# The "RAP" on Reading Comprehension

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*Mrs. Brown is the special education teacher for the third-grade team at Casey Elementary School. Recently, the team realized that some of their students had problems with reading comprehension. As a part of their response to intervention (RTI) program, the team assesses students' reading fluency every 2 months using Dynamic Indicators of Basic Early Literacy Skills (DIBELS; Good & Kaminski, 2002) to ensure students are improving and meeting district benchmarks. The team noticed that the majority of the third graders were meeting their fluency benchmarks and could decode at grade level, thus meeting their instructional goals. However, they also noticed that a few students were well behind their peers in reading comprehension skills despite the fact that their fluency was at or above district benchmarks. This came as a surprise to the team because they had always thought comprehension of text automatically followed fluent reading. They knew they had to address this issue immediately so these students wouldn't fall behind their peers; however, they weren't sure how to improve the comprehension skills of these students. Mrs. Brown suggested teaching the students a reading comprehension strategy. She suggested that they look for a simple and flexible comprehension strategy. They needed a strategy that could be taught individually or in small groups in the general education classroom or resource room. The strategy should also be one that students can master quickly. In addition, Mrs. Brown suggested teaching the strategy using the self-regulated strategy development (SRSD; Harris & Graham, 1996) model because she knew that how a strategy is taught is a critical factor in its success or failure (Reid & Lienemann, 2006).*

Many teachers have encountered similar issues with reading comprehension in their classrooms. In fact, reading problems are one of the most frequent reasons students are referred for special education services (Miller, 1993) and the disparity between students with reading difficulties and those who read successfully appears to be increasing (U.S. Department of Education, 2003). As a result, there is now an emphasis on early intervention programs such as RTI. In many cases, early intervention in reading instruction focuses primarily on foundational reading skills, such as decoding. These foundational skills allow the reader to read fluently (i.e., with speed and accuracy; National Reading Panel, 2000). However, with much of the focus on fluency, reading comprehension may be overlooked. It's true that reading fluency is necessary for comprehension. Students who are able to decode and recognize words effortlessly are able to devote more of their cognitive resources to reading comprehension. As a result, readers who are fluent are more likely to have better comprehension skills (Fuchs, Fuchs, Hosp, & Jenkins, 2001). This link between fluency and comprehension can lead teachers to assume that if students can read fluently they should also be able to comprehend what they read.

For many students, this assumption is correct; however, there are students who are fluent readers who experience difficulties with reading comprehension. Up to 10% of students are fluent readers who struggle to understand what they read (Meisinger, Bradley, Schwanenflugel, Kuhn, & Morris, 2009; Shankweiler, Lundquist, Dreyer, & Dickinson, 1996). These students are able to successfully decode text in specific content areas, such as sciences and social studies, but are unable to process and comprehend what they read (Caccamise & Snyder, 2005). One way to improve these students' comprehension skills is by teaching them effective comprehension strategies. Research shows that explicit instruction of reading comprehension strategies can significantly improve students' comprehension skills (Gajria, Jitendra, Sood, & Sacks, 2007; Pressley, Brown, El-Dinary, & Allferbach, 1995). Unfortunately, research also shows that comprehension instruction is often rudimentary and instruction in actual com-

