Of course, being able to comprehend and visualize word meanings and central concepts is essential to reading. As necessary as this skill is, by itself it is not sufficient for achieving an expert level of reading. Students must learn to coherently envision chunks of text as organic meanings.

Therefore, in addition to using many of the ideas cited above, I also took care to do a lot of reading to and for Marko, then with him, before I asked him to read on his own. I usually read a text to him and then used the activities above to do “word work” with a few vocabulary words from the reading. This helped him to remember that the skills we were learning were not decontextualized but should be put to use in real reading situations to make meaning, and that the ultimate end of our project was for him to be able to read on his own.

While I was working with Marko, who was a big sports fan, I brought in the newspaper every day and we read the sports page together. This had a huge unintended benefit. As we often read about sporting events that Marko had attended or games he had watched on TV, he was assisted in visualizing the scenes and events described in the stories: He could use his memory of actually seeing the events instead of having to imagine them from scratch. Also, instead of feeling that Marko’s attendance at sports events and his television viewing were taking away from his study time, I was able to use it as a resource to help him improve as a reader. I also taught Marko how to search the Internet, and we bookmarked several Milwaukee Brewers, Green Bay Packers, and Wisconsin Badgers websites on which we could monitor stories about his favorite teams.

These activities gave me a sense of déjà vu. I was helped
through some reading difficulties myself in second grade by one of the greatest teachers I have ever known. His name was Orlando Schultz, and he claimed that he “could teach anybody to read through one interest.” Orlando often taught kids to read with the newspaper by having them follow stories or issues that were of passionate interest to them. And this is what I found myself doing with Marko: teaching him a foundational set of strategies in reading by using the sports he was so interested in.

With Marko, as I would with other struggling readers, I moved from read-alouds and guided imagery with texts we read and re-read together (shown to have significant benefits at all grade levels and with all abilities of students; see Sulzby, 1985) to providing visual prompts with reading we did together or that he did on his own. This allowed him to practice becoming adept at using imagery in independent reading situations.

**Pushing Beyond Prompts**

Various studies have demonstrated that simply suggesting to students that they attempt to form visual images as they read improves engagement, comprehension, and comprehension monitoring for many students. It seems that most younger readers do not spontaneously employ imagery as a reading strategy, and yet many have the capacity to do so when prompted (cf., Gambrell and Koskinen, 2002). However, my own studies (Wilhelm 1995; 1997) and those of others, have found that struggling readers do not employ imagery and do not know how to do so. Simply prompting them will not suffice. These readers need scaffolded assistance with visualization strategies. Even more accomplished readers can improve their visualization skills through scaffolded help, which deepens their engagement, comprehension, and ability to learn and use ideas.

It is therefore important to explicitly identify the use of visual strategies to create mental imagery as an essential part of reading. It helps readers to experience stories and other textual information and think about the content of the text.
Reading aloud to students is a great way to help them build their image-making abilities. As you read aloud, be sure you also think aloud to model how you create images as you read. Use texts that are rich in images, and then demonstrate several times how you create images. Below is an example of how I think aloud during read-aloud. I often teach a unit on civil rights around the question: What are civil rights, and how can we protect them? One of my favorite texts to use in this unit is Leon’s Story by Leon Walter Tillage (1997). It’s a fabulous story and has beautiful collage art by Susan Roth. Her images symbolize the meaning of Leon’s various experiences. This kind of thematic visualization is very helpful to students wrestling with the deep implications of Leon’s story. It gives me an opportunity to think aloud about the illustrations and their relationship to the story’s meaning, and it gives my students a model of how
to use visuals to reinforce thematic implications. This is how I start:

Okay, is everybody on page five of Leon’s Story? I look at this collage and I think, it’s just row after row of corn. Wow, that must be a lot of work to farm. There’s just corn everywhere. It makes me think that maybe Leon’s life as a sharecropper was just working in the fields with no time for anything else. In fact, the corn looks like prison bars.

