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5

Active Thinking and Engagement

Comprehension in the Intermediate Grades

Kathy Ganske

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Much has been said and written about the "activeness" of good readers. Among other things, they draw on background knowledge; make predictions and inferences; create mental images; monitor for meaning; make connections; ask questions; recognize the organization and structure of text; determine what's important; and synthesize, summarize, and evaluate what they've read (Duke & Pearson, 2002; Harvey & Goudvis, 2007; Keene & Zimmerman, 2007; National Institute of Child Health and Human Development, 2000; Pressley & Afflerbach, 1995)—and, we hope, enjoy what they are reading. We get glimpses of what active reading looks like through journal excerpts written by a proficient fifth-grade reader, Kelly, who is beginning Mildred Taylor's (1981) *Let the Circle Be Unbroken* (Figure 5.1).

Clearly, Kelly is an engaged and active reader. She immediately makes known her enjoyment of *Let the Circle Be Unbroken,* drawing a text-to-text comparison to another book by the same author: "I am enjoying this book as much as *Roll of Thunder Hear My Cry* [Taylor, 1976]. It has just as many intense and tear-jerking events and thoughts." Then she shares her thinking about possible interpretations of the book's title, clarifying and elaborating her predictions with drawings and by con-

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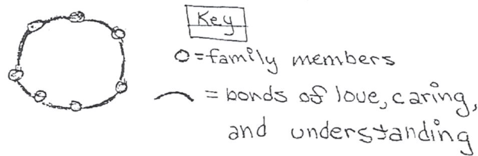
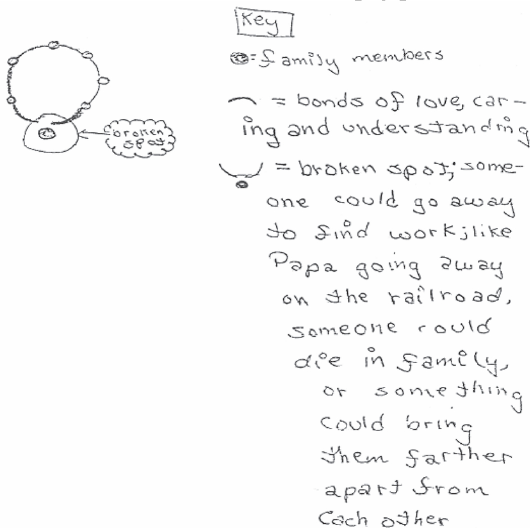
I am enjoying this book as much as Roll of Thunder, Hear My Cry. It has just as many intense and tearjerking events and thoughts.
I think the title refers to the family being in a circle and connecting the people would be love, caring and understanding. This is what a diagram or picture might look like:



There is another possibility that it could be a song. I just thought of that because everytime my brother sees the book he sings the words of the title. Do you know if it is a song? Maybe they sing the song (if it is a song) if they are going through really hard times, or it could be my two ideas put together. I think it is both because it sounds like a song you sing and it would be hard times if the circle was broken. This is how it could break:



It wouldn't be too likely for someone to die in the family, because all of the characters are so developed and give the story more deep feelings. Everyone in the family could die except for Cassie, because she tells the story, but the author can make-up more ways to add sadness then letting a family member die. I would prefer the author to keep the family alive.

FIGURE 5.1. A fifth grader's journal entry excerpts for *Let the Circle Be Unbroken.*

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necting the text to both a personal experience she had with her brother and to her knowledge of the world, "hard times." Uncertain whether a song with the title words actually exists, she questions her reader, in this case the classroom teacher ("Do you know if it is a song?").

In her final paragraph Kelly shows sophisticated understanding of the structure of stories and how they work and provides a personal evaluation of what she thinks the author can and should do as a writer: "The author can make-up more ways to add sadness then letting a family member die. I would prefer the author to keep the family alive." The student reveals her deep engagement with the book through drawing and her journal writing, which resonates as a think-aloud written down. After finishing *Let the Circle Be Unbroken* she created a visual representation depicting her overall assessment of the book (Figure 5.2).

For this fifth grader and this book, the act of reading was clearly a pleasurable and absorbing one, a *flow* experience (Csikszentmihalyi, 1991) that totally captured her attention. This sort of engagement is a critical factor in reading because how motivated students are impacts the extent and manner in which they use comprehension strategies (Guthrie et al., 1996), and according to Guthrie and Wigfield (1997), whether or not readers are motivated depends on how they perceive themselves relative to the reading task, namely:

1. *Do they feel a sense of self-efficacy, in other words, are they self-confident?*? Readers who are confident of success are more likely to

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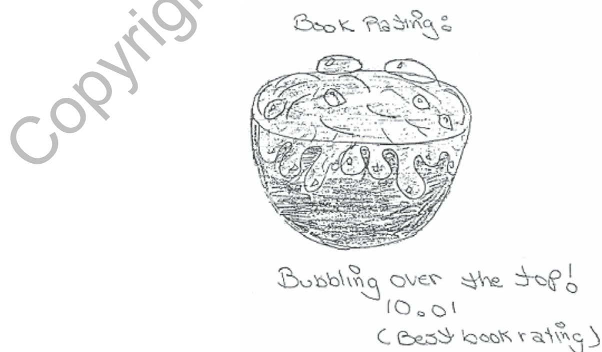

FIGURE 5.2. Rating pot for *Let the Circle Be Unbroken*.

put forth effort and persist when they encounter difficulties. Texts that challenge readers without frustrating them facilitate this willingness to persevere, as does teaching that builds on strengths.