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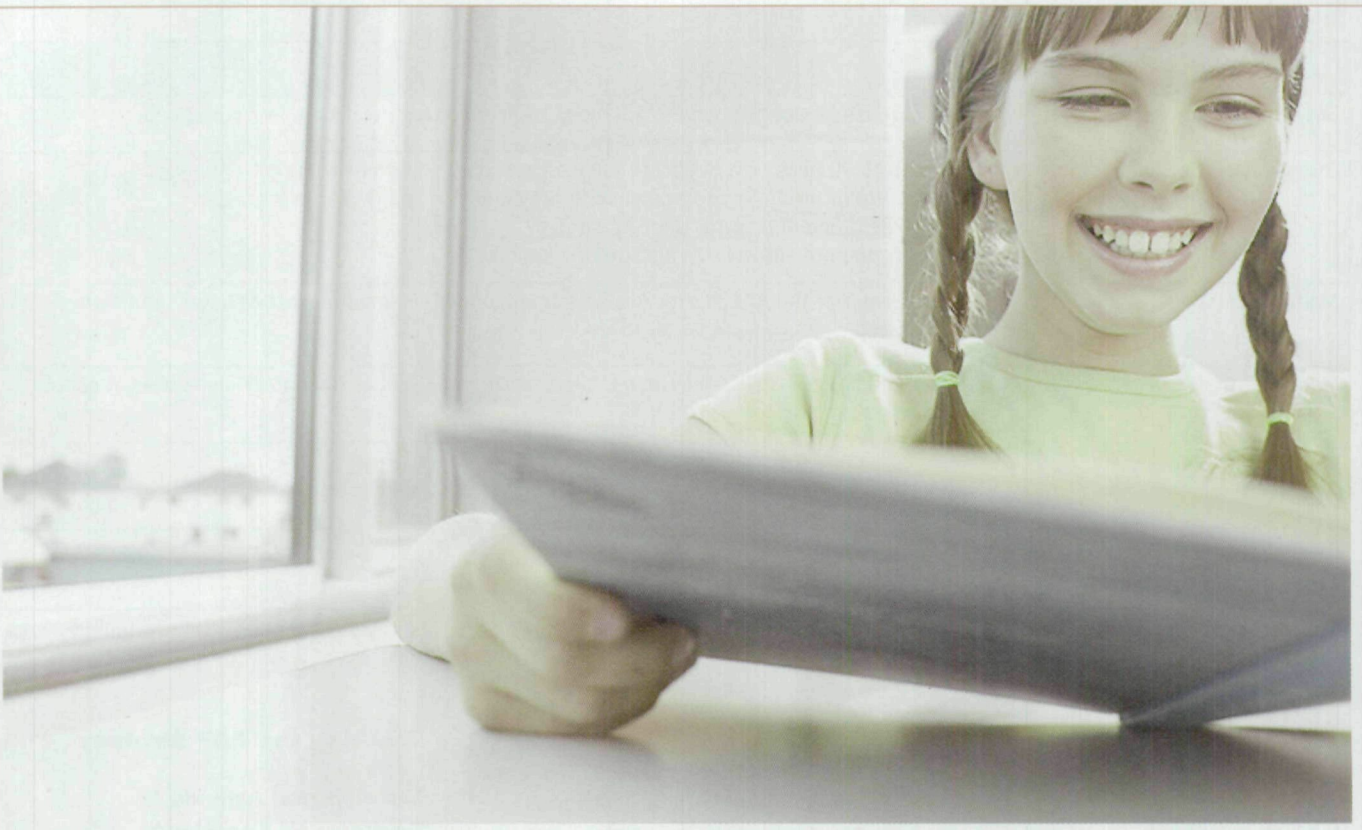

prehension strategies (i.e., specific procedures students can use to increase their comprehension) is rare (Vaughn, Levy, Coleman, & Bos, 2002). As a result many students do not improve their ability to comprehend text. In addition, few teachers are knowledgeable about how to effectively teach a strategy (Reid & Lienemann, 2006)—and unless all the critical instructional elements are included, students are unlikely to benefit from a strategy.

How can special educators implement an effective reading comprehension strategy with young students who exhibit reading comprehension problems? We taught the RAP strategy (Read-Ask-Paraphrase; Schumaker, Denton, & Deshler, 1984) to Gary, Betty, and Jean, third-graders with reading comprehension problems. The results of our Tier II intervention (Hagaman, Casey, & Reid, in press) demonstrate that teaching young students such a strategy can markedly improve their reading comprehension.

### The RAP Strategy

RAP (Schumaker et al., 1984) is a simple strategy that is easily incorporated into existing curriculum without taking time away from critical content instruction. This three-step strategy (see Figure 1) can improve the reading comprehension of students with and without disabilities and is extremely flexible. It can be used for elementary, middle, and high school students across many different content areas (Hagaman & Reid, 2008).

The strategy requires students to engage in reading materials through questioning and paraphrasing to increase their comprehension of the material. From the questioning and paraphrasing, students process information for better understanding of what they read. Studies using the RAP strategy (Schumaker et al., 1984) have shown it to be effective (e.g., Hagaman, Casey, & Reid, in press; Hagaman & Reid, 2008; Katims & Harris, 1997). Results from these studies showed marked improvement in reading comprehension across multiple age groups (e.g., elementary through high school), and for students with and without disabilities (e.g., learning disabilities). In short, the RAP strategy can easily be incorporated into existing curriculum as a support for a variety of readers who struggle with comprehension.