All right, on page seven, let’s read together: “We lived on a farm owned by Mr. Johnson. He had lots of acres and grew lots of different crops—corn, tobacco, cotton, alfalfa, wheat, and sometimes sugarcane. It was mostly cotton and tobacco though, because in those days those were the number one crops.”

In my mind, I see this big farmhouse where Mr. Johnson lives. I see it as well kept and painted white with black shutters and a big front porch with a swing. I imagine this because Leon says Mr. Johnson owned the farm, and because I grew up on a farm I can use the farmhouses I know to imagine what Mr. Johnson’s might look like. In my mind, surrounding the house are fields as far as you can see, full of corn with tassels, big-leafed tobacco plants, and cotton with the cotton balls at the end of branches. I can see all this because these are the crops Leon mentions,
because I know what cornfields look like, and because I was once in the south and saw cotton and tobacco farms. I know tobacco looks like this (I draw a picture) and cotton plants look like this (I draw a picture). If I hadn’t seen the plants before, I would try to imagine what they might look like.

I also see the decrepit house Leon says they live in: no paint, grey, sagging roof and porch. I also see an aerial view of the farm and how these shacks are spread around at the edge of Mr. Johnson’s fields. I think I get the images of the shacks from WPA photographs I have seen. I often use photos or movies I know to help me see what I am reading. And if I don’t remember any images, I might try to find some photos on the Internet. (With my digital projector, I show them some photos from the WPA and Smithsonian collections.) You can do a quick Google search on the Internet and get help visualizing scenes you might not know much about. (I draw a quick sketch of Mr. Johnson’s big house, surrounded by crops and, at the edges, little shacks for the sharecroppers.)

Okay, let’s continue reading: “My father was a sharecropper, which means he had to share half of everything with Mr. Johnson. So let’s say Mr. Johnson gave my father ten acres of corn—whatever—to work. Then, at the end of year, when it came time to sell the crops and settle up, Mr. Johnson would get five acres of each crop and my father would get the other five.”

You know, now I am thinking of the collage that started this chapter and how much corn there was. I’m thinking about how much work it must have taken to plant, and to harvest, and then to cut down the stalks and clear the fields. And I take half of the harvest away—but none of the work. I see a bar graph in my mind. One bar is the amount of corn ten acres would produce. Below it is another bar that is half as long, which is the corn Leon and his father would get. (I draw my graph on the board, labeling each line.) This is called making a mental model of the
meaning of what you are reading. Okay, back to Leon:

“Maybe it sounds good, but the problem was my father had to pay Mr. Johnson for supplies and such, and he purchased the food we’d needed to live on for the past year on credit from the corner store. So out of our half he needed to pay off those debts. . . . At the end of the year, we’d settle our debts. Then Mr. Johnson would say to my father, ‘Well, Ivory, you almost got out of debt that time. I think next year you’ll make it.”

In my mind, I see Leon’s father giving Mr. Johnson half the corn, then the other half of the corn to pay off his debts, and then Mr. Johnson telling him he is still in debt. I change the graph in my mind so that there is no bar for the corn that Leon and his father would get, and a long bar representing all of the corn going to Mr. Johnson. (I change my graph on the board.) And I see how Leon and his father have done all the work and gotten none of the corn. All they have earned is enough food to survive, and they are still indebted to Mr. Johnson, so they have to keep working for him next year. In my mind, the scene with Mr. Johnson and Leon and his father takes on a red tint because I am sure Leon and his father are being cheated and I am angry about that. Okay, we’re going to continue reading, but now I want you to visualize in your mind what you see. I’d like you to be able to tell a partner what words from the text help you to see what Leon describes, and what experiences from your life help you to see it. If you can’t see it, think of where you could find some pictures or have some experiences that would help you to see it.
As you read and think aloud, identify the cues that you use to begin creating a “story world” (for a narrative) or a “mental model” of the information, concepts, or processes (for both narrative and informational text). You might even choose to draw quick sketches of your story world or mental model and share them with students. Be sure to identify the cues that prompted you and the life experiences you used to build the images the way you did. If I can, I provide students with a short excerpt of the text that I will think aloud with and have them circle or underline the visual cues I use to make my mental images. Later on in the process, I ask students to circle their own clues, first with my help, then on their own.

