

INSTRUCTIONAL FRAMEWORK

Learning strategies instruction has helped students in many settings, from students with learning disabilities who are writing compositions (Harris & Graham, 1992), to first-language elementary students who are comprehending stories (Brown, Pressley, Van Meter, & Schuder, 1996), to ESL students who are presenting science projects (Varela, 1997). Across settings, successful strategies instruction includes several common elements (Chamot & O'Malley, 1994; Pressley, El-Dinary, Gaskins et al., 1992). This chapter explores the critical elements of effective strategies instruction and includes a discussion of factors that facilitate effective strategies instruction as well as a framework that describes how these elements work together.

Instructional Objectives

- This chapter will help you to:
- Understand the roles of student and teacher beliefs in learning strategies instruction.
- Plan a classroom context that assists learning strategies development.
- Identify instructional techniques that foster learning strategies instruction for different levels of language proficiency.
- Select strategies and learning tasks that support strategic thinking.
- Apply the CALLA instructional framework.
- Scaffold learning strategies instruction.

Factors Facilitating Effective Strategies Instruction

Both individual and instructional factors can impact the effectiveness of learning strategies instruction. These factors include the beliefs of both students and teachers regarding learning, the social climate of the learning setting, and general approaches to instruction used in the classroom.

Student Beliefs

Learning strategies instruction is based on the idea that students are more effective when they take control of their own learning. Students' cultural or educational backgrounds may be at odds with this belief. For example, students whose prior schooling has been in highly structured, teacher-directed contexts may have had few opportunities for independent, self-regulated learning. However, for strategies instruction to have an impact, students must first believe they are capable of becoming more independent learners. They also must believe that what causes their success or failure is the use of effective or ineffective strategies, not luck or innate ability alone. Finally, students must be willing to take responsibility for their learning. Teachers need to nurture and encourage these beliefs and may need to provide extensive support so students can experience the success that comes by willingly using effective strategies.

Are your students prepared to take responsibility for their learning? If not, what beliefs stand in their way? How can you encourage them to look at learning differently?

Teacher Beliefs

The teacher, too, must believe that effective strategies use can determine student success. As one teacher stated, "I think strategies instruction helps the students if [teachers] really believe in it. If we don't believe in it or really use it ourselves, it's not really going to help them. But if we really believe in it, then maybe they'll use it as a part of their learning also."

If the teacher thinks successful learning is the result of ability alone, which is relatively fixed, it follows that low-achieving students are powerless to change. Strategies, on the other hand, are not innate and can be learned. If learning strategies instruction is to be successful, teachers must also believe that strategies can be taught. Teachers must have confidence that the individual strategies are effective, and they must communicate this confidence to students. A good way for teachers to do this is to offer personal examples of how they have used strategies for similar language tasks or in everyday life. One teacher, for instance, described *predicting* how much spaghetti would be needed at a dinner

Are you ready to give students more control over their learning? What fears do you have about students becoming more independent? What would help you give up some of the control over learning?

party and then *evaluating* the prediction by determining whether the guests had actually had enough.

Perhaps most importantly, teachers must believe that their students are capable of becoming more independent learners. This also requires that teachers be willing to give up some control over learning so that students can take more control. Teachers who adhere to the transmission model of learning or other teacher-directed approaches are likely to have difficulty making strategies instruction work for them.

Classroom Control

Giving students control over their learning does not mean giving up control of the classroom. Effective classroom management is critical, since a chaotic classroom impedes any form of learning, including strategies instruction.

Like learning a new language, learning to be an independent learner requires taking risks. The classroom environment must encourage students' risk-taking. Teachers who accept students' responses without judgment and who promote respect among classmates will have greater success with strategies instruction.

Language of Learning Strategies Instruction

Since most learning strategies are mental operations and hence not directly observable, classroom discussions about learning strategies are important vehicles for identifying the strategies that students use and for modeling additional strategies. These discussions are relatively easy to initiate in students' native languages, but they are difficult to conduct in a second or foreign language when students are at beginning levels of language proficiency. Teachers of beginning-level students must decide whether to introduce learning strategies in the native language (assuming that all students speak the same first language and that the teacher is proficient in that language) or to teach students the vocabulary and expressions needed to talk about learning strategies in the target language.

Students will find it easier to talk about their own thinking and learning processes in their native language if this type of discussion is familiar to them. However, if their cultural and educational experiences have not emphasized the identification of individual approaches to learning, the discussion of learning strategies—even in the native language—could be bewildering. As one student explained, "In my country, we are not supposed to talk about ourselves in class, we are supposed to learn what the teacher

says." In this situation, students may actually find it easier to talk about learning strategies in the second or foreign language if learning strategies are perceived as an important element of learning the new language.

Discussing learning strategies in the target language poses linguistic challenges for the teacher. How can students in the beginning-level class talk about their own thinking processes? We have observed both ESL and foreign language teachers introducing strategies in the target language successfully. They start slowly with a single strategy, often one that students are already using implicitly (for example, *cooperation*). The strategy is given a target language name, and the teacher demonstrates how to apply it, using simple language, gestures, and repetition as necessary. Teachers need patience and perseverance to teach learning strategies in the second or foreign language to beginning-level students, but the task is not impossible.

Instructional Approach

Effective strategies teachers focus on students' learning processes, as well as on products and outcomes. In addition to emphasizing curriculum content, they must strongly emphasize the thinking that students use to make sense of that content. Thus teachers focus not only on technically "correct" language use, but also on the message that students are trying to communicate and the reasoning behind their responses. This can be done by probing to find out how students arrive at their answers. During students' explanations, the teacher can point out when students use strategies, especially if they seem unaware that they are doing something strategic. Teachers can also help students avoid future mistakes by following up incorrect answers to find out where the student's logic went astray. Mistakes can thus serve as opportunities to remind students of effective strategies that might have helped them.