### The Self-Regulated Strategy Development Model

Effective strategy instruction requires teachers to explicitly teach students the

**Figure 1. RAP Strategy Cue Card**

**The RAP Strategy!**

- ✓ Read a paragraph.
- ✓ Ask yourself, "What was the main idea and two details?"
- ✓ Put information into your own words.

**Table 1. SRSD Stages in RAP Strategy**

| SRSD Stage | RAP Activity |
|---|---|
| Develop background knowledge | Make sure student knows what main ideas and supporting details are in a paragraph. |
| Discuss the strategy | Sell the RAP strategy as a "trick" to help with reading comprehension.<br>Discuss current level of performance with the student.<br>Discuss the different steps of the RAP strategy.<br>Obtain a commitment to learn and use the strategy. |
| Model the strategy | Model the use of the RAP strategy using a think-aloud, demonstrating the "hows" and "whys" for each step. |
| Memorize the strategy | Student memorizes the strategy steps. Automaticity and fluency of strategy steps frees attention for understanding of text. |
| Support the strategy | Teacher supports the strategy through scaffolding.<br>Responsibility for strategy use is gradually transferred to the student. |
| Independent performance | Student can use strategy independently.<br>Teacher monitors performance. |

*Note.* SRSD = self-regulated strategy development model (Harris & Graham, 1996); RAP = Read-Ask-Paraphrase reading strategy (Schumaker, Denton, & Deshler, 1984).

use of the strategy, model the strategy, cue students to use the strategy, and scaffold instruction to gradually allow the student to become an independent strategy user (Reid & Lienemann, 2006). We used the SRSD model to teach the RAP strategy (Schumaker et al., 1984) because SRSD is a well-validated model with over 20 years of research support that incorporates all the vital components of strategy instruction in the reading process (Harris & Graham, 1996). The SRSD model uses six stages for teaching strategies to ensure student mastery and generalization:

1. Development of background knowledge.
2. Discussion of the strategy steps.
3. Strategy modeling.
4. Memorization.
5. Support of the strategy.
6. Independent performance.

The stages are flexible and may be combined or reordered. Lessons typically involve activities from multiple stages; for example, memorizing a strategy is incorporated into all the lessons. Table 1 lists RAP strategy activities for each stage of the SRSD model.

Each of these stages contributes to students' eventual mastery of the strategy. Note that instruction is mastery-based: Students do not move to the final stage until they can use the strategy fluently and without teacher assistance. Fluent use of a strategy is critical because it allows students to use the strategy without taxing their working memory. Struggling students often have difficulty because their working memory is overloaded and information is not processed properly (e.g., Gathercole, Alloway, Willis, & Adams, 2006; Swanson, Howard, & Saez, 2007). This in turn can translate into problems such as difficulty storing and retrieving information. Strategy instruction teaches students how to do each step of the strategy and why each of those steps are important to accomplish their task (e.g., remembering what you read). Strategy instruction also entails teaching students metacognitive information about the strategy (e.g., the "hows" and "whys" of a strategy), because use of a strategy requires much more than rote knowledge of steps. Instruction is *scaffolded* (i.e., responsibility for strategy use is gradually shifted from the teacher to the student) to allow students to become independent strategy users.

## Teaching the RAP Strategy

### Develop and Activate Background Knowledge

In this stage, the instructor identifies if the student has the necessary skills to perform the chosen strategy. In most cases, the instructor will already know this information from working with the student on a regular basis; otherwise a task analysis can be performed. This analysis identifies and defines the skills necessary to use the strategy and then determines whether the student has the necessary skills. Direct observation of the student or curriculum-based measures can work well for this analysis. For the RAP strategy (Schumaker et al., 1984), the instructor might assess whether the student is a fluent reader, as proficient fluency can influence whether students understand what they read (National Reading Panel, 2000). In addition, the instructor will want to ensure that students understand what a paragraph is and what main ideas and details are in a paragraph. After the instructor has determined that students have the necessary prerequisite skills and background

