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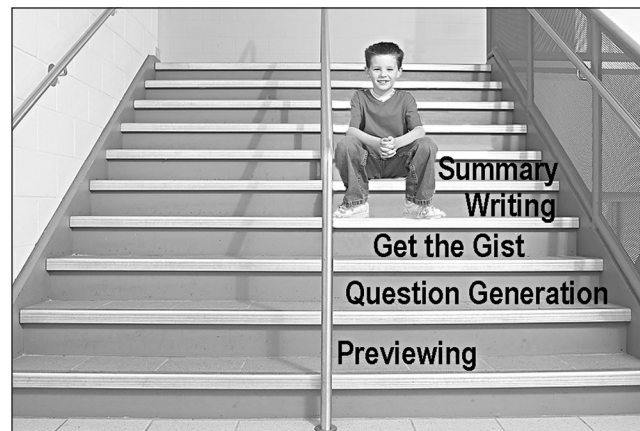
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Applying a Cohesive Set of Comprehension Strategies to Content-Area Instruction

Elizabeth Swanson¹, Meaghan S. Edmonds¹, Angela Hairrell¹,
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Abstract

Upper elementary content-area teachers often face the challenge of how to make content-area text more accessible and learnable for their students. Whereas there exists a range of comprehension strategies that can be applied to informational text, the premium on instructional time leaves teachers in search of a cohesive, efficient, and effective set of comprehension strategies that can be applied to existing textbook materials. In this article, a set of reading comprehension strategies designed for informational readings in social studies textbooks will be described. A description of each strategy is followed by a timeline for introduction and techniques for increasing task difficulty over time.

Keywords

intervention, learning strategies, elementary, comprehension

Upper elementary school students face increasing demands to read and comprehend different types of text. By fourth grade, they are more often engaged in learning from expository text (Chall, 1983; Gajria, Jitendra, Sood, & Sacks, 2007; Wharton-McDonald & Swiger, 2009) that is dense and thick with meaning (Armbruster, 1984). In addition, many upper elementary school students can decode text adequately but continue to experience difficulty with text comprehension. These students exhibit several common characteristics, such as poor recall of ideas (Kintsch & Kintsch, 2005; Warren & Fitzgerald, 1997) and problems identifying main ideas (Baumann, 1984; Williams, 2003),

drawing inferences (Holmes, 1985; Kintsch & Kintsch, 2005), relating new information to prior knowledge (Johnson, Graham, & Harris, 1997), and monitoring their own comprehension (Wong, 1994).

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As several studies reveal, many students may benefit if content-area teachers teach students comprehension strategies and how to apply them in content-area text (e.g., Gajria et al., 2007). However, in elementary classrooms, comprehension strategy instruction has been reported to be sparse (Allington & Johnson, 2002; Pressley, Wharton-McDonald, Mistretta-Hampston, & Echevarria, 1998), even in exemplary classrooms (Taylor & Pearson, 2002). The lack of strategy instruction in content areas in particular may be a result of the nature of content-area texts themselves that do not make explicit the connections between text and strategies (Kragler, Walker, & Martin, 2005). As a result, teachers look elsewhere to identify comprehension strategies to teach their students, with a tendency to implement several comprehension strategies instead of focusing on a few key strategies and developing them to mastery (Dewitz, Jones, & Leahy, 2009).

What Do We Know About Comprehension Strategy Instruction?

Comprehension strategies are procedures that allow students to become aware of their level of understanding as they read (RAND Reading Study Group, 2002). Several research syntheses (e.g., Gajria et al., 2007; Scamacca, Vaughn, Roberts, Wanzek, & Torgesen, 2007; Vaughn & Klingner, 2004) and reports (e.g., Baxter & Reddy, 2007) provide converging evidence to inform effective comprehension strategy instruction, with several practices showing evidence of facilitating reading comprehension during content-area instruction. These include providing a variety of ways to monitor comprehension during reading, such as question generation (Palinscar, Brown, & Martin, 1987; Pressley, 2000; Vaughn & Klingner, 2004), focus on main idea in text (Jitendra, Hoppes, & Xin, 2000; Pressley, 2000; Vaughn & Klingner, 2004), and the use of graphic organizers (Kim, Vaughn, Wanzek, & Wei, 2004). Summary writing can be used after reading to further improve students' comprehension (Palinscar & Brown, 1984).

