

Matching Instructional Strategies to Facets of Comprehension

Last fall, Rebecca, my 13-year-old niece, came home from school and announced she had a test the next day in geography.

“Can you help me study, Aunt Sue?” she asked.

“Sure, what can I do?” I answered.

She pulled out a number of blank index cards, explaining she wanted to list details for every city and country mentioned in the chapter so that she could memorize it. She wanted me to write the information as she found it in the book.

In part, I was pleased with her strategy use. Rebecca never liked reading. Ask her to play basketball, construct an art project, or write a play, and she’s ready, but asking her to read is punishment. Her use of index cards was a strategy she had learned two years prior—one she was transferring to prepare for her test. Because transfer is often a problem with strategy instruction, particularly in the content areas and with adolescents, I was proud that she had adopted this approach as her own.

At the same time, I was uneasy. By design, Rebecca’s cards listed only factual information. As such, the cards supported her literal comprehension of the text but did nothing to help her interpret relevance or apply a critical stance. While I realize that literal comprehension is essential, I knew she was missing other, perhaps more important, components that would support her in becoming a literate adult.

Rebecca’s experience is common. For multiple reasons—large class sizes, preparation for high-stakes tests, and ease of evaluation—current practices focus on literal recall. This is problematic

for all learners, but especially for those in middle school. Evaluating only literal comprehension assumes one “right” answer and stresses that the sole purpose for reading is to find text-based responses to questions. However, reading literature, interpreting data in science, or determining historic significance requires interpretation and critical thinking. Therefore, instruction in content areas must stress deeper thinking over simple recall. Further, adolescents struggle with finding their own identity and rebel against authority. Text-based responses place authority within the text and not within the reader; therefore, at a time when learners want to express their original thinking and establish ownership of their experiences, teachers are privileging textual information over students’ opinions and ideas. This focus can result in students rejecting reading—not because of problems with the texts or because they cannot read, but because instruction ignores the meanings they find relevant. If we want our students to become literate, we must expand our instruction so that learners engage with texts in ways that require deeper thought.

Before presenting my argument, I want to stress that I fully agree that: 1) strategy use across domains should remain key to comprehension instruction, 2) such instruction should instill student ownership so that they transfer such use to other texts, and 3) we should continue to reinforce attention to textual details. Despite my agreement with these points, however, I will argue that while these are important, they are not sufficient. We need to refocus our efforts on instruction that fosters higher-order thinking and stresses interpretive and critical comprehension. Further, our instruction should highlight how

some strategies can support these facets of comprehension better than others.

Why Deconstruct “Comprehension” and Align Strategy Use?

Several years ago, I engaged in an extensive staff development project that examined how to analyze students’ written responses to texts as a basis for assessing their comprehension. As a result of

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this work, we developed a list of several “facets of comprehension”; this list provides a rich framework for teaching the multiple ways in which readers construct meanings from texts and for developing an assessment process that informs instruction (Fiene & McMahon, 2007). Understanding these facets also enables us to develop frameworks for determin-

ing which strategies are most effective for promoting alternative ways of comprehending. Our list of facets and their accompanying strategies is too long to include in detail here; therefore, I will emphasize three that I think provide a firmer base for teaching and supporting transfer, resulting in higher-order thinking in adolescents.

Many teachers perceive comprehension as an “either-or” situation. That is, to them, comprehension means either understanding main details or not. Such a stance is understandable if literal recall is the sole determination of comprehension. However, comprehension consists of more than recall. Constructing meaning from texts is a complex process that requires each reader to attend to relevant information but also necessitates connecting new information to existing knowledge bases and evaluating its significance. Thus, while the ability to remember details does demonstrate one level of understanding, that level is probably the least meaningful. That is, even though all readers might agree on the most important details pro-

vided in a text, their constructed meanings about the relevance of those details will vary. Therefore, our instructional goals should include an emphasis on and assessment of how students interpret and evaluate what they read; we must require learners to work with ideas, assess their relevance, and develop opinions about their value. Recognizing these different meaning constructions likely makes our work as teachers more interesting, as well as more demanding. That is, if we shift our focus from solely literal comprehension to one that embraces interpretive and critical responses, then we need to emphasize each facet of comprehension and provide explicit instruction on how to support it.