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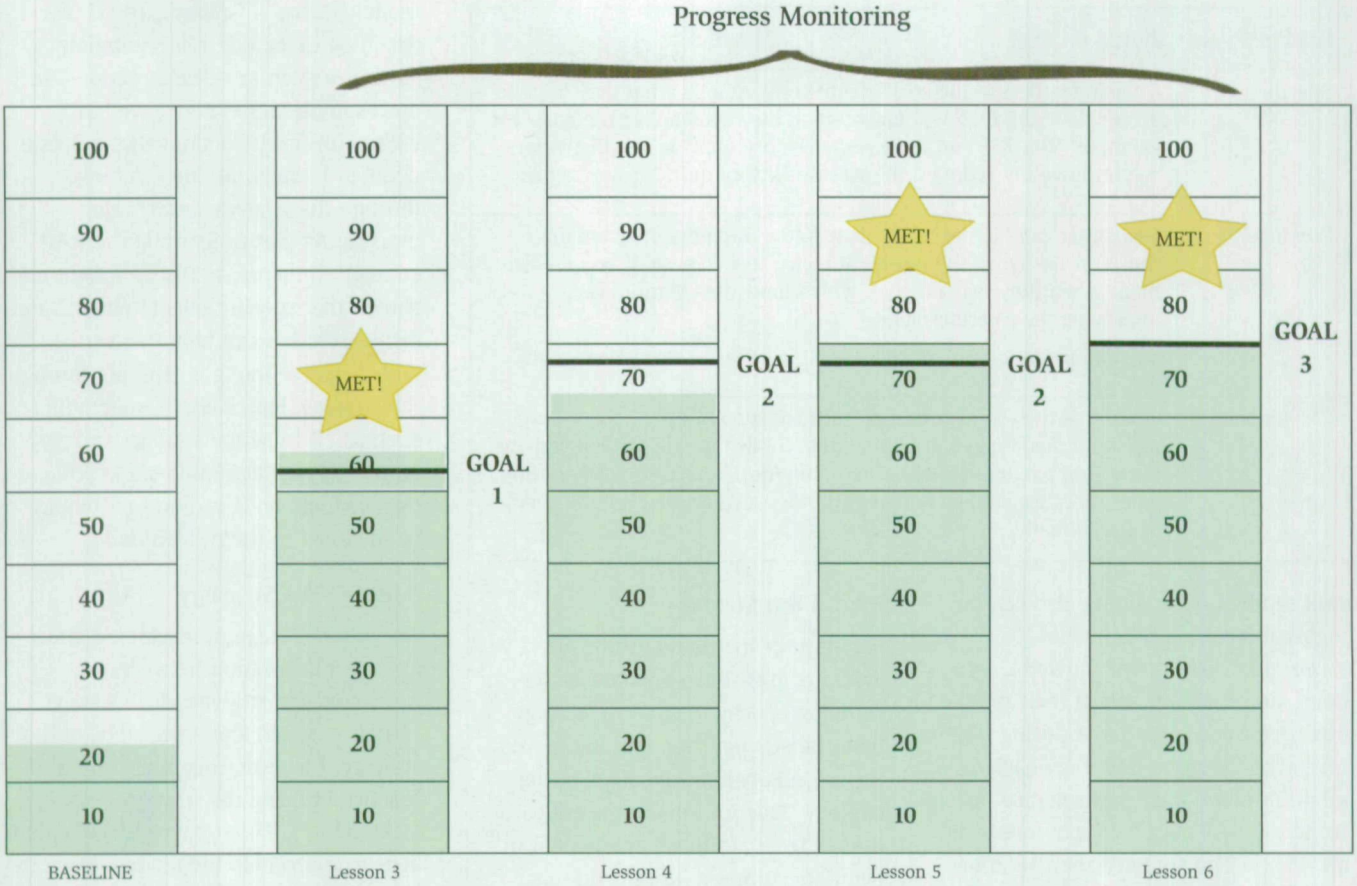
**Figure 2. Sample Goal-Setting Chart**




knowledge to use the strategy, the students can learn the specific steps of the strategy.

When we taught the RAP strategy (Schumaker et al., 1984) to three third-graders, Gary, Betty, and Jean, we first determined whether the students were able to read fluently at grade level using DIBELS middle-of-the-year benchmark probes (Good & Kaminski, 2002). We then asked the students to read a short paragraph aloud and identify the main idea and two details. As the students identified each element, we wrote down their responses. This assessment helped us determine whether the students understood the components of a paragraph (i.e., the main idea and details).