As you do this kind of thinking aloud and visual prompting, you might focus on particular techniques the author uses, conventions of particular kinds of texts (such as classification, argument, and expository writings), or conventions that run across texts (such as symbolism, irony, and unreliable narrators). In my classroom, I use lots of expository texts for read-aloud and think-aloud—including primary source materials, nonfiction, and historical texts—because these can be challenging for young readers who are used to reading fictional narrative. For example, I might read aloud from great children’s or young adult books like *Dolphin Man* (Pringle, 2003) to show how gripping quotes are used to put readers in the midst of the action. *Phineas Gage* (Fleischman, 2002) starts with a description of Phineas using the tamping iron that explodes through his brain but does not kill him or destroy his intellectual functions. The author prompts readers to visualize and live through the incredible scene that was the beginning of modern brain science. Jim Murphy’s *Across America on an Emigrant Train* (1993) uses a real diary entry to open each chapter, establishing the historical situation and personal context. When I highlight the features of such texts—including their

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**Basic Ways to Conduct Think-Alouds**

- Teacher does think-aloud; students listen.
- Teacher does think-aloud; students help out.
- Students do think-alouds as large group; teacher and other students monitor and help.
- Students do think-alouds as small group; teacher and other students monitor and help.
- Individual student does think-aloud in forum; other students help.
- Students do think-aloud individually; compare with others.
- Teacher or students do think-alouds orally, in writing and or pictures, on an overhead, with notes, or in journal.

For more on using the think-aloud strategy, see *Improving Comprehension with Think-Aloud Strategies*. 
use of quotation, historical anecdote, and primary source materials—I help students to see how authors use particular techniques to help their audience see and experience what they are reading. In turn, students learn how to craft their own writing to shape the experience of an audience.

**Read-Alouds and Guided Imagery (I Do/You Help)**

The next step to induce students to create images is to prompt them as they listen to you read either stories or informational text. Instead of creating or describing the images yourself, cite the prompts you have noticed and ask students to create and describe their visualizations to the class, small groups, or partners. Provide assistance as needed by asking for justifications based on text cues or by correcting misconceptions, if students bring inconsistent images to bear. Have students compare and contrast the images they have created, and compare the textual cues and life experiences they used to create such images.

It is important when using guided imagery and think-alouds to identify the visual and descriptive cues you use to see what you read. These stimulate image-making, helping students to notice and use these cues on their own.

The research makes it clear both that imagery is an essential part of the expert reader’s repertoire and that many students need very explicit and active teacher support to internalize this strategy for themselves. Repeated practice and prompting will help students to develop the skill of creating images based on text cues, and will help them to do this habitually. It is important for us as teachers to stress that valid images depend both on the reader’s experience and on textual cues, and that the actual image depends on the active engagement of the reader.

**Simple Prompting (You Do/I Help)**

Eventually, you can read aloud, or have students read aloud to each other, and simply prompt them to circle visual cues and make pictures in their heads about story events or ideas. With some readers, simple prompting will suffice to
help them visualize. Using the techniques described in this chapter will help even struggling readers eventually progress to the point where you can simply prompt them, then intervene as necessary. As always, teaching interventions should be used only if and when needed by particular students or groups of students. Often, a technique will be helpful to everyone in a class. Sometimes, the level of support or way the technique is used will vary between classroom groups. At other times, perhaps only a few students will require the intervention. It all depends on your students’ zones of proximal development. Luckily, all the techniques offered here are flexible and can be pitched to readers at almost any level of expertise. Below are prompts to share with your students.

