Kindergartners Can Do It, Too!
Comprehension Strategies for Early Readers

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It's a sunny room; there are pictures and writing on most of the surfaces, books in the nooks and cran-
nies, and loads of little bodies beginning to get set-
tled on the carpet at the front of the room. When Mrs. Hope (all names are pseudonyms) brings out Zach's Alligator by Shirley Mozelle (1995), something unusual happens. She asks the young students to raise their hands to share their schema for alligators. Hands go in the air and students begin to talk about alligators: They suggest that alligators swim, that they bite, that they see underwater. They also explain, when asked, that a schema is "what you already know."

As the discussion continues, the students hold their hands up in different forms. One holds his hand in the shape of a C, another makes a V, and that one is for some reason wiggling her index finger up and down. As Mrs. Hope calls on the students to share their thoughts, a pattern emerges. The C shape is followed by a connection to the story, a student flashing the V shape shares her mind movie or a description of her visualization, and a question follows the wiggling little finger. These students are engaging in meaning construction.

Comprehension Instruction
Thanks to the comprehension revolution (1970–1990), we have been able to develop new intellectual tools, increase recognition that there is something more to reading than decoding, and better determine what good readers do as they read (Duke, 2001). This work, however, has been primarily targeted at the instruction of older students (Hoyt, 2005; Stahl, 2004) and little information found its way into early primary classrooms.

What is surprising is that when young students interact with texts in any literary task, they bring the ability to construct meaning (Brown, 1973; Bruner, 1983; Wells 1985). So why is there so little research available on comprehension strategies for young students, the acquisition of new knowledge via text, and how we can help students learn to examine text critically (Duke & Pearson, 2002; Stahl, 2004)? These questions are difficult to answer, but Mrs. Hope found a way to adapt lessons gained from work with older readers to work within her classroom.

Teaching Comprehension Explicitly With Kindergartners
It is difficult to know where to begin when teaching for comprehension. Where does meaning making begin? How do you start and where do you go? Thinking about what is known about good readers and how they interact with texts (Duke, 2001; RAND Reading Study Group, 2002), it seemed natural to begin at the beginning—with activating schemas. Making connections, visualizing, asking questions, and inferring naturally flowed from there. Mrs. Hope followed a protocol of instructional delivery as she introduced these strategies in her classroom. She began by defining the strategy, providing a visual representation of its meaning, and asking students to use the strategy within the context of the story, through the use of anchor charts and hand signals.

Schema
Cunningham and Shagoury (2005) described schema as "this stuff already in your head, like places you've been, food you've eaten, people you know, when you read a book and you use what's in your head to make sense of the book, you make a bridge" (p. 38). In Mrs. Hope's classroom, schemas became the basis for interactions with text. To introduce this concept to the students, she graphically represented...
schema as a picture of a human head with many ideas swirling around it. She and the students discussed the picture and what their ideas were for a topic. As new stories were read and shared aloud, schemas became an ever-present force driving the discussion. Many of their read-aloud sessions began with a “click” as the students “turned on” their heads and activated their schemas.

Making Connections and Velcro Theory

Young students have an innate ability to construct personal narratives (Cunningham & Shagoury, 2005; Miller, 2002); it is this ability that best readiness them for the task of making connections. Mrs. Hope began to explain connections with a picture of a brain with smaller pictures of ideas swirling around in it, then explained to the students what she calls the “Velcro Theory.” She explained that when we get a new piece of information, it’s easier to remember it if we can stick it onto something that’s already in our heads; making this connection helps us to understand what we are reading. As she began reading, the children began to make connections and raised their hands in the shape of the letter C to indicate that they had a connection to share.

Making connections was not enough for the students in Mrs. Hope’s class; they were also asked to categorize these connections. Using the think-aloud strategy, Mrs. Hope guided the students to categorize their connections by modeling text-to-self, text-to-text, or text-to-world connections. Through this categorization, students better understood ways in which to connect and make meaning with texts.

Visualization and Mind Movies

The strategy of visualization encourages students to listen to the story and create detailed mental pictures about what is happening. In Mrs. Hope’s classroom, this strategy was called “making mind movies,” and students raised their hands in the shape of a V when they had a visualization to share. As part of the introduction to this strategy, Mrs. Hope asked the students to close their eyes and listen to the story Fireflies by Julie Brinckloe (1985). After reading two pages, Mrs. Hope asked the students to describe their mind movies. Later, they were asked to draw their mind movies and then to compare their drawings to the illustrations in the book (see Figure 1). This provided Mrs. Hope and the students with the opportunity to discuss why some things were included in their pictures but not in the text.