EXAMPLE

Use the following questions to elicit information about students' thought processes.

- What are you going to do?
- How did you come up with that?
- What makes you think so?
- What were you thinking about?
- How can you solve your problem?
- What led to that decision?

Coordinate with teachers of other content areas to plan to teach a core set of strategies across subjects. For instance, prediction in language learning and hypothesizing in science can correspond to estimation in mathematics and technical courses. Most strategies can be adapted for use across a wide range of content areas.

Encouraging students to talk about their thought processes helps make them more aware of the strategies they are already using. This metacognitive awareness is important because it enables students to call on those strategies whenever they face challenging tasks. In addition, the teacher can explicitly introduce other strategies that the students can try, since some students may never have thought of using a particular strategy. Others may have used the strategy without really thinking about it. Explicit instruction is a way to ensure that students are aware of the choices they have for learning, understanding, and solving problems. The framework presented later in this chapter will describe how to teach strategies explicitly.

Many teachers find it important to emphasize the value of strategies instruction as part of content as well as language instruction. Teachers need to make it clear that instruction in strategies can help students reach long-term goals in all types of learning, not just a specific, immediate goal in the language classroom. Learning strategies are not just a classroom activity for a particular vocabulary set or other language task. Developing learning strategies can help students become effective learners with a variety of tools to aid them in all types of learning and understanding. Teachers should point out that the strategies students are learning in the language classroom can help not only in language but also in other subject areas, as well as in any situation in which greater understanding is needed.

Teachers need to build students' metacognitive knowledge for each strategy that is introduced. This means naming and defining the strategy and explaining why the strategy works and when to use it. Teachers should explicitly discuss why and how each strategy can improve students' understanding, production, and learning. After explaining a strategy, the teacher can ask students why they think the strategy would help. Teachers can then supplement students' responses by explaining the theory behind the strategy (see sample explanations in the Metacognitive Model of Strategic Learning in Chapter 2). It is important to acknowledge that different strategies work better for different people and for different tasks. Teachers can encourage exploration of the kinds of tasks, situations, and purposes for which each strategy is more or less useful. This can be done in a formal explanation or discussion, but it also should occur informally when a student uses a strategy.

Finally, once a few strategies have been introduced, instruction should emphasize the coordination of strategies. The teacher can explain the importance of having a flexible repertoire or menu of strategies for language learning. The Metacognitive Model of Strategic Learning in Chapter 2 can serve to organize individual strategies. Thus the teacher

should remind students that good learners **plan, monitor, problem-solve, and evaluate** recursively during a given task; these are not just linear steps to follow. Students can also be reminded that different strategies can work for the same task. If one strategy does not work for a student, the teacher can encourage the use of another. Students need to understand that explicit instruction in strategies can help them become better language learners because it helps them add strategies to their repertoire of learning tools, makes them more aware of the strategies available to them, and encourages them to evaluate which strategies are most effective for them on different kinds of tasks.

EXAMPLE

Use the following questions for building students' metacognitive awareness.

- Did that strategy help you?
- Why was that strategy helpful for this task?
- Is there another strategy that might work better?
- In what situations does this strategy work well for you? When does it not work so well?

Course Level and Strategies Instruction

The strategies in the Metacognitive Model of Strategic Learning are designed to be taught to students at all levels of language proficiency. Although strategies are especially important for less proficient and beginning-level students, even the best students do not use strategies as thoughtfully and flexibly as they could. Less advanced students may need more modeling and coaching from the teacher. More advanced students need faster fading of scaffolding; teachers can release control to such students by providing less explicit cues to use strategies they have learned. Teachers may find different strategies more appropriate at different language levels, based on the specific tasks and goals they are working on in those classes. Some teachers find it helpful to start with a few basic strategies at lower levels and build up with more strategies at higher levels. It is also important to revisit previously taught strategies, exploring how they apply to more advanced tasks.

A Word about Scaffolding

A challenge teachers may face when teaching learning strategies is determining when and how to scaffold instruction to provide the

FIGURE 3.1

Scaffolding Strategies Instruction

Scaffolding: Ways to provide additional support when students need it

- If students understand a strategy but are hesitant to use it, try a mini-experiment (see Chapter 7) to prove the strategy's impact.
 - If students have trouble remembering the full range of strategy choices, create a poster and refer them to it.
 - If students have trouble choosing a strategy, offer one or two choices and have them try one of them.
 - If students understand the strategy but have difficulty applying it themselves, provide some guided practice opportunities.
 - If students are using a strategy inappropriately, model it for them again, describing how what you are doing differs from what you have seen them doing.
 - If students seem to misunderstand the point of the strategy, explain it in a different way, perhaps using an analogy.
- Scaffolding: Ways to reduce explicitness when students are ready
- Instead of telling students which strategy to use, have them choose strategies themselves.
 - Instead of verbal reminders to choose a strategy, refer students to a poster of choices.
 - When students practice strategies, give less teacher feedback and ask them to evaluate how well the strategies worked.
 - If the strategies are getting repetitive for students, introduce some new strategies.
 - Introduce a totally new context for using the strategy (such as for a speaking task rather than for reading) and have students discuss how to modify the strategy so it works for the new task.

appropriate amount of support. Evaluating students' strategies use is the critical first step in scaffolding. If it seems that students are not applying a certain strategy, then they may need stronger scaffolds. Teachers can provide extra support by giving more explicit reminders or revisiting practice opportunities. They may also need to give students more evidence that the strategy is useful to them. As students begin using a strategy more independently, the teacher needs to gradually reduce prompting and explicitness (see Figure 3.1). For example, coaching strategies can be done at first through verbal reminders and then later by

referring students to a poster of questions that they can