators do the following:

- Provide students with a big idea that will be the focus of the entire 6-week unit
- Refer students to an interesting illustration that accompanies the text
- Ask a series of questions to help students build the knowledge needed to understand the information presented in the text

### Comprehension Purpose Question

Research supports using short, teacher-led discussions to focus students' attention on key information in the text.<sup>9,10,11</sup> Before students read a passage, teachers pose a comprehension purpose question, such as "Why were the Comanche skilled warriors, and why were they eventually defeated?" The comprehension purpose question is directly tied to the main idea of the passage.

## During Reading

### Teacher-Led Text-Based Discussion

To discuss the text, teachers do the following:

- Direct students to **think about the main idea** of the passage
- Have students **read the text**:
  - Silently, reading independently
  - With a partner
  - Following along as the teacher reads aloud
- Stop at the end of each section to **check for understanding** and **prompt discussion** through various questions, including *who*, *what*, *when*, *where*, *why*, and *how* questions.
- Direct students to use the Question Types cue card if needed (see image at right).

Question Types	
<b>Who?</b>	A person or group
<b>What?</b>	A description or an effect
<b>When?</b>	Related to time
<b>Where?</b>	A place or location
<b>Why?</b>	A reason or cause
<b>How?</b>	A process or characteristic

## Get the Gist

This strategy supports students in identifying the gist, or main idea, of a paragraph or section of a text.<sup>20,21</sup>

Teachers model the strategy for students using two questions to guide them (see image at right): “Who or what is the passage about?” and “What is the most important idea about the ‘who’ or ‘what?’”

Teachers then do the following:

- **Use a think-aloud** to model how readers identify the most important “who” or “what” and the key related ideas in the text
- Emphasize that gist statements are short and **model how to write a statement** in 10 or fewer words
- **Display students’ gist statements, provide feedback, and collaboratively revise** statements using the strategies

## After Reading

### Summarizing

Summarizing is a complex literacy skill in which students use multiple paragraph-level statements to cohesively express the key ideas in the entire text.<sup>21</sup> Over several lessons, students build on their skill in writing gist statements, leading to the ability develop a summary.

Teachers use the following instructional components:

- **Graphic organizers** to help students identify the main idea (i.e., gist) of different sections of the text and make connections between them
- **A list of criteria** to guide students in drafting, editing, and revising a cohesive written summary

## Get the Gist

- What is the most important “who” or “what” in the paragraph?
- Tell the most important idea about the “who” or “what.”
- Write the gist in about 10 words or less.



## Example Materials

**Texas Lesson**

### Albert Redder, Archaeologist

**What is an Archaeologist?**  
Archaeologists are people who study the artifacts of past groups of people. Artifacts are things made by people, then thrown away or left behind. Artifacts tell archaeologists about the culture of these people. When archaeologists study past cultures, they are learning how these people lived, what they made and what they believed. Archaeologists use science to help them learn everything they can from the artifacts they find.

**A Childhood Discovery**  
If you think nothing important happens when you are a child, think again. Children often experience things that change their lives. That's what happened to Albert Redder. As a boy, he found arrowheads in the fields near his home. Al was fascinated with these ancient tools. He wanted to learn more about them and the people who made them. That's when Al ran into a problem. There weren't any books about archaeology in his hometown in northwest Texas.

**Interest Grows**  
Al finally found the archaeology books he wanted to read when he joined the Army in World War II. The Army had some in its library for soldiers. Now he could read about the stone tools that captured his interest as a boy. When the war ended, Al moved to Waco. There, he found more books about archaeology. He continued learning about ancient tools and the people who made them.

**An Unexpected Find**  
On July 4, 1954, Al made another discovery that changed his life. It was a hot summer day, and Al was enjoying a swim in the Brazos River. "I saw a rock shelter across the river," he said. "It was in a cliff overlooking the opposite shore." Al swam across the river to investigate the shelter. It was about 150 feet wide and 22 feet deep. He discovered that someone looking for artifacts had dug a hole in the south end of the shelter. Nearby, he discovered a

Passage Excerpt

*Studies Weekly, Week 7*  
**Lesson 7: American Indian Society**

**Unit Big Idea** The early civilizations of Texas included Paleoamericans, American Indians, and European settlers.

**Vocabulary** product, deflect

**Gist 1**

**Gist Questions**

Who or what is this about? \_\_\_\_\_

What's the most important idea about the main "who" or "what"? \_\_\_\_\_

\_\_\_\_\_

**Gist Statement**

\_\_\_\_\_

\_\_\_\_\_

### Summary Graphic Organizer

After reading, students use a graphic organizer to write the gist statement

## The Takeaway

Reading comprehension is a critical component of learning as students advance through school and engage with a range of subject-specific concepts and ideas. Content area teachers can support students' development in reading comprehension by using a cohesive set of instructional practices, such as STRIVE.

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