**TIPS FOR MODELING THE PROMPTS**

During a longer reading, stop periodically to share images of characters, events, settings, ideas, key details, and processes, and the clues that helped you create these images.

**SOME GENERAL VISUALIZATION PROMPTS:**

- As you read, make pictures in your mind to help you understand and remember.
- Try to build images of people, places, interactions, events, processes, and ideas as you read.
- Use memories and objects from your life experience to “see” what you are reading.
- Make a movie in your mind as you read.
- Try to recall the major scene, main idea, important process, and so on, from your reading by using an image or moving images.
- Use visuals to placeholder major ideas and their sequence.
- Explain how and why visions or pictures develop and change with the introduction of new information.
**Some prompts for seeing the “story world”:**

- What impressions are forming in your mind of the people and settings?
- Where did the story take place? What is it like there? What kinds of buildings, trees, and so on, do you see?
- Does it matter where the story takes place? Could it have happened elsewhere or anywhere? Does it matter when the story happened? Is the historical situation important or could it have happened anywhere?
- Does it matter from what perspective you see the story? How would the story and what you see as the reader be different if it were told from another viewpoint?
- How do you respond to the setting as you read? How does it make you feel? How does it compare to what you know?
- If you were going to take a picture or make a movie of a particular scene, where in our community would you stage it? What props would you include? What sort of music would you be playing?
- What do the characters look like? How are they dressed or groomed? How do they walk, stand, gesture, interact, or display emotions? What classmates or famous actors would you cast for each part and why?
- Where are the characters in relationship to each other? To the setting? To objects in the setting? (This gives you the chance to use maps and tableaux.)
- What helps you to see pictures of characters, scenes, events, and ideas? How and when does the clarity of your vision change? From what perspective or position are you seeing the story?
- What kinds of details help you to envision the story? How are these connected to your life or reading experiences?
What other ways do you see or sense the story world?

If you were to create a symbol or object to represent the mood of this scene what would it be? How would you create a symbol of the deep meaning or theme of the scene? How would you symbolize a message about human behavior that we could use in our lives?

VISUAL THINK-ALOUDS

A favorite technique of mine is to have students sketch anything they see, think, or feel as they go through a think-aloud of a text (Wilhelm, 2001). I often type an excerpt of text on the left-hand side of a sheet and have students draw their responses on the right side, next to the textual cues that stimulated these responses.

At other times I provide students with sheets of paper and ask them to sketch their visualizations at particular points in the story. I sometimes have them do a back-to-back description: I ask them to identify the visual cues and structure-words that helped them to visualize the particular image or scene they sketched. They then list these cues on the back of their
pictures, so the relationship between verbal stimuli and visual response can be seen. In other words, students see how the cues, their experiences, and their resulting visual representations are all connected.

**Embracing “Alternative” Texts and Literacies**

In the review of studies *Achieving Literacy* (Meek, et al., 1983), Margaret Meek describes how she assisted illiterate seventh graders in becoming engaged readers through the intense one-on-one reading of picture books. Many of my own most reluctant readers can remember neither having picture books read to them nor reading such books. Such texts, of course, directly connect text to images, communicate the idea that reading is a visual experience, and improve facility at creating such images in one’s mind. I encourage you to embrace many forms of texts that combine words and pictures and graphics, including graphic novels, magazines, journals, websites, multimedia texts, age-appropriate comic books, sophisticated textbooks, and so on.

Denali creates a visual think-aloud to explore her response to a book.
PICTURE BOOKS
I often start a unit by reading picture books, even with my middle and high school students. This provides everyone with a successful reading experience, puts them all in the game, and provides a basic shared background experience. During a recent unit on the Great Depression, my middle schoolers read illustrated books, such as Jerry Stanley’s magnificent *Children of the Dust Bowl* and Ann Turner’s *Dust for Dinner*. Some students, for whom this reading was appropriately challenging, continued to read these sophisticated kinds of picture books and searched the Internet to find information and images (see, for example, www.scs.state.mi.us/history/museum/kidstuff/depression/costlist.html) to create original picture books that could become classroom resources. Other students went on to read Karen Hesse’s *Out of the Dust*, Richard Peck’s *A Year Down Yonder*, Christopher Paul Curtis’s *Bud, Not Buddy* or David Booth’s *The Dust Bowl*. Everyone was reading a text that was appropriately challenging, and everyone could participate fully and equally in the classroom project of studying the Depression and answering our inquiry questions about people’s experiences of that time. It all began by reading picture books.