2. *When faced with roadblocks, do readers feel personally inadequate, or do they believe that they have not succeeded because their approach to solving the problem was simply not the right one?* Those with the former attitude are likely to give up and very well may not choose to read when provided time to do so. Overcoming hurdles during reading requires that readers monitor their understanding as they read so that they quickly realize when they run into a problem that breaks down their comprehension. Further, once aware of a problem, they need to know what to do to fix it: for example, reread, look ahead, and so on.

3. *Do they gain pleasure, fulfillment, or practical benefits from the reading experience* (Baumann & Duffy, 1997)? Whether or not readers are interested in what they are reading may depend on the topic, genre, or reading situation. Choice, prior experiences with books, book access, and opportunities to interact socially with others are motivating factors for readers in the upper elementary grades (Gambrell, 1996; Palmer, Codling, & Gambrell, 1994; Worthy, 1996). Even situational motivation, such as using informational books in conjunction with hands-on science observations and experiments, can encourage reading interest (Guthrie et al., 2006).

This chapter focuses on ways to promote active, engaged reading in the intermediate grades. We'll explore strategies that encourage readers to monitor for meaning, activate background knowledge, visualize, develop a thinking-and-questioning stance, and summarize. But first, let's take a brief look at the role of metacognition in comprehending text.

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THE IMPORTANCE OF METACOGNITION

Good drivers keep a careful eye on the road, monitor the situation, and modify their actions as needed. They observe not only what is directly in front and behind them but also relevant events and objects in surrounding areas—a car approaching an intersection from the side; a passing vehicle; signs indicating an upcoming curve, construction area, exit, tunnel, or bridge; and sometimes even a deer or other animal threatening to dart across the road. This approach helps good drivers avoid pitfalls and makes it more likely that when they do encounter a problem, they will be ready to react. The sort of conscious awareness that enables a

person to monitor, adjust, and direct attention to a desired end is known as *metacognition* (Harris & Hodges, 1995).

Proficient readers use metacognition to track whether their reading makes sense and when it does not they know what to do to improve the situation. Unfortunately, students who struggle with reading often do not have strategies for improving their understanding. By contrast, proficient readers use a variety of metacognitive strategies to monitor and adjust. They draw on what they already know (background knowledge), create mental pictures, question, sift out what's important from what's not, summarize and synthesize. For the fifth grader featured at the onset of this chapter, application of several of these strategies was likely fluid and automatic; however, the process of gaining that automaticity probably involved active learning and active teaching.

MONITORING FOR MEANING

When I'm tired, distracted from the day's events, or confronted with a text that either does not hold my interest or that I am forced to read and feel no connection to, I can find myself at the end of a paragraph or even a whole page having "read" every word but knowing more about whatever was on my mind at the time than what the text was about. Clearly, I was neither actively thinking about the reading nor noticing whether I grasped what the author was trying to communicate, much less considering whether I agreed or disagreed with what was said or whether I might be able to relate to it in some way. Although this is an extreme example, it is probably a situation we have all experienced at some time or other and certainly an event that happens all too often with students who don't know how to monitor for meaning and who tell us they've read everything they were supposed to but show us they've understood nothing.

Monitoring for meaning requires close, thoughtful reading. Without close reading, comprehending text can be a slippery slope. Let one text segment go by without understanding it and the next, which likely builds on the first, may go sliding by as well, and soon the reader is mired in confusion. As proficient readers we carry on silent conversations in our heads as we read and monitor for meaning, sometimes directing comments to the author or a character. Teachers who use think-alouds to make these conversations transparent to students can help them realize that proficient readers do more than just look at or call out words when they read. Proficient readers critically consider the text, question the author, solve problems, enjoy humor, savor interesting language, marvel over fascinating facts, wonder what may happen next, and myriad other

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things. In my experience the beginning of a book is one good place to think aloud. Characters, setting, actions—everything about the story is virtually unknown at this point, and a think-aloud can illustrate how good readers sift through information to get focused on who and what are likely important. Let's consider the following example based on the beginning lines of a picture book by Paul Fleischman (1999) called *Weslandia*. The story is about a young boy with a vivid imagination and a keen curiosity who would rather read a book or try out a science experiment than eat pizza or watch football. Because he is different than other boys his age, Wesley is rejected by his peers until he creates a new civilization in his backyard and becomes the envy of all his classmates. The teacher begins reading:

> *"Of course he's miserable," moaned Wesley's mother. "He sticks out."*
>
> *"Like a nose," snapped his father.* [Stops reading.] So . . . a boy named Wesley is probably the main character in this story. Wesley must be different from other kids, since his mother says "He sticks out." She feels bad for him, maybe because being different is making him really unhappy—"miserable" in her words. And the dad seems angry about the whole business, or maybe he's just feeling really hurt by it all, and that's why he "snapped."
>
> [Resumes reading.] *Listening through the heating vent, Wesley knew they were right. He was an outcast from the civilization around him.* [Stops reading.] I wonder why he's listening through the vent? I did that once to try to hear a funny story. This doesn't seem like a funny situation, though, so maybe Wesley's wondering what his parents are going to do. It says he's an "outcast." *Outcast* means somebody who is *cast out,* rejected. I'm not exactly sure what *civilization* means. I've seen the word in books about the Greeks and Romans, like the "Greek civilization." I thought it meant "Greek life." Maybe Wesley feels cast out from the life around him because he's different. But how's he different? And what will happen to him? I'll read on to see what I can find out. [Resumes reading.]

Thoughts and wonderings that help students monitor for meaning, such as those revealed in the preceding think-aloud, can also be recorded on sticky notes or in a journal and serve as springboards for discussions (see Figure 5.3). To ensure that students understand the process, teachers:

- Demonstrate with a think-aloud.
- Distribute a stack of sticky notes to each student.

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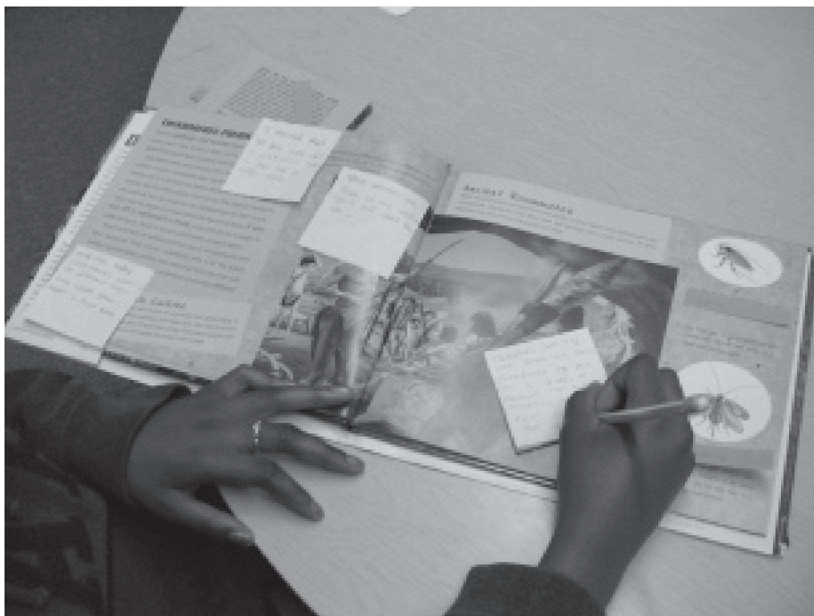

FIGURE 5.3. Monitoring for meaning with sticky notes.

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- Ask students to jot down their reflections, questions, and unfamiliar words on sticky notes and post them on relevant pages as they read a few pages of text.
- Lead students to deeper understanding of the text and broader perceptions about the kind of musings they might record by providing time for them to share their thinking, either with a partner or as part of a whole-group discussion.

Because some students may be overwhelmed by the task of determining what to write down and where to begin, it often works well initially to determine a specific focus for the recording—for example, unfamiliar words—or provide students with a prompt to guide their note taking, such as "I was confused when … " "I stopped reading to think about … " "When I read I thought about … " or "I'd like to ask the author …" (Strickland, Ganske, & Monroe, 2002). Be careful not to inadvertently cause students to become overreliant on prompts of this sort. The quiet talk in which we engage with ourselves as we read is a conversation, not a fill-in-the-blank question-and-answer session. Guide and encourage students to put down what they notice and what they

think about it. Let them know you are not looking for a "right answer," but rather you want them to share their thinking. Because our experiences influence our thinking, and the experiences we've had differ from person to person, everyone's musings will be somewhat different.

USING SCHEMAS TO MAKE CONNECTIONS

Being able to recognize and understand words is essential for reading; the more words you know the easier it is to make sense of the text (National Institute of Child Health and Human Development, 2000). Although the importance of vocabulary knowledge in reading can hardly be overstated, comprehension isn't just a matter of "adding up" the meanings of words to understand the whole. "The click of comprehension occurs only when the reader evolves a schema that explains the whole message" (Anderson, 2004, p. 596). A *schema* is our stored memory representation for an object, event, or relationship (Harris & Hodges, 1995). Our personal experiences, knowledge of the world, and knowledge of texts contribute to schema development. As we gain new knowledge related to a concept, our schema changes and becomes enriched, with links forged to other schemas. For example, my schema for *reading* is much different now than the schema I had when I was a toddler and "read" back stories to my mother by pointing to pictures. In fact, my schema continues to change. While working on the manuscript for this book, my review of Chapter 10 by Lapp and Gainer, which is about multiliteracies, further developed my *reading/literacy* schema.

