Strategram ™

The Heart of Strategy Instruction

—effective modeling—

Jean Schumaker
Coordinator of Research

> **The model step of instruction is fundamental for teaching and demonstrating cognitive behaviors.**

Think about the last time you did something that was truly difficult for you. Perhaps it was learning a new sport like golf or tennis or something new related to your job like providing learning strategy instruction. What thought processes and self-instruction did you use? What observable acts did you perform?

If you were working very hard at learning, you were probably actively engaged in thinking through what to do next, telling yourself what to do, monitoring your progress, and evaluating your performance (all cognitive acts)—in addition to physically performing the task. For example, if you were practicing wind surfing, you might be constantly planning your next move (e.g., "It's time to tack, or I'll crash into those rocks."), telling yourself what steps to take to accomplish that move (e.g., "Let's see, to come-about, I'll tilt the mast toward the stern."), reminding yourself to be patient since sailboards take a while to respond (e.g., "Just wait it out. It'll happen!"), monitoring your progress (e.g., "O.K. It's starting to turn."), evaluating your performance (e.g., "Gosh. I goofed! This water's cold!"), and telling yourself what to do next time to avoid getting dunked (e.g., "Next time, I'll take it slower as I step around the mast.").

Most of us do silent verbal acts without needing anyone to tell us or show us how to do them. Research in the field of learning disabilities suggests that learning disabled and other low-achieving youngsters may not use self-talk effectively to guide their performance. Thus, as teachers, we may need to teach students these cognitive behaviors as well as the overt physical acts they need to perform a given task. The Model Step of instruction is fundamental for teaching and demonstrating these cognitive behaviors.

Instructional Phases of the Model Step

The Model Step in the instructors' manuals of the *Learning Strategies Curriculum* includes four phases of instruction: Advance Organizer, Presentation, Student Enlistment, and Post-Organizer.

Advance Organizer

The Advance-Organizer phase is the roadmap for instruction. It focuses students' attention on where they have been (i.e., what they have learned) and where they are going (i.e., what they will learn in the current lesson). Thus, this phase usually includes a review of previous learning covering the strategy steps and strategy application. In addition, the teacher personalizes the strategy so that students understand how its use will benefit them. This phase also includes a definition of lesson content. For the Model Step, the definition contains an explanation of what a model is, how it can help students as learners, and a brief description of the activities in the lesson. Finally, expectations with regard to student involvement during the lesson are stated, such as instructions for students to: (a) watch the demonstration, (b) pay particular attention to what the teacher says and does, and (c) imitate what has been demonstrated.

It is suspected that successful learners typically watch and listen to everything that goes on around them and imitate models without having to be told, "Watch me," or "Do

. . . The heart of strategy instruction

it like I do." For example, if they see friends skate boarding, they imitate their moves. Similarly, they may see a basketball player on TV make a dunk shot and later imitate the shot. In contrast, poor learners tend to make less use of models. This is particularly evident in their poor performance in the area of social skills. Social skills are rarely taught formally; instead, successful learners acquire many social skills through imitation. Poor learners typically do not learn these skills, perhaps because they do not attend to models in their environment, perhaps because they do not view models as something to

should be fluid and organized; thus, preparation and practice are critical. Specifically, the demonstration emphasizes the cognitive acts required to perform the strategy through a thinking-aloud process. As the teacher thinks aloud, three types of cognitive processes should be emphasized. First, demonstrate self-instruction. For example, the teacher models how to cue oneself to use the next strategy step (e.g., "Let's see, the next step is 'Insert a letter'.") and how to tell oneself what to do to complete that step (e.g.,"Okay, I'll try inserting one of the vowels. I'll start with 'a'."). Second, model how to do problem solving (e.g., "Hmm. . . I have a problem. There are nine items

like I did on this one.").

The demonstration focuses both on thinking about and performing the task. Merely describing a performance (i.e., telling what to do) does not provide a true model of thinking processes and physical acts that students can imitate. Therefore, the entire strategy must be demonstrated and the whole task—beginning to end—must be shown. When the task is completed, the teacher can say, "Great! I'm done. That was easy, now I can start to use the strategy again on. . . ."