### Discuss the Strategy

In the second stage of the SRSD model (Harris & Graham, 1996), the instructor should help the student continue to understand the uses for the strategy. The instructor should introduce the strategy to the student and activate his/her background knowledge on the topic. For example, the instructor may ask the student to brainstorm what makes a good reader or why reading is important (e.g., good readers understand what they read, enjoy reading). At this time, the mnemonic device "RAP" should be presented to the student and discussed. The instructor should explain each step of the strategy in the reading process (see Figure 1); the use of a cue card or graphic organizer can help students remember the steps of the strategy. The instructor should present the strategy as a "trick" to help students remember what they read.

An important component of this stage is obtaining student "buy-in." Getting a student to buy in to using the strategy is extremely important. If students are not committed to learning and using a strategy, it is unlikely that they will use the strategy independently, which is one of the goals of SRSD (Harris & Graham, 1996) instruction. For the RAP strategy (Schumaker et al., 1984), student buy-in can be accomplished by reviewing previous measures of reading comprehension (e.g., curriculum-based measures, unit tests). This information should be graphed so students can clearly see a need to improve their reading comprehension (see Figure 2).

After discussing with the student how using the RAP strategy (Schumaker et al., 1984) can improve reading comprehension, the instructor should work with the student to set a performance goal (see Table 2). Graphs are often an effective way to illustrate student progress towards their self-determined goals. For example, the instructor may ask the student to graph current reading performance (e.g., percentage or number correct on a curriculum-based measure) over time to show improvement. Students can compare the current graph with their previous baseline performance. Graphing and goal setting also serve as self-regulation strategies, and feedback serves to reinforce performance. Note that

**Table 2. Effective Goal Setting**

| Effective goals should be . . . | |
|---|---|
| Specific | Goals must be specific so students know exactly what they hope to accomplish and they will know when they accomplish the goal. For example, "Get 75% on the weekly History quiz" is specific, whereas "Improve my score on the weekly History quiz." is too vague. |
| Proximal | Goals that can be met in the near future are more effective than those set farther in the future. Students feel a sense of accomplishment when they reach a goal, which motivates them to keep improving their performance.<br>You can set long-term goals by using a series of short-term goals. |
| Challenging | Goals that are too easy do not enhance student effort; those that are too difficult can be discouraging. Goals that are challenging are those that are attainable, but require effort. Take care when setting goals, because students often will propose goals that are too easy or too difficult. |

goal setting and graphing also can be highly motivating to students.

For goal setting, we showed Gary, Betty, and Jean a graph of their previous performance gathered during baseline, and discussed how they each might improve their performance by using the RAP strategy (Schumaker et al., 1984). The students then set individual goals related to how much information they could recall from given text. We worked with the students to ensure they set realistic goals directly related to their current performance (e.g., if a student recalled 17% of text in baseline, an appropriate goal might be 40%). The students would record their future scores on a graph to self-monitor progress toward their self-determined goal. Initial goals for Gary, Betty, and Jean were 35%, 40%, and 50% respectively. When students met a self-determined goal, we worked with them to set a new goal.

We also encouraged the students to self-monitor their use of the strategy. We taught them to develop a plan to make sure they were following each step of the strategy as they read a passage. Most students monitored their use of the strategy by taking notes or making tally marks while they read a passage to indicate they had completed a step of the strategy. For example, after reading a paragraph, Gary would underline the main idea of a paragraph, circle the details, and briefly orally summarize what was read.

### Model the Strategy

For strategy instruction to be effective, students must have a strong understanding of why they use a strategy, how the strategy can help them, and the reasons behind the steps of the strategy. This information is critical if the students are to see the benefit in using the strategy. To provide this information, the instructor should model the use of the strategy. Systematic modeling is a critical component of effective strategy instruction, much more than simply going through the steps of a strategy; good modeling allows the student to see the thought processes of a skilled learner as s/he uses the strategy. This modeling provides critical information on using the RAP strategy (Schumaker et al., 1984), such as why steps are performed and how the steps help them to become a better reader. Modeling helps struggling learners understand that using a strategy is not a passive process, but requires active thought and effort. The procedure used to model a strategy is referred to as a *think-aloud*. In this procedure the instructor demonstrates the use of the strategy while verbalizing his or her thought processes (see box, "Think-Aloud for the RAP Strategy").