While rethinking the concept of comprehension is important, it is not the sole modification we need to make; we should also reconsider how we approach strategy instruction. Currently, we teach a selection of strategies so that students can monitor and repair comprehension breakdown; however, we teach them generically, without explicating which facets of comprehension they support. That is, some strategies, like the one Rebecca adopted, promote literal comprehension, yet we do not explain this to students. I propose that, in addition to teaching how, when, and why to use strategies, we also explain which levels of comprehension—literal, interpretive, or critical—they support.

Exploring the Facets of Comprehension and Ways of Supporting Them

In the following sections, I clarify three facets of comprehension and describe how particular strategies can support them. Certainly my list of facets and strategies is not all-inclusive, nor do I intend to convey that any strategy is necessarily limited to one particular facet. The intent is to clarify each facet and illustrate how explicit modeling of a strategy can support each one. Together, they promote enhanced comprehension and student ownership that will facilitate transfer.

Literal Comprehension

Literal comprehension refers to accounts that closely match the written text. While I believe we over-teach this facet, a literal reading of any text is important because it helps readers understand the author's purpose, identify relevant information, and establish the foundation upon which they will accumulate information, evaluate its accuracy, and critique ideas presented. Therefore, when engaging in this facet, readers must be able to attend to details and demonstrate their understanding through statements closely aligned with text information. Since this facet is indeed important, learners should develop a collection of strategies that support it.

One Strategy Supporting Literal Comprehension

Helping students engage in literal comprehension requires instruction on a repertoire of strategies that aid the reader in determining which information is pertinent. Even though many strategies can support this facet, I focus on *questioning* here because it 1) helps students concentrate on relevant information, 2) provides a structure for thinking about details, and 3) provides a record of students' thinking across reading. Teachers can support students' engagement in literal comprehension by providing instruction on how to formulate questions that focus on text-based information. If students understand this purpose for this strategy, they will be more likely to use it across content areas and texts.

Good readers formulate or respond to questions before, during, and after reading. While there are many ways to structure questioning, Raphael and her colleagues (Raphael, Highfield, & Au, 2006) remind us of four: "Right There," "Think and Search," "Author and Me," and "On My Own." In this section, I address only the first two, since they support literal comprehension.¹ Further, I demonstrate my points using examples

from a sixth-grade classroom reading about animal habitats.

Right There. "Right There" questions ask for information that can be found on one place in a text. As a pre-reading focus, a sixth-grade teacher I observed stressed two ideas she wanted students to remember from their reading of *Rain Forest Animals* (Randolph, 2004). She showed them the questions, reminding them that the answers are text-based. Here are two "Right There" questions the teacher posed:

1. What do we call an adaptation that has to do with how an animal behaves or acts?
2. What is a behavioral adaptation?

Before providing students time to read, the teacher asked them what key words they should look for in the text to help identify relevant information. Students supplied examples like "adaptation," "behaves," "acts," or "behavior." Listing these on the board, the teacher directed students' attention to the following paragraphs, asking them to read and look for appropriate answers.

The kind of adaptation that has to do with the way an animal acts is called a behavioral adaptation. A behavioral adaptation is an inherited behavior. It is passed from one generation to the next.

This means that an animal does not have to learn this behavior. (Randolph, p. 14)

After reading, students provided answers such as, "How an animal acts is called behavioral adaptation" or "Behavioral adaptation is inherited."

These answers are easily found within the text, and the teacher's approach showed students how they were reflecting a literal comprehension of the paragraph. Further, she explained that such a perspective helped them identify relevant information essential to understanding the remainder of the text. While simple, this lesson demonstrated how certain questions help the reader identify important information.

Think and Search. A second type of question

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¹ The other two support interpretive ("Author and Me") and critical ("Author and Me" and "On My Own") comprehension.

that supports literal comprehension is “Think and Search” (Raphael, Highfield, & Au, 2006). These differ from “Right There” questions in that the answer is embedded in more than one place in the text. For example, the same teacher continued by asking students to read the following paragraph containing specific information about the behavioral adaptation of the great hornbill.