Considering the limited time for content instruction, teachers may want to select a set of strategies that complement and build on one another, beginning with discrete skills, such as identifying main idea, and progressing into teaching students how to use several main idea statements to write a summary. In this article, we present a set of comprehension strategies that (a) are designed to be complementary and cumulative in nature, (b) are intended to support comprehension throughout the text reading process, and (c) can be used with a range of text types but are particularly useful with informational text. We follow this with a description of practices that increase the feasibility of strategy instruction.

An Effective Set of Comprehension Strategies for Content Area Text

Previewing

The first component of this multistrategy set is previewing, in which teachers engage students in three activities: (a) preteaching proper nouns, (b) introducing the big idea of the section, and (c) preteaching and connecting students' prior knowledge with text. This contrasts with practices in which previewing involves guessing what might be read with limited guidance or feedback. When students cannot read or do not know proper nouns, it prevents them from understanding informational text (Fletcher, Lyon, Fuchs, & Barnes, 2007). Teachers choose three to five key proper nouns for each section or chapter that are of essential importance for understanding the text. They tell students how to read the proper noun and provide a brief explanation that is easily understandable for students. For example, to introduce the key proper noun *Leanderthal Lady*, the teacher might say, "The Leanderthal Lady is a skeleton of a woman who lived 9,500 years ago. Workers discovered the skeleton near Leander not too long ago." Students write the key proper nouns and their descriptions in their learning logs (see Figure 1).

Second, teachers introduce the most important information from the section—the big idea. This brief summary may sound something like, "We will learn about how the earliest people came to the Southwest. Many people believe they may have been hunters who followed herds of mammoths and bison from Asia into North America." Third, students engage in a preview cycle. Here, students read the title and subheadings and browse the chapter for information that supports the big idea and prior learning. Teachers help students connect key concepts learned from the preview to the big idea and prior knowledge about the topic. Following are suggested steps for helping students make these connections.

1. Provide students 1 to 2 minutes to read the title and subheadings and to browse the chapter.
2. Students state the key concept of the subsection and how it connects to the big idea. Acknowledge students' ideas, ensuring the information is accurate. It is critical to avoid allowing incorrect information during this time.
3. List only accurate connections and information on chart paper or the chalkboard.
4. Students write briefly about what they already know and what they will learn.

Question Generation

The second component of this multistrategy set is question generation. Students are taught to write three different

LEARNING LOG: Combining Strategies	
Name: _____	Partner's Name: _____
Date: _____	
Chapter: _____	Lesson Title: _____
Unfamiliar Proper Nouns	
1. _____	<input type="checkbox"/> Person <input type="checkbox"/> Place <input type="checkbox"/> Thing/Event
2. _____	<input type="checkbox"/> Person <input type="checkbox"/> Place <input type="checkbox"/> Thing/Event
3. _____	<input type="checkbox"/> Person <input type="checkbox"/> Place <input type="checkbox"/> Thing/Event
4. _____	<input type="checkbox"/> Person <input type="checkbox"/> Place <input type="checkbox"/> Thing/Event
What do I already know about this topic?	
Make a Prediction: What will I learn?	
Turn Over	
Questions and "Gists" for Each Section	
Questions:	
1. _____	
2. _____	
Gist #1:	

Questions:	
1. _____	
2. _____	
Gist #2:	

Questions:	
1. _____	
2. _____	
Gist #3:	

Questions:	
1. _____	
2. _____	
Gist #4:	

Figure 1. The learning log can be used by students to record their progress in using the strategies during reading

types of questions: (a) “right there” questions, (b) “putting it together” questions, and (c) “making connections” questions (Raphael, 1986; Raphael, Highfield, & Au, 2006). See Figure 2 for student cue cards for each question type.

When modeling each question type, teachers can use an outline similar to this:

1. Introduce the name of the question type (e.g., “Today we are going to learn about ‘right there’ questions”) and where to find the information to answer the question type (e.g., “The information needed to answer a ‘right there’ question can be found in one place, word-for-word in the text).
2. Read a short passage aloud to students and model creating “right there” questions. For example, the teacher might say, “The first sentence says, ‘More than 1,200 years ago, mound builders migrated, or moved, south into the Piney Woods region to the site of the Caddoan Mounds.’ One fact is that mound builders moved to the Caddoan Mounds more than 1,200 years ago. I can turn that fact into a question: 1,200 years ago is a ‘when,’ so I’ll start with that. When did the mound builders move to the Caddoan Mounds?”
3. Continue modeling with several sections of text.