At times it appeared that full-length stories demanded too much cognitive attention, so Mrs. Hope used poetry to help students develop their understanding. She often would use shared and interactive techniques (McCarrier, Fountas, & Pinnell, 1999) with the students to write these. Then, these poems would be written on half pieces of paper, leaving the other side blank for the students’ illustrations and visualizations (see Figure 2).

At other times, she might ask the students to brainstorm ideas with her and record these ideas in order to illustrate the mind movies they were creating. In all instances, opportunities were provided to discuss what was included in the pictures created by the students that helped them to understand and represent their understandings. Visualizing is an important strategy for students as they move from picture books to chapter books, and is especially important in today’s world where everyone is constantly bombarded with sophisticated graphics and little language (Keene & Zimmermann, 1997).

Questioning and “I Wonders”

The questioning strategy involves children in constantly asking questions of the text. To do this, children must be involved in creating and revising meaning based on the information provided by the text. An anchor chart was used to introduce this strategy in Mrs. Hope’s classroom. At the top of the chart she wrote, “Expert readers ask questions before, during, and after they read” (see Figure 3).

Mrs. Hope introduced the story of Owen & Mzee: The True Story of a Remarkable Friendship by Craig and Isabella Hatkoff and Paula Kahumbu (2006), showing the front cover of the book and asking the children to wiggle their index fingers if they had any “I wonders” about the story. The children asked questions, and these were recorded on the chart. When reading the story, Mrs. Hope periodically stopped to record the questions that the children had generated. As the reading of the story progressed, the children began to form more and more thoughtful questions. Young children are naturally inquisitive (Brooks & Brooks, 1993), and when asking questions is explicitly demonstrated during the reading of text, they
Figure 1
Visualizations for Fireflies

Figure 2
Visualizations for Sunflakes
quickly begin to ask questions helping them both to interact with the text in meaningful ways and to critically examine the story.

Inferring and Using Our Brains

An inference is created at the intersection of our schema, the author’s words on the page, and our mind’s ability to merge that information into a unique combination (Keene & Zimmermann, 1997). This is a strategy of some complexity and required the children of Mrs. Hope’s class to utilize aspects of all the strategies they had learned up until this point.

Lobel’s (1979) Frog and Toad Are Friends and the stories in that series were a great resource for Mrs. Hope when working with inferring. She and the children would create anchor charts at the beginning of the story with the questions they had (see Figure 4). After the story was read, they would discuss these questions and answer whether the question was explicitly answered in the text of the book or if they needed to use their brains. Whenever they needed to use their brains, they were making an inference. Presenting the inference process in this manner allowed the children to work with the text concretely and make the inference process itself more tangible. Additionally, asking questions increases children’s ability and inclination to make inferences (Hansen, 1981).

Young Students and Meaning Making

What we have seen in Mrs. Hope’s classroom is that young students are able to use schema, make connections, visualize, ask questions, and infer when interacting with texts. These comprehension strategies, although typically associated with the instruction of older children, can—and do—work in classrooms of younger students, as the kindergartners in Mrs. Hope’s classroom demonstrate. These young students benefited from her explicit instruction of comprehension strategies and were able to construct meanings and interpretations for texts. While it was

Figure 3
Expert Readers Ask Questions for Owen & Mzee

![Image of handwritten questions](questions before, during and after reading.

Is it about the hippo & turtle? Are the turtle & hippo friends? Is the hippo a girl and the turtle a boy? But is the turtle a turtle or tortoise? Are they going to walk together? Are the hippo & the tortoise having a fight? When they get older will they still be friends? Why are hippos so dangerous? Are the hippo going to die? Do the hippo eat or grow at people? Will the hippo be back to where they live? Will the hippo be back to where they live?

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not always evident if these interpretations were comprehensive (i.e., inclusive of the entire text), all students within the classroom were able to engage with text to begin to negotiate meaning construction.

By necessity, comprehension instruction looks different with young children. It is more active and much more visible (i.e., through the use of hand signals). However, their use of these strategies functions in a manner that is very similar to that of older children. The result is that they are better able to understand what they are reading.

References
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