The great hornbill is a bird with an interesting inherited behavioral adaptation. Hornbills build their nests in tree holes. When the female is ready to lay her eggs, she seals herself into the nest with a layer of mud and other material. She leaves only a small slit as an opening. The male hornbill passes food to the female through the slit. The female stays inside her self-made prison until her babies are hatched. This behavior keeps her eggs safe from predators. Baby hornbills are born knowing how to seal up a nest. It is an adaptation that is passed from one generation to the next. (p. 14)

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When students completed the paragraph, the teacher modeled an example of a “Think and Search” with the following question: “List the steps the female hornbill follows when making her nest.” While all the information to answer this question is included in the paragraph, the reader must think about which

facts are relevant and must look across the text to find all the steps. The teacher provided students time to find parts of the answer and asked students to share their findings. The first student said that the female seals herself in the nest when she’s ready to lay her eggs. The teacher wrote this on the board. This continued until the teacher had listed all relevant text-based information. As further support, she followed up by asking students to be sure they could find everything on the list somewhere in the paragraph. Once they confirmed their list was in the text, the teacher directed them to construct an answer to the question. Afterward, they compared answers to see that, while sometimes slightly different, the substance was the same

across answers. Through such explicit instruction, this teacher had helped students to incorporate focused questioning into their arsenal of strategies for literal comprehension.

Interpretive Comprehension

In contrast to literal comprehension, interpretive comprehension requires more than recall. When we interpret a text, we connect new information with old, comparing and contrasting ideas. Because this facet requires the reader to fuse personal knowledge and text-based information, the constructed meaning results in the development of a unique meaning (Anderson & Pearson, 1984). That is, interpretive comprehension reveals some text-based information, but also includes the reader’s individual twist by combining with accessible knowledge related to the reader’s 1) prior experiences, 2) knowledge constructed from other texts, and 3) affective reaction to the text (Gaskins, 1996). Thus, this facet of comprehension requires readers to blend new knowledge with existing thought, encouraging them to think about their reading at a deeper level and to achieve a more personal understanding. As such, it enables the teacher to assess not only the reader’s meanings but to discover text-based omissions, as the example below will show.

One Strategy That Supports Interpretive Comprehension

To foster interpretive comprehension, the teacher must consider strategies that facilitate the learner’s efforts to build relationships between their personal knowledge bases and new information found in the text. As with literal comprehension, there are many such strategies; I have selected one for illustrative purposes.

Interactive Reading Using Sticky Notes. One method teachers can encourage to promote students’ interpretive comprehension is the use of sticky notes while reading. Clearly this approach can be used to support literal comprehension as well; however, instruction that makes an explicit connection between this strategy and interpretive comprehension will result in the necessary blend-

ing of existing knowledge with new information.

Let us visualize the same sixth-grade class referenced above, still reading about behavioral adaptation. The teacher modeled making her own interpretations and encouraged students to share theirs. As they did so, the teacher made a list. For example, one student wrote, “I wonder how long it took for the anteater to grow a longer nose to get to the ants.” The teacher listed this, noting that this student had raised a question for additional research. Next, Michael read a sticky note he had written when reading about anteaters. His note read: “My Aunt Rosie has a really long nose. I wonder if it’s an adaptation because she really likes to smell flowers in her garden.” Even though Michael had not understood “behavioral adaptation” as inferred in the book, the teacher listed his response without question, wanting to learn how each student was connecting new information in the book to existing knowledge. As more students shared, she realized that many students had developed similar misconceptions about adaptation. When considering how to address this, she reread that section of the text and learned that “physical adaptation” was explained in a way that supported the students’ comprehension; therefore, she recognized the need to supplement the text with additional readings and instruction.

This sample from a lesson demonstrates a crucial factor when considering the need to expand comprehension instruction beyond the literal. That is, had this teacher limited her focus to literal comprehension questions, she would have only understood that students could restate text definitions; however, the information in the text was insufficient to allow all her students to grasp the complexity of the concepts. Including interpretive comprehension enabled her to adjust instruction before the unit test to ensure students’ understanding, and this particular strategy provided the necessary evidence she needed for assessment. Therefore, only by asking students to relate new information to existing knowledge can we determine the meanings students are constructing. Using sticky notes is one way to do this.