During a guided practice phase, students read a short section and write one or two “right there” questions. Teachers may pair students to read, write questions, and then answer each other’s questions. There is space on the learning log for students to write and answer questions (see Figure 1).

Get the Gist

This strategy helps students identify the main idea (gist) of a paragraph or section of text (Klingner, Vaughn, Dimino, Schumm, & Bryant, 2001). Students identify the most important “who” or “what” in the section, tell the most important thing about the “who” or “what,” and write the main idea statement in 10 words or fewer (Klingner & Vaughn, 1998; Mathes, Fuchs, & Fuchs, 1995). As teachers model the strategy, we suggest an introduction that explains what “Get the Gist” means. This might sound something like,

“Today, you will learn a new way to find the main idea of a section of text that you have read. It is called ‘get the gist.’ Get the gist helps you figure out the most important ideas from what you read.”

Second, the teacher should repeatedly model reading a short section of text, asking the gist questions in order, and

RED Question Card	
Level 1—Right There	Level 1—Examples
<input type="checkbox"/> Questions can be answered in one word or one sentence <input type="checkbox"/> Answers can be found word-for-word in the text > Who? > Where? > What? > Why? > When? > How?	<input type="checkbox"/> What is the capital of Texas? <input type="checkbox"/> Who was Jane Long? <input type="checkbox"/> Where did the Mexican War begin?
front	back
WHITE Question Card	
Level 2—Putting It Together	Level 2—Examples
<input type="checkbox"/> Questions can be answered by looking in the text <input type="checkbox"/> Answers require one or more sentences <input type="checkbox"/> To answer the questions, you have to look in more than one place and put information together > Who? > Where? > What? > Why? > When? > How?	<input type="checkbox"/> How did ranchers get their cattle to the markets? <input type="checkbox"/> Describe the events leading to Texas joining the United States. <input type="checkbox"/> Why was it harder for enslaved people to have a family life than plantation owners?
front	back
BLUE Question Card	
Level 3—Making Connections	Level 3—Examples
<input type="checkbox"/> Questions cannot be answered by using text alone <input type="checkbox"/> Answers require you to think about what you just read, what you already know, and how it fits together > How is _____ like (similar to) _____? > How is _____ different from _____? > How is _____ related to _____?	<input type="checkbox"/> Why is the Alamo important in Texas History? <input type="checkbox"/> How is the Texas Declaration of Independence similar to the United States Declaration of Independence? <input type="checkbox"/> How is the Civil War different from the Mexican War?
front	back

Figure 2. Student cue cards aid in writing questions
Adapted from *Second Grade Teacher Reading Academy (Revised)* by the Vaughn Gross Center for Reading and Language Arts. Copyright 2009 by the Author. Permission to reprint granted by VGCRLA.

then writing a 10-word gist. This phase may sound something like,

“[Read a section of text and then say] To write a gist, I want to identify the most important ‘who’ or ‘what’ from the passage. I think the most important ‘who’ is Christopher Columbus because many of the ideas in the paragraph were about him [write “Christopher Columbus” on a transparency]. The second part of ‘get the gist’ is to say the most important thing about the ‘who’ or ‘what.’ [Ask students to identify the most important information and list their responses on the transparency. Help students determine what is the *most*

Gist Cue Card (YELLOW)	
Get the Gist	Get the Gist: Longer Passages
<input type="checkbox"/> What is the most important WHO or WHAT in this paragraph? <input type="checkbox"/> Tell the most important idea about the WHO or WHAT. <input type="checkbox"/> Write your gist in about ten words or less.	<input type="checkbox"/> What is the most important WHO or WHAT in this longer passage? <input type="checkbox"/> What is the most important idea about the WHO or WHAT? <input type="checkbox"/> Write your gist. <input type="checkbox"/> Remember, your gist should have about the same number of sentences as the number of paragraphs you read.
front	back

Figure 3. Student cue cards aid in writing gist statements
Adapted from *Second Grade Teacher Reading Academy (Revised)* by the Vaughn Gross Center for Reading and Language Arts. Copyright 2009 by the Author. Permission to reprint granted by VGCRLA.

important information to remember.] Finally, we’re going to write a short sentence with this information. We want to use 10 words or fewer. Let’s try this. ‘Christopher Columbus wanted to find a shorter route to Asia.’”

After modeling this procedure several times, students should be ready to work in pairs. This is a good time to introduce the cue card (see Figure 3).