As the demonstration proceeds, it is important to avoid mental leaps. For example, while demonstrating the 'FIRST' steps in the *FIRST-Letter Mnemonic Strategy*, the teacher shows

. . . successful learners typically watch and listen to everything that goes on around them and imitate models without having to be told.

imitate, and/or because they fail to cue into salient or subtle parts of models. Thus, it is important to instruct these students to watch and listen so they can learn to accurately imitate. It is also important to forewarn them that they will be expected to participate in the demon-stration so they can mentally prepare for their role in the lesson.

Presentation

The Presentation phase of the Model Step is comprised of a teacher demonstration of the strategy. The demonstration includes all the elements of how to think and act while performing the strategy. It

in this list, and I should only have seven. I need to break the list into two lists. I know! I'll put these four items together because they're related to plants and these five items together because they're related to animals."). Third, demonstrate the monitoring required while perform-ing a strategy. For example, include in the demonstration instances of checking progress (e.g., "Let's see, where am I?" "I just finished the 'S' step."), evaluating progress (e.g., "Hey, I memorized that list! That's great! I'm ready for the next list."), and adjusting performance (e.g., "On the next list, I'll remember to check to see if I can use a friend's initials

how **each** step is tried before resorting to the next step. Making a mental leap to "Shaping a sentence" (the fourth step of the strategy) without trying the first three strategy steps does not help students because all the thought processes involved in the decision-making process are not modeled. Students will not know how to make similar decisions if they do not witness their teachers making them.

Student Enlistment

During the Student Enlistment phase of the Model Step, students are prompted to gradually perform more and more of the required thought processes and physical acts themselves;

that is, they become the demonstrators. For example, students can be initially prompted to name the next step. Once they master this, prompt them to say what they would instruct themselves to do at a given step. Then they can be prompted to say what they would say as they: (a) check their progress, (b) evaluate their performance, (c) make adjustments, and (d) problem-solve. In this process, students are required to use the actual words they would say to themselves (e.g., "I'll look for the main idea in the first sentence.") instead of telling the teacher what to do (e.g., "Look for the main idea."). To facilitate this process, one student at a time can demonstrate thinking aloud and performing the behaviors required by the task.

Enlisting students in the demonstration serves as initial guided practice of the cognitive and physical parts of a strategy. By involving the students, the teacher can <u>check</u> their <u>understanding</u> of the strategy steps and the processes involved in performing them. In addition, the exercise provides students with good models to imitate and examples of what they should not do. Teacher feedback,

including <u>correction</u> <u>and</u> <u>expansion</u> <u>of</u> student <u>responses</u> during the exercise, is critical to help students distinguish good from poor models. Thus, throughout the Student Enlistment phase, the teacher checks that verbal and physical acts are accurate and appropriate, prompts as much self-talk as possible, and provides specific feedback about the self-talk as well as other aspects of students' performances. Additionally, the teacher <u>engineers</u> <u>success</u> by assigning tasks that have a high likelihood of success.

Post-Organizer

The final phase of the Model Step, the Post-Organizer, sums up what has been accomplished in the lesson and draws the students' attention to: (a) the models they have witnessed, (b) their function, and (c) the importance of imitating the cognitive thinking processes they have heard and the physical acts they have seen. Thus, the teacher <u>reviews</u> the information that has been covered, and <u>personalizes</u> <u>the</u> <u>strategy</u> so students are reminded how use of the strategy can help them. Future lessons and activities are previewed to <u>give</u> <u>direction</u> to students' future learning.

In addition, the teacher <u>cues</u> students <u>to</u> <u>record</u> their <u>progress</u> on their *Progress Charts* and the *Management Chart*. Finally, the teacher makes a <u>statement</u> <u>of</u> <u>expectations</u> conveying the message that the students are to master the strategy quickly and easily.

Thus, an effective model for a learning strategy involves a demonstration that integrates thought processes voiced aloud with physical acts. It also involves an introduction and a conclusion both of which draw students' attention to the demonstration and its function in relation to the learning process and imitation. In addition, an effective model engages students in guided practice of the cognitive processes and other behaviors that are required to perform the strategy. The inclusion of these components in each Model Step of instruction leads to earlier student success in the practice steps of instruction and ultimately to quicker mastery of each strategy.

Editor's Note: Teachers can use the Cue Card on pp. 4-5 of *Strategram* to cue themselves to include all the phases and components of a good model during the Model Step of instruction.

Teacher's Cue Card for the Four Instructional Phases of Modeling

Use these instructional categories and phrases to embellish the procedures provided in your strategies instructors' manuals.