When teaching strategies like RAP (Schumaker et al., 1984), it is important to explicitly teach and model both the strategy and the self-regulation components of the strategy. The SRSD model (Harris & Graham, 1996) is designed to include self-regulation strategies such as self-instructions. In our example think-aloud, we have included self-instructions that help students to literally talk themselves through the strategy and reading process. As part of learning the RAP strategy, students should be taught and shown that specific self-statements and self-instruction can help them cope with negative thoughts and get through the strategy. For example, statements such as "If I use my strategy and try hard, I know I can understand what I'm reading" or "I can do this" could be included in the think-aloud.

### Support the Strategy

The support stage of teaching a strategy is a collaboration between the instructor and student. At this stage, students should know the steps of the strategy; however, they will still require practice in using the strategy before mastering it. This stage uses scaffolded instruction to help the student learn to use the strategy independently. During this stage the instructor and student practice using the strategy. At first, the instructor should support the student through all the steps of the strategy. As the student becomes more comfortable with the strategy, instructor support is systematically reduced. Progress through this stage of the SRSD model (Harris & Graham, 1996) is dependent upon the length of time needed by the individual student. The instructor should decrease support and give students more responsibility for the strategy as they are ready. The end result of this stage should be independent use of the strategy.

Scaffolding can occur at any stage in the SRSD process. For example, in Stage 1, we provided the students with a strategy prompt sheet to help remember the steps of the RAP strategy. Other scaffolding activities occur during instruction and practice activities. For example, scaffolding instruction could begin with reading a story aloud to the student. Students should be allowed and encouraged to perform any steps of the strategy independently; similarly,

**Think-Aloud for the RAP Strategy**

What am I being asked to do? Mrs. Tuttle said I am going to practice using the RAP strategy to read two paragraphs. I need to understand and remember what I read and Mrs. Tuttle said this strategy is going to help me.

Now, Step 1 of RAP says to *Read a paragraph.* Easy enough—I know how to read and this paragraph only has five sentences! OK. I did Step 1. This strategy is easy so far!

Okay, now for Step 2: *Ask myself "what was the main idea and two important details?"* Uh-oh, this step seems kind of difficult. I know that at this step I have to get ready to paraphrase what I just read. If I take my time and look back at the paragraph I just read, I should be able to identify the main idea.... Hmmm. I feel like Mrs. Tuttle told me that the main idea is often found in the first sentence of a paragraph. Let me see . . . "There are two types of elephants" . . . OK! I think this paragraph is definitely about elephants. Now for two important details . . . "The two kinds of elephants are Asian and African. African elephants are much larger than Asian elephants." OK, I'm feeling pretty good about this.

Now on to Step 3: *Paraphrase or Put the paragraph into my own words.* This is a big step, and very important. This is how I will know if I understood what I read or not. I know that paraphrasing means I have to summarize what I read in my own words. OK, here I go . . ..

I'm reading about elephants, and I remember that there are two kinds: Asian and African. Asian elephants are smaller than African elephants. Wow! I can't believe I remembered all that! Mrs. Tuttle was right about this strategy being helpful! But what do I do now?

Hmm. I have one more paragraph to read before I am done reading this story. I guess that means I am going to be doing the RAP strategy again!

All right, here I go again. First, *Read a paragraph.* Easy. Here I go . . .. Done! Ok, *Ask myself about the main idea and details.* "Elephants can be found in the wild or in zoos" . . . OK, so I'm still reading about elephants, but what were the details I read about? "In the wild, elephants live in families called *herds*. A female elephant is usually the leader of a herd and called the *matriarch*."

OK! I think I'm already read for the third step, *paraphrase*! Elephants can either live in the wild or in a zoo. Elephants live in herds and a female elephant is in charge of the herd.

Wow! I learned a lot about elephants and it wasn't even that hard! I just used my RAP strategy and I could remember what I read. I bet when I take my test on this reading I'm going to do really well. Mrs. Tuttle said if I used the strategy I would get better scores in reading . . .. I can't wait to find out if I met my goal!

instructors should support students as needed in any areas of the strategy. At this stage, supports such as graphic organizers can help students remember the steps of the strategy, although both prompts and graphic organizers should be faded as students gain fluency with the strategy. After reading the story aloud, ask the student to identify the main idea and details in each paragraph by underlining, highlighting, or saying them aloud. After this step, the instructor should encourage the student to determine whether his or her goal (identified in Stage 2) was met and to graph the results. The instructor should also encourage the student to reflect on how the strategy improved his or her reading comprehension. For further examples of scaffolding, see Table 3.