Teachers guide students step-by-step through the get the gist strategy:

1. Read one paragraph with the class.
2. Students identify the most important “who” or “what.”
3. Share and provide feedback. Students justify why it is the *most* important “who” or “what.”
4. Students identify the most important information about the “who” or “what.”
5. Students write a gist in 10 words or fewer on their learning log (see Figure 1).
6. Write several student gists on the board and provide feedback. Use this time to teach students how to evaluate and improve their gist statements. For example, ask students to identify the portion of text that supports their gist. Ask them to justify why they believe their gist contains the most important information.

Summary Writing

There are two components to summary writing. First, at the heart of the summary writing strategy is the use of graphic

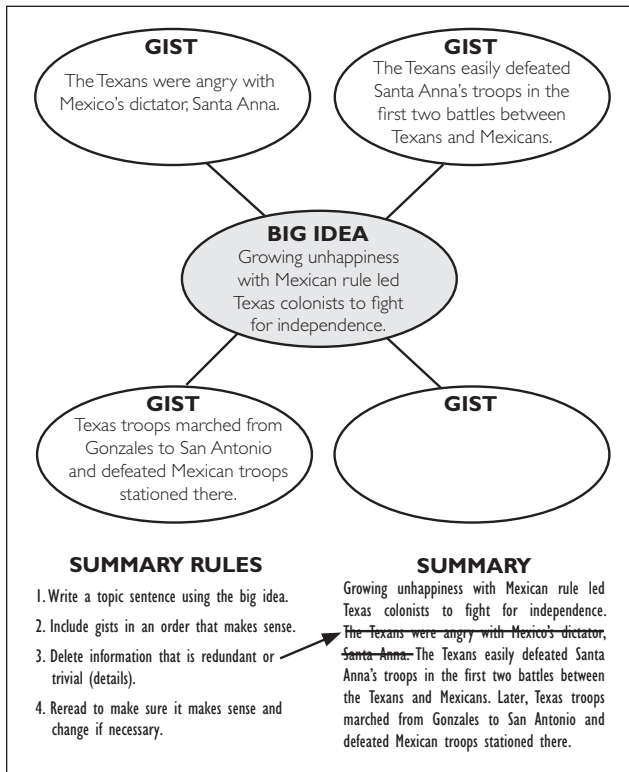


Figure 4. Example graphic organizer

organizers (see Figure 4) that help students identify main ideas from several sections, make connections between several main idea statements, and summarize longer portions of text. The second component is a list of rules that students use to focus on the most important information for the summary.

Teaching students to write summaries using a graphic organizer may take several days of instruction. On the first day, introduce the strategy, saying something like, “We have one last strategy to add. It is called summarizing. Summarizing is like get the gist, but you can use it to remember larger amounts of reading. There are two steps that we will use to write summaries. The first step is to complete our graphic organizer. The second step is to use rules to help you write only the most important information in your summary.”

Provide each student a copy of the graphic organizer and a copy to display in class (i.e., on chart paper or transparency). Tell students to write the big idea (introduced during preview) in the center oval of the graphic organizer. Next, read the first section with the class and write a class gist in one of the ovals surrounding the big idea. Discuss how the gist from this first section relates to the big idea. Continue reading subsequent sections, filling in the gist ovals and discussing their relation to the big idea.

After the graphic organizer is filled in, it is time to teach students how to write a summary. The first few summaries that students write should be completed as a whole class with your guidance. Model aloud the thinking that goes into summary writing as you follow each step of the summary

rules. For an example of a completed graphic organizer, summary rules, and a sample summary, see Figure 4.

Timeline for Scaffolded Implementation

Teach One Strategy at a Time

While it is tempting to provide students with all the strategies simultaneously, we recommend a scaffolded, sequential introduction introducing strategies in the order indicated previously over several 6-week periods. Although 6-week intervals are suggested, some students may progress more quickly or slowly.

In the first 6 weeks, focus on previewing and asking/answering questions. With questioning, it is important to introduce the question types separately, allowing students to master each type before moving to the next question type. Once students are proficient with previewing text and using the three question types, introduce writing gist statements. This can generally occur in the second 6-week period. Gist statements can be difficult and may require many weeks of modeling and practice. Summary writing is the final component of this strategy set. Ideally, this would be introduced in the third 6 weeks; however, because writing a summary uses gist statements, it is important for students to master gist statements first. As with gist statements, summary writing requires weeks of modeling and practice with increasingly difficult text. See Figure 5 for a suggested introduction timeline for this set of comprehension strategies.