Being able to link new information to what we already know aids comprehension and memory, but children do not automatically do this as they read; and due to differences in age, gender, race, religion, nationality, occupation, and so forth, a particular schema will not necessarily be activated (Anderson, 2004). Another factor to consider about schema activation is that at times readers may not have relevant experiences to activate, as, for instance, might be the case if we were asked to read an article on *histology* (the study of the microscopic structure of plant and animal tissues). Lack of prior knowledge would likely negatively impact our interest and comprehension. We see evidence of the critical role that background knowledge plays in engagement and understanding in the series of dialogue journal entries, with teacher response, written by a proficient intermediate-grade reader and shown in Figure 5.4. The story *Monkey Island* by Paula Fox (1991) features an 11-year-old boy growing up in New York City who becomes homeless after his family falls into economic difficulties.

Classroom dialogue, such as occurs during read-alouds and small-

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Dear Mr. K.,
I just started reading Monkey Island by Paula Fox. Here's what's happened so far.
The main character is a boy named Clay. He lives with his mom in a hotel in some city but she's been missing for five days. Clay's dad's gone too. He left to look for work after he lost his job and Clay's mom is looking for him. Clay has quit going to school and he has to find his food in other people's garbage. That's about it, not much happening. It might pick up but this first chapter reminds me of my sister before she learned to walk. It just creeps on and on and on and on and on. You know how in Writing Workshop we talk about hooking the reader? Well, I think the author forgot the hook. I hope it will get better; I don't like quitting a book.
Your friend,
T. R.

Dear T. R.,
I wonder if Monkey Island hasn't grabbed your attention because Clay's life in a big city is so tremendously different from our experiences in the country. I read the book aloud last year. We talked about the book as I read it and overall, everyone really enjoyed the story. What do you think? At any rate, if your opinion of the book doesn't change, pick another one. Reading should be fun!
Your friend,
Mr. K.

Dear Mr. K.,
I quit reading Monkey Island after the second chapter. There was nothing pulling me to read on. I had to drag myself to read it. It was just about Clay wandering around in the city. No snapshots no thoughtshots, just boring, boring, boring. I think Paula Fox was in a hurry to get done. Clay isn't a round character at all. He's as flat as a pancake. I'll look for a better book.
Your friend,
T. R.

Dear Mr. K.,
I just read your letter. You're right about Clay's life being different from mine. It's another world! Clay lives in New York where there are a zillion people and lots of noise. In the country where I live everything is quiet, without many people, and my parents aren't missing. I've decided to read My Side of the Mountain instead. I think I'll like this story better.
Your friend,
T. R.

FIGURE 5.4. Student dialogue journal entries with teacher response.

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group discussions, would likely have done much to increase T. R.'s engagement with *Monkey Island*. Differences between living in a rural area versus an urban area, and all that that may mean for everyday living experiences, could have been bridged, to some extent, through talk, questioning, and the sharing of experiences, as likely occurred the year the teacher read aloud the story to the class. Encouraging such dialogue in the classroom is not only desirable, it is imperative if students are to deeply understand texts (Hacker, 2004).

There are many ways to activate background knowledge and get students thinking about their reading both before and while they read, including sharing and discussing artifacts related to a reading, brainstorming about the topic, and examining a relevant picture. Involving students in picture walks or text walks by previewing the pictures or headings and captions provides them with a kind of roadmap for the upcoming reading, so that they can capitalize on what they know. Previewing also encourages speculation and prediction making (What's happening to a character? How will the event turn out? What might have happened since the previous picture or subheading?), and it can increase students' engagement for the reading. To activate or build background knowledge in preparation for reading a textbook topic, teachers often provide opportunities for students to explore the event, culture, or phenomenon by reading a trade book, chapter book, or picture book. These have the added advantage of enabling students to engage with texts that are of appropriate reading difficulty. Two other possibilities for activating background knowledge are anticipation guides (Readance, Bean, & Baldwin, 1985) and double-entry drafts (Barone, 1990; Berthoff, 1981).

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Anticipation Guide

Anticipation guides work well with informational text (including textbook passages) to help activate students' background knowledge and to ignite their interest; they can also be used with fiction. They are easily constructed. Each guide consists of a series of statements (typically 6–10 statements), some of which the reading will reveal to be true and some false. Students indicate their agreement or disagreement with each statement before reading and then check off the correct category as they come across relevant information in their reading. Figure 5.5 shows an example based on Cathy Camper's (2002) informational book *Bugs before Time: Prehistoric Insects and Their Relatives*, which includes some pretty incredible facts about various ancient members of the insect class. Whereas students generally believe that cockroaches existed before humans, and they tend to doubt that cockroaches were ever very differ-

Before		*Bugs before Time* by Cathy Camper	After	
Yes	No		Yes	No
√		There were cockroaches before there were humans.	√	
	√	Fossils show us that ancient cockroaches were very different than the cockroaches of today.		√
	√	A cockroach has a kind of brain in its head and its tail.	√	
	√	If we could run as fast as a cockroach, we could run 200 miles per hour.	√	

FIGURE 5.5. Part of an anticipation guide.