Critical Comprehension

Critical comprehension, like interpretive, requires the reader to work with both existing knowledge and new information to construct meaning. However, this facet demands that readers include more of their existing knowledge, drawing on their dispositions or values to weave: 1) an opinion after reading, 2) an evaluation of positions, either within the book or held by the reader, 3) an assessment of the relevance or reliability of information provided within a text, and/or 4) the formulation of inferences

beyond the text to other contexts. Such an approach to reading is essential to encourage critical thinking, both within and across disciplines and domains of knowledge (Paul, 1986). Critical comprehension is a complex process, requiring both the combination of new information with existing knowledge and the reconstruction of it to create something new—an opinion, an evaluation, or a larger inference.

One Strategy That Supports Critical Comprehension

As with the previous two facets of comprehension mentioned above, many strategies can foster critical comprehension. Look for ones that enable the reader to restate text information and include personal opinions related to it or, more specifically, that encourage readers to track their reactions while reading in ways that require them to reflect on what they have read to express an opinion. Unlike the notes posted within the text, this approach requires an opinion or evaluation, not just a connection. While this monitoring of opinions, evaluations, and criticism during and after reading can be accomplished through many strategies, I will focus on the one observed in the same sixth-grade classroom.

One way of promoting critical comprehension

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is to encourage students to use a Double Entry Journal (Schatzberg-Smith, 1989). This simple format clearly communicates to learners that their opinions related to the text are important. For example, the double entry journal in Figure 1 shows one student's reactions when reading the science book referenced earlier.

This sixth-grader's response shows how she is connecting her thinking about conditions within the nest to develop a deeper understanding of how important it is to seal the eggs within the hole in the tree. Further, she has added her own prior knowledge to infer that the nest accumulates waste from the mother, so it must be dirty by the time the eggs hatch. Thus, her initial entry shows how she is relating new information to her accessible knowledge base to reach a new conclusion related to the safety of the newborn hornbills. Her further entries continued this pattern so that, after reading many related texts, her notes demonstrated that she had developed a deep understanding of how adaptations within nature enabled animals to be safe.

All the students in this sixth-grade classroom maintained their double entry journals, answered "Right There" and "Think and Search" questions, and added sticky notes while reading several related texts. As a final activity, the teacher asked all students to trace the development of their thinking across the texts, as evidenced by these three strategies. The majority of students noticed how the three strategies helped them comprehend the texts in different ways, thus making the purposes of each one explicit and increasing the likelihood

that students would transfer these strategies to other reading experiences.

Final Thoughts

I began this article with a description of Rebecka's preparation for a geography test. She did well, not only on the test, but in the course. She proudly announced at dinner just before summer vacation that she had earned a 94% for the semester. Her use of the strategies she had been taught paid off in terms of her grade and self-confidence. Further, I am confident that the strategies that helped her prepare are clearly part of her repertoire that she will use again. Still, I wonder whether any of the facts she learned are permanently tied to information she already knew, whether she developed interpretations that were incorrect, and whether she developed informed opinions about the content.

Experiences like Rebecka's have caused me to alter my thinking about strategy instruction. No longer do I think that we need only select one strategy for instruction; rather, I believe we must expand our teaching to include other facets of comprehension and align our strategy lessons with each one to make clearer its purpose and to ensure transfer. Such an approach deepens comprehension, promotes multiple strategy use, and facilitates transfer. Time will tell whether Rebecka will become a critical reader of texts; however, my hope is that her future teachers will provide more expansive instruction on comprehension in ways that value her thinking and provide her with occasions to interpret and critique what she reads, not simply to memorize it. I have the same hope for your students.

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What the Author Said	What You Say
<i>Baby hornbills are born knowing how to seal up a nest. It is an adaptation that is passed from one generation to the next.</i>	I think that the nest must be really dirty by the time the eggs hatch. I think the mother bird would get sick since she can't leave to go to the bathroom. I guess she must really want to keep the eggs safe!

Figure 1. Student sample of a double entry journal

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