PHASE I: ADVANCE ORGANIZER

Review Previous Learning	*Okay, let's go over the steps of the strategy that we discussed yesterday.* *Great, you're beginning to remember some of the steps of . . . .* *Let me go over this step again so it's clearer.* *Where could you use this strategy at school, at home, on the job?* *What might cue you to use this strategy?*
Personalize the Strategy	*What do you think would begin to happen if you used this strategy in . . . ?* *If you don't learn this strategy, what might be some of the consequences that you might have to face in. . . ?* *(Student's name), tell me why you think this strategy is going to help you.*
Define the Content	*Now that we have reviewed the information we covered in the Describe stage, what is the next stage of instruction, _____?* *That's right, but what's a model?* *What are you going to be learning in the modeling stage?* *How is "thinking aloud" important to you?*
State Expectations	*What do you think I am going to do?* *What do you think you're going to do?* *That's right. I expect you to watch and do everything that I do when it's your turn.* *Remember, today you are going to be involved in showing everyone how you think about this strategy, too!*

PHASE II: PRESENTATION

Think Aloud	*Okay, let me see, if I do this. . . then . . . . Hey, it worked!* *I can do this. . . now, when will this work?. . . Wow!* *What would happen if I. . ., hmm, no, I can't do that.* *Let me try. . . . Okay, I can do it again.*
Self-Instruct	*Okay, now I will use the _____ strategy.* *I will write the mnemonic ____ on my paper.* *The first step is_____. In this step, I . . . .* *Okay, now I need to do the next step which is _____.*
Problem-Solve	*Hmm. . . this doesn't work, what should I do?* *Okay, let me try this. . . hmm. . . . It still does not work. . . .* *Well, let me try this. . . . How about this. . . hmm. This seems to work. I think I will do it this way.*
Self-Monitor	*How did I do on that? Did I do that right? Let me check that.* *I better do this over. . . hmm. Why did I do that? Does that look right?* *I did that right, great job! It worked! Great, right on the mark!*
Perform Task	*Now, I need to _____. (do it)* *I complete this by _____. (do it)* *I organize this by _____. (do it)* *Great, I have completed the task. I am all done! It feels great!*

PHASE III: STUDENT ENLISTMENT

Prompt Involvement	*Okay, I've gotten you started, what's next?* *What's the next step, (student) ?* *What would you say to yourself on this step? Okay, now do it?* *Tell me what you're thinking.* *What question should you ask yourself here?*
Check Understanding	*Explain what you are supposed to do here.* *Why did _____ do that?* *Show us what you do here. Explain it as you do it.* *What is involved in that step?*
Correct & Expand Responses	*Good start, now you need to do what?. . . Right!* *During this step, you need to say to yourself that. . . . Now you do it.* *Right, but don't forget to. . . . Now, show me how you would do it.* *Okay, stop. In this part we need to. . . . What did you do?* *Let's try it again. This time, remember to. . . . Great job!*
Engineer Success	*You're doing fine. Now, do this. . . . Okay, back up, and try this. . . . Good. Wait a minute, what's the cue card say? Good. . . .Good. . . .Great, you did it. See, this is going to be easy for you.* *Let's do it again, this time a little slower. I think you will find it easier if you use your cue cards a little more.*

PHASE IV: POST ORGANIZER

Review the Model	*Great job! Now let's review a little. What is a model?* *How did the model help you? Based on the model, what should YOU remember to do? And what types of things should you say to yourself? What were the steps we modeled?*
Personalize the Strategy	*When could you use this strategy, (student)?* *Why is it important to use this strategy every chance you get?* *Why is "talking to yourself" important? How can you do this when other people are around? How will you remember to do this?*
Give Direction	*Okay, what stage of learning the strategy have we completed? What instructional stage is next? What is involved in a rehearsal?* *It is very important that you memorize and really understand all the parts of the strategy. Why?*
State Expectations	*I know that you can do this. . . . I want you to start using this strategy, even parts of the strategy, when it will help you meet a demand.* *I know that this strategy combined with your effort will make you more successful. I expect you to master this strategy by. . . .*
Cue Progress Checks	*What do we do when we complete a specific instructional stage?* *That's right, we mark our progress chart. Go ahead and do it. You should know how to do that for yourself. If you need help, let me know.*