### Independent Performance

In this stage, the student should be ready to use the strategy without assistance from the instructor. At this stage, the purpose should be to monitor the student's performance and ensure proper and consistent use of the strategy. Monitoring academic performance is critical: The goal of strategy instruction is increased academic performance. The student's work should show a marked and consistent improvement. There are a number of ways to monitor performance that are simple and effective, such as unit tests or retells. Teachers should also watch to see if students distort the strategy or skip steps when using it independently. If a student modifies a strategy but performance remains high, there is no cause for concern; many students will adapt the strategy to meet their needs. Changes are acceptable as long as the student performance remains high. On the other hand, if a student is performing the strategy correctly and consistently but a high level of performance is not attained (or maintained) then reteaching the strategy or considering a different strategy is probably in order. When using the RAP strategy (Schumaker et al., 1984), the independent performance stage is reached when the student is able to read a multiple-paragraph selection while correctly paraphrasing each paragraph with no assistance from the instructor.

Motivation and emotion are important factors in strategy instruction using SRSD (Harris & Graham, 1996). Changing a student's attitude toward a task and success are important goals of strategy instruction. In our case, we observed whether the students' attitudes toward reading and confidence in their abilities improved. We also checked to see if the students were using the strategy outside the classroom. We observed one student teaching her classmates the RAP strategy. The use of open-ended questions such as "What do good readers do?" or "What do you say to yourself before you read something?" can help teachers determine if a strategy changed students' perception of a task. However, teachers should remember that some changes (such as attitude improvements) take more time than others to obtain.

### Final Thoughts

The RAP strategy (Schumaker et al., 1984)—when correctly taught using an effective model of strategy instruction such as SRSD (Harris & Graham, 1996)—can be extremely effective for

**Table 3. Scaffolding Examples**

| Type of Scaffolding | Explanation | RAP Example |
|---|---|---|
| Content scaffolding | Instructor uses material at an easy reading level (e.g., text below the student's grade level).<br>Instructor uses content of interest to the student to teach the strategy.<br>Instructor teaches the student easier steps of the strategy first, then more difficult steps.<br>In initial practice sessions the student performs the easy steps; the instructor models the more difficult steps. | The student is allowed to read one paragraph, a shorter story, or a story written at a lower grade level.<br>The student reads stories on topic(s) that they know about or that interests them.<br>The instructor teaches the student the R and A in RAP first, then how to paraphrase. |
| Task scaffolding | Ownership of the strategy is gradually transferred from instructor to student by letting the student perform more and more of the strategy steps. | Phase 1: The instructor asks the student to name the strategy step that should be performed, then the instructor describes the step and performs it.<br>Phase 2: The teacher asks the student to name the step and describe the step; the instructor performs the steps.<br>Phase 3: The student names, describes, and performs the step. |
| Material scaffolding | Prompts, graphic organizers, and cues are used to help the student use the strategy. Typically, these are faded over time. | The student is given a graphic organizer or cue card. As the student gains mastery of the strategy, the prompts should be faded. |

*Note.* RAP = Read-Ask-Paraphrase reading strategy (Schumaker, Denton, & Deshler, 1984).

improving reading comprehension. This strategy is extremely flexible and can be used for elementary, middle, and high school students across many different content areas (Hagaman & Reid, 2008). Effective strategy instruction requires using specific techniques (e.g., modeling, scaffolding). Teachers should also remember that strategy instruction should be customized to the student. Instruction should continue until the student has mastered the use of the strategy (i.e., using the strategy correctly and consistently). The number of lessons depends on how quickly the student is able to master the strategy. Luckily, most students can master the RAP strategy quickly, typically in four or five lessons of 20 to 30 minutes. Gary, Betty, and Jean mastered the RAP strategy in four, three, and five lessons, respectively, that were roughly 20 minutes in length (for lesson plans, see University of Nebraska-Lincoln, n.d.). In sum, the RAP strategy, when taught using an effective model for strategy instruction, can be an effective means of improving students' reading comprehension.

**This strategy is extremely flexible and can be used for elementary, middle, and high school students across many different content areas.**

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