A student reads *Out of the Dust* by Karen Hesse.
**Overlay Maps**

During a unit I helped to plan with teachers at the Chicago Teachers Center, Chicago students read Jim Murphy’s books *The Blizzard* (a fascinating story of a debilitating blizzard in New York City that led to the establishment of the National Weather Bureau) and *The Great Fire* (see also www.chicagohs.org/fire) as an introduction to how accounts of disasters can vary. Students created an overlay map: a map of Chicago at the time of the fire overlaying a current map of Chicago. They colored in places that burned as they read the story, adding notes or pictures about important places, people, and events as they read about them.

![A teacher introduces *The Great Fire* by Jim Murphy.](image)

**Resources**

Following are some powerful books that make use of visuals:

- Avi’s futuristic myth *City of Light; City of Dark*
- Robert Burleigh’s *Into the Air* about the Wright Brothers’ first flight
- Steven Kellogg’s folklore comic book *Mike Fink*
- Mordicai Gerstein’s *What Charlie Heard* explores visual connections to Charles Ives’ music.
- Jan Greenberg’s *Action Jackson* about the artist Jackson Pollock explores how people see.
- James Rumford’s stunning book *Traveling Man*, about a 14th-century Muslim pilgrim who walked 70,000 miles, uses illuminated Arabic verses from the Koran—useful for units on culture, the hero quest, or the human journey.

- Lists such as the Orbis Pictus Awards for children’s literature and your library media specialist are great resources for finding such books.
Watching Video Excerpts
In a listserv discussion, the noted researcher Judith Langer asserted that using videos could assist students in developing what she calls “envisionment-building stances.” She explained that some students are so distant from the language, social situation, settings, or other aspects of a written text that they will have great difficulty “stepping into an envisionment”—a prerequisite for all further engagement and reflection on the text. Scaffolding can be provided by using a video to create some visual images, as sense of setting, time period, character, plot, or language that will help students envision the text. Even short clips may be enough to help students envision the written text.

Lunch Club Videos: Reading Captions
For a couple of years, I invited a group of students who struggled with reading to a lunch club. We munched our sandwiches in my room while we watched video tapes. We’d watch one of their choice, then one of mine (which would be associated with a unit we were pursuing or a book we were reading). The catch was that there was no sound; students had to read the captions at the bottom of the screen. I found this to be a highly engaging way to get them to read text in a manner that was supported by visual images.

What’s At Stake
The research on boys and literacy that I conducted with my mentor Michael Smith (Smith and Wilhelm, 2002) has convinced me that we need to use a wide variety of visual and nonvisual popular-culture texts in the classroom to bridge to more traditional forms of text, and to expand our notions of literacy and text. We found that boys rejected the “schoolishness” of school reading, which they saw as totally divorced from the literacy and concerns that they practiced in their own lives. Bringing in popular-culture texts communicated that the class project would both value and include their literacies and allow them to use these literacies as a resource and bridge to developing school literacies. The boys can therefore see a way to bring competence to school literacies that typically cause them difficulty. Such a project also helps us to expand our notion of what counts
as a text. The boys were cynical about school because schools place a high—and nearly exclusive value—on long texts such as textbooks, novels, and plays when these were unlike the texts they used in their lives, which were increasingly short, electronic, and multimedia.

Expanding our notions of text and literacy, and then using these wider views to help students gain new literacies, can be powerful, particularly for our most disenfranchised students.