Increase Task Difficulty Over Time

Teachers provide initial supports that are gradually withdrawn as students become more proficient with each step of the strategy. For example, when teaching students to ask and answer questions, teachers may initially provide students with the questions, focusing the lessons on how to recognize and answer the different question types. Next, as students learn how to answer each question type, they are provided with question stems that they must complete before looking for and providing the answer. For example, the teacher might say, “Today, I want you to write a ‘right there’ question that begins with the word ‘who.’” Finally, students write questions independently. These scaffolds are flexible and can remain in place for some students that continue to need support. For example, most of the class may be able to generate questions independently, while two or three students continue to need a question stem. Consider it high-quality practice to provide struggling students with the proactive support they need.

There are also several ways to increase the difficulty of writing gist statements. Teachers may consider the difficulty of text. For example, when introducing and initially practicing gist statements, select text that has an obvious main idea. As students become more proficient, select texts that may require

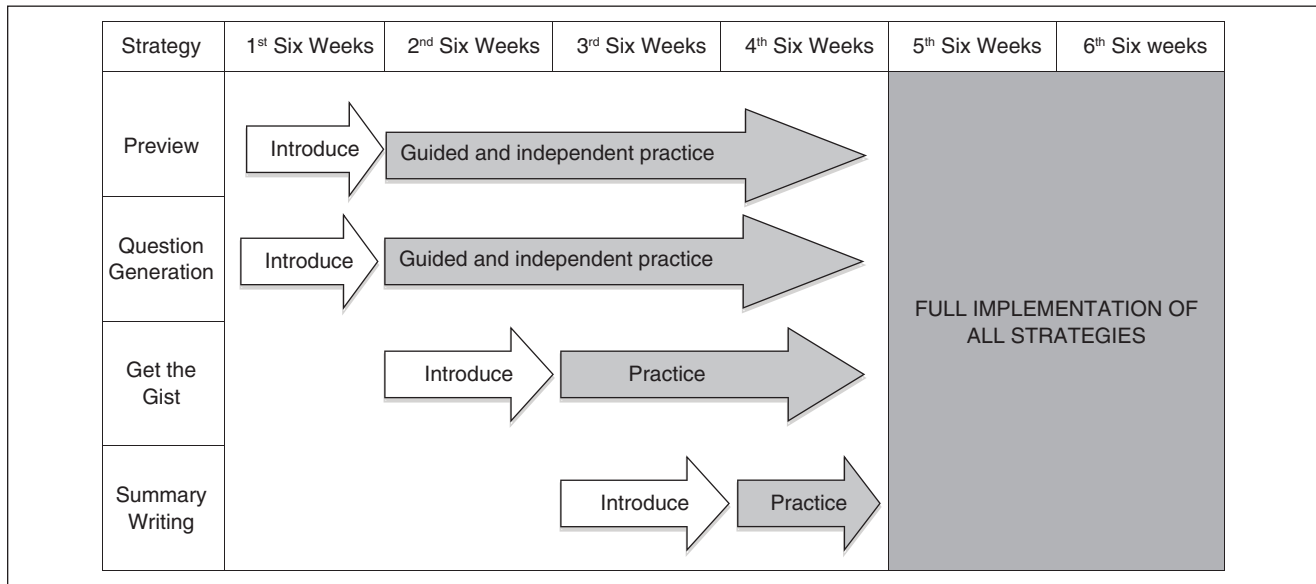


Figure 5. Timeline for introducing strategies

students to make inferences to write a high-quality gist statement. Another way to increase the difficulty of writing gist statements is by varying the length of the text. In the beginning, you may ask students to write a gist statement at the end of a one- to two-paragraph section of text. However, as students gain mastery in gist writing, increase the amount of text read to one section and, finally, to an entire chapter.

Summary

This strategy set allows teachers to create a classroom routine that encourages students to develop a set of tools for approaching the reading task. The routine also assists teachers in efficient planning while allowing them to customize the lessons to meet student needs and mandates to cover social studies curricula in a timely manner. One fourth-grade teacher included in the development of this strategy set was asked to share her experiences implementing the strategies. She said, “Finding a template that fits different lessons with room for flexibility takes time out of the planning process. It leaves more time to focus on the content, rather than reinvent the wheel for each lesson” (Simmons & Vaughn, 2008).

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