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ent, most are surprised or even shocked to discover the speed at which a cockroach can run *and* that with a brain at both ends of its body, it can survive even after losing its head or tail!

Double-Entry Drafts

Double-entry drafts (DEDs) are an effective way to encourage students to activate schema and make connections as they read. Students fold a notebook page in half, lengthwise. At the top of the inner half of the page they record the book's title and author and beneath it a quote from the reading that captured their interest. (The page number can also be included for easy reference during discussion.) On the right half of the page students respond to the quote. Although responses can be text-to-text or text-to-world associations, they are often text-to-self connections. Good readers attend carefully to characters and setting as they read (Duke & Pearson, 2002). Making personal connections can help students relate to an incident or draw students into a story by creating empathy for a character, and thus promote comprehension (see Figures 5.6 and 5.7).

Another advantage of DEDs is that they are extremely adaptable. Besides being used by students to record quotes and their reactions, DEDs can also be used to encourage other types of thinking—as, for example, with the heading titles: "I Predict/I Learned," "I Learned/I Wonder," "What I Know/What I Want to Know," "My Connection/What Kind Is It?" and so on. DEDs can also be used to foster comprehension in math ("The Problem/My Solution," "What I Know/The Problem,") and other content areas.

Despite the importance of prior knowledge in comprehending text, there is a caveat to bear in mind: Readers can be overly influenced by

Sideways Stories from Wayside School by Louis Sachar "I don't believe it," said Mrs. Jewls. "It's a room full of monkeys!"	It reminds me of when my dad, brother, and I were whoching TV one time and some monkeys came on and my dad would say "Hey look theirs Lauren and Andy on T.V. And say when we are in the car "I have two little monkeys in the back of my car. And he still says that!

FIGURE 5.6. Double-entry draft by an intermediate-grade student—Example 1.

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their prior knowledge and as a result fail to construct a meaning that is congruent with the text. Also, students sometimes make connections that are inconsequential to understanding the gist of the story. The two intermediate-grade student responses shown in Figures 5.6 and 5.7 reveal meaningful connections that help the students connect to characters in their stories, but this is not always the case. For example, a reader might know someone by the name of Mrs. Jewls and comment on this fact, but the Mrs. Jewls the reader knows may have nothing in common with the character in the story, besides their names, and because the real Mrs. Jewls has different character traits, the background knowledge may actually lead to confusion and misinterpretation during reading. Teacher modeling, opportunities for students to talk about their readings, and thoughtful reading of students' DEDs help teachers identify when redirecting or clarifying is needed for understanding.

The Fellowship of the Ring by J. R. R. Tolkien "There was a sudden silence in which his heart was thumping hard."	Sometimes when you say something dumb and everyone looks at you like huh? and it seems like it is silent forever and in that time you can almost see your heart thumping under your skin. That happened to me one time when I had finished a speech and no one knew it was over, so they gave me the go on look. In that time I felt like my heart was going to tear through my skin and through the air somewhere.

FIGURE 5.7. Double-entry draft by an intermediate-grade student—Example 2.

VISUALIZING: READING WITH THE MIND'S EYE

After viewing the movie version of a book they have previously read, careful readers often make comments like "It wasn't as good as the book." Readers who experience flow (Csikszentmihalyi, 1991) have little trouble creating mental images of the actions and descriptions in the text or feeling the emotions of the characters, whether sad, happy, frightened, angry, or surprised. They are living the experience vicariously. In general, movies just do not have the space or time (or the budget that would be required) to render scenes and events as authors depict them. Also, because as readers we bring our personal experiences to bear as we read, the images we form necessarily differ, at least somewhat, from person to person. Consider, for instance, the following paragraph; as you read it, concentrate on making mental images of the event taking place, especially: Who are the "we" the author speaks of? What is the loop area like where huckleberries are being sought? What do the containers look like that are being used for the berries? Where is home? And what's the desired result?

> On our long trek through the loop area, we finally found a spot to get our much-desired huckleberries. Our sacks were bulging as we left, ready for the long drive home. We were satisfied when we imagined our end result.[1]

Depending on your experiences and which part of the country you live in, you may have pictured very different scenes. Did you picture a family traipsing through the woods on a brambles-ridden path carrying burlap sacks in search of huckleberries, like many readers/listeners do? Or like the author of the paragraph, who grew up in Chicago, did you perhaps envision a couple of adults driving along Chicago's downtown Loop in search of a health-food store to get some huckleberries? The bags are the green, nylon variety. The long drive home is back to the suburbs, and the end result? In my experience with using this paragraph there is less regional distinction here—pie, jam, pastries, we all like our sweets!

Good authors (whether professional or intermediate-grade writers) create wonderful snapshots in their writing, and though some authors may focus more on describing action and others on character and setting, the snapshots create visual images that draw readers into and through the text. For example, consider the flashback that Betsy Byars (1968) uses to open *The Midnight Fox*. We are introduced to Tommy, the main character and storyteller, as he closes his eyes recalling the black fox he has come to know and love. Sometimes he pictures the

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first time he saw her leaping over the green grass with a quick and easy gait, and

> Sometimes it is that last terrible night, and I am standing beneath the oak tree with the rain beating against me. The lightning flashes, the world is turned white for a moment, and I see everything as it was—the broken lock, the empty cage, the small tracks disappearing in the rain. Then it seems to me that I can hear, as plainly as I heard it that August night, above the rain, beyond the years, the high, clear bark of the midnight fox. (p. 9)

Passages such as the one above and those that follow are excellent for engaging students in the skill of visualizing. Ask them to close their eyes and create pictures of the scene, character, or action as you read the passage expressively aloud. After the reading, ask listeners to draw a quick sketch to capture as many details from the reading as possible or invite them to retell the passage to a partner and then listen while the partner tells it back, adding anything that might have been missed.

Roald Dahl was a master at using description to captivate his readers, describing characters, settings, and events in picture-making language, sometimes even going so far as to ascribe names to his characters that captured a physical or personality trait, as he did in *James and the Giant Peach* (1996) with Aunts Sponge and Spiker who, as the author tells readers, "were both really horrible people" (p. 2).[2]

> Aunt Sponge was enormously fat and very short. She had small piggy eyes, a sunken mouth, and one of those white flabby faces that looked exactly as though it had been boiled. She was like a great white soggy overboiled cabbage. Aunt Spiker, on the other hand, was lean and tall and bony, and she wore steel-rimmed spectacles that fixed onto the end of her nose with a clip. She had a screeching voice and long wet, narrow lips, and whenever she got angry or excited, little flecks of spit would come shooting out of her mouth as she talked. (p. 6)

Later in the story, as James and his motley creature crew fly high in the sky on the peach, Roald Dahl depicts an ominous scene:

> Clouds like mountains towered high above their heads on all sides, mysterious, menacing, overwhelming. Gradually it grew darker and darker, and then a pale three-quarter moon came up over the tops of the clouds and cast an eerie light over the whole scene. (p. 86)

Dahl also cast actions in a vivid manner, sometimes using similes and onomatopoeia, as in the following scene in which Cloud-Men respond to a challenge by Centipede:

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> A large hailstone can hurt you as much as a rock or a lump of lead if it is thrown hard enough—and my goodness, how those Cloud-Men could throw! The hailstones came whizzing through the air like bullets from a machine gun, and James could hear them smashing against the sides of the peach and burying themselves in the peach flesh with horrible squelching noises—*plop! plop! plop! plop!* And then *ping! ping! ping!* as they bounced off the poor Ladybug's shell because she couldn't lie as flat as the others. And then *crack!* as one of them hit the Centipede right on the nose and *crack!* again as another one hit him somewhere else. (pp. 91–92)

Nonfiction or informational text can also be used to develop visualization skills and to help increase reading motivation and comprehension. Picture, for example, the following from the opening paragraphs of "Dragonflies: Rulers of the Sky" in Cathy Camper's (2002) *Bugs before Time: Prehistoric Insects and Their Relatives:*

> It's three hundred million years ago, the world is swampy, the air is hot and humid. There are no people or dinosaurs. A few huge amphibians doze in the warm mud. Horsetails, mosses, and ferns as big as trees bake in the still air.
>
> Suddenly there's a loud whirring sound. What is it? Birds, bats, pterosaurs and planes don't exist in the ancient world.
>
> Flying overhead is the biggest insect that ever lived! (n.p.)

To visualize nonfiction passages such as the preceding one, students need well-developed vocabulary knowledge, or they need to be introduced to critical vocabulary before the passage is read. In the dragonfly segment, lack of prior knowledge of *amphibians, horsetails,* or *pterosaurs,* as well as other words that may be unfamiliar, is likely to negatively impact readers'/listeners' abilities to visualize the scene and may possibly distract students from the amazing fact that ends the scene: Prehistoric dragonflies had wing spans of over 30 inches!

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THINKING AND QUESTIONING

Students need to be able to generate questions in order to monitor for meaning and to engage with one another about the text. Strategies such as reciprocal teaching (Palincsar & Brown, 1986) and questioning the author (Beck, McKeown, Sandora, Kucan, & Worthy, 1996) help students to develop and internalize a questioning stance. Modeling the sorts of questions you want students to ask is an important part of the process of teaching students to question. If the kinds of questions you ask are primarily literal and require memory for what is read but little or no thinking, that's the kind of question you will likely

find students generating. If, on the other hand, you want to encourage questions that involve inferring, evaluating, analyzing, interpreting, synthesizing, and so forth—in other words, questions that involve higher levels of thinking—then those are the kinds of questions you need to be modeling.

As readers, we sometimes ask ourselves literal questions to recall a bit of information we previously read in order to more fully understand a portion of text we are currently reading, but the bulk of our questions is comprised of the whys and hows that surface as we seek to understand and make connections. For example, consider the discussion of Pluto and its new classification in Seymour Simon's updated edition (2007) of *Our Solar System,* in particular, the sentence about the new definition of the solar system, which identifies that, among other objects, "there are eight planets, at least three minor, or dwarf, planets, and tens of thousands of much smaller Solar System objects, such as comets and asteroids" (p. 57) As a reader, I may recall that earlier in the book the phrase "minor planets" was explained, but I may not remember the term *asteroid* that was given to explain it and therefore ask myself the question: "What is another name for *minor planet*?" and look back to find the answer. With that understanding, a bigger, more provocative question comes to mind: "Although all minor planets seem to be asteroids, from the last part of the sentence, it's clear that not all asteroids are minor planets; why is that?" To try to resolve the matter, I would need to analyze text from the preceding page and make some inferences.

An engaging way to provide upper-elementary students with practice in generating questions and probing text (and graphics) is through the use of cartoons or nursery rhymes. Present students with a cartoon from the newspaper, a magazine, or a resource, such as *The Complete Cartoons of the New Yorker* (Mankoff, 2004), or with a nursery rhyme, which can easily be downloaded from the Internet, and ask them, individually or with a partner, to generate at least five questions about the cartoon or nursery rhyme, allowing one or none of the literal variety. Then ask individuals or partners to pair up and talk about their questions and possible responses to them. If time allows, ask each group to choose three questions from those already generated or new ones, and trade them with another group. Repeat the discussion process; then debrief as a group. Which questions were most engaging, which required the most thinking, which could be answered without ever looking at the cartoon or reading the nursery rhyme? Are the questions authentic; in other words, do they logically relate to the text?

Consider one or both of the following nursery rhymes and generate as many questions as you can; interrogate the text; ask the difficult questions. Poetry can be used to extend students' work with cartoons and/or nursery rhymes and encourage questioning as a habit of mind.

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Jack and Jill

Jack and Jill went up the hill
To fetch a pail of water.
Jack fell down and broke his crown,
And Jill came tumbling after.

Humpty Dumpty

Humpty Dumpty sat on a wall,
Humpty Dumpty had a great fall.
All the King's horses, and all the King's men
Couldn't put Humpty together again!

Some possibilities for "Jack and Jill" include:

- Who are Jack and Jill? What's their relationship?
- A hill seems an unlikely place to fetch water; why are they going up the hill?
- Why do they need the water?
- What caused Jack to fall down—was he running? Did he trip?
- Which kind of crown did he break—his head, the kind worn by a king, part of his tooth, or something else?
- Why did Jill tumble after Jack? Did the same thing that caused Jack's fall cause hers?
- Is Jill hurt?
- What happened to the water? Or did Jack fall before they got the water?
- How will Jack and Jill get home?
- Should one or both of them go after the water one more time?

Some possibilities for "Humpty Dumpty" include:

- Who or what is Humpty Dumpty?
- Why was Humpty sitting on a wall?
- Where is the wall?
- How did Humpty get on the wall in the first place?
- What caused Humpty's fall?
- Was someone who could have prevented the fall negligent?
- How did the King's horses and men try to put Humpty together?
- What made anyone think that horses could put Humpty together again?
- How did people feel about the fact that Humpty couldn't be put together again?
- Which is Humpty Dumpty: Brave or foolhardy? Why do you think as you do?
- What additional questions could be generated that would relate the two texts?

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Some online sources for nursery rhymes, such as *www.rhymes.org.uk/,* include the rhyme's origin as well as the lyrics. Discussion of the history can be an interesting follow-up to the question-generating activity. For instance, "Jack and Jill" originated in France, and Jack was none other than Louis XVI, who was beheaded ("broke his crown") during the French Revolution's Reign of Terror during 1793, as was his queen, Marie Antoinette ("and Jill came tumbling after"). "Humpty Dumpty" derives from the English Civil War (1642–1649). In 1648, Colchester, a walled town that had been fortified by the Royalists ("King's men"), was besieged by the opposition. Next to the wall was a church, which housed a Royalist fort. A huge cannon ("Humpty Dumpty") had been tactically placed on it. The opposition fired at the Royalists, damaged the wall, and Humpty Dumpty fell to the ground. The Royalists ("all the King's men and all the King's horses") tried to restore the cannon to another part of the wall, but it was too heavy ("couldn't put Humpy together again"). The loss of Humpty Dumpty had tragic consequences, as the town fell to the opposition.

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SUMMARIZING: MAKE IT ACTIVE!

Being able to summarize information, to pare down what has been read to its gist, along with key supporting details, is an aid to comprehension and remembering. Students are frequently asked to summarize information, but if we want *all* students to be able to engage in the process, we need to precede the *asking* with *showing* students how to summarize. According to Hidi and Anderson (1986), summarizing involves (1) determining what's important, (2) condensing information by generalizing rather than specifying all the details, and (3) writing down the result in your own words.

Graphic Organizers

Graphic organizers can help students master the process of summarizing, and because there are lots of different types of organizers, they can be used with both narrative and informational text. Three good sources for downloadable graphic organizers include

Education Place: www.eduplace.com/graphicorganizer/ (Spanish option)
edHelper.com: *edhelper.com/teachers/graphic_organizers.htm*
Teacher Vision: *www.teachervision.fen.com/graphic-organizers/printable/6293.html*

Story retelling frames and story maps can be used to guide students to include important elements when summarizing narrative text. These two types of graphic organizer typically include a space, or a prompt, for each story element—setting, characters, problem/goal, events/roadblocks, resolution, and conclusion. The categories draw students' attention to what is important, and the limited space for responding necessitates concise wording. Once the graphic is complete, the student has a template of information from which to draw for writing the summary.

Although an informational text usually involves multiple text structures (description, sequence, compare and contrast, problem and solution, and cause and effect), for a given topic one structure is likely to predominate or be more suitable for the portion to be summarized. For example, although the discussion in Seymour Simon's (2007) *Our Solar System* moves sequentially from planets closest to the sun to those farthest away, and information is presented that allows readers to compare and contrast the planets, the structure of the text for each planet discussion is that of description. So if a summary is being written for a particular planet, a graphic organizer for description would be most appropriate; however, if the aim is to examine relationships or order, a compare–contrast or sequence graphic organizer would be more suitable.

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Sticky Notes

The sticky notes students use as they monitor for meaning can also be used to help them summarize. Students can write down in their own words key ideas for a given paragraph or section of text read and stick it on the page. A sentence or even a phrase can capture the essence of what was read in a portion of the text. To avoid confusing these sticky notes with others, students might label them with a code, such as *S* for summary. When finished with reading the chapter or part, students can compile their section stickies to create an overall summary.

Countdown Summaries

A final possibility for summarizing involves performance. This technique stems from a comedic improvisation activity called "Countdown," used by The MAD* Factory (music, art, and drama), a nonprofit theater arts organization for kids of all ages located in Oberlin, Ohio. Although grounded in improvisation, Countdown is well suited for summarization of text that has been listened to or read. It not only encourages students to focus on what's important and to be concise, but it's tremendously fun for everyone involved. The procedure, which involves a series of drama-

tizations and seems better-suited for fiction than nonfiction (other than perhaps history), works as follows:

After students have read or listened to a passage, ask for two volunteers to act out a summary of the reading. Because performance is used, some students may be reluctant to get involved at first. Work with volunteers initially, rather than choosing actors, until everyone feels it's safe for risk taking. Warming up the whole group with some theater games, and improv activities such as those in Viola Spolin's *Theater Games for the Classroom: A Teacher's Handbook of Techniques* (1986), or Carrie Lobman and Matthew Lundquist's *Unscripted Learning: Using Improv Activities Across the K–8 Curriculum* (2007), will make it easier for more students to volunteer. A third person serves as timer.

Initially, the pair of actors has 1 minute to perform a summary of the text just read. Before they begin, talk about the essence of the passage—What's important? What sort of movements will there be? Thinking about likely movements in advance is just as important as considering what's important from the text. Movement adds interest and helps students remember the summary. One minute passes by very quickly; to ensure that students get to the end of their summary, when there are about 10 seconds left, say something like "Find a way to end the scene."

For the second try reduce the time allowance to 30 seconds. The same two actors repeat their scene but with obvious consolidation of the events. Before they begin, discuss with students what's most important and should be maintained and what will have to be sacrificed due to the brevity of action. For the third trial, reduce the time to 15 seconds; and for the fourth cut it back to just 5 seconds. By this point, a classroom *mirthquake* is likely as students strive to capture the essence of the text in a flash of action. To culminate the sequence, actors have a go at a 1-second performance.

Though the activity may sound almost ridiculous, the action of repeating the scene while still striving to capture the core meaning of the passage of text makes it a valuable tool for working on summarizing and in a context that is both challenging and highly entertaining. After the action, students can write down the summary, perhaps even as a paired script (Strickland et al., 2002).

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CONCLUSION

Comprehension is at the heart of reading. Many effective strategies can be used to help develop intermediate-grade students' comprehension. In this chapter I have focused on strategies and techniques that actively

engage students and that also have the potential to be motivating. Writing, thinking, imagining, drawing, questioning, talking, and performing are avenues for deepening students' understanding of text. With teacher modeling and ample opportunities for students to construct understanding and monitor for meaning using activities that hook and hold their interest, it is my hope that students will develop habits of mind that enable them to comprehend deeply, purposefully, and with a sense of satisfaction.

NOTES

1. Many thanks to Barbara Guzzetti of Arizona State University, originator of the paragraph.
2. Selections from *James and the Giant Peach* by Roald Dahl, copyright 1961 by Roald Dahl. Text copyright renewed 1989 by Roald Dahl. Illustrations copyright 1996 by Lane Smith. Used by permission of Alfred A. Knopf, an imprint of Random House Children's Books, a division of Random House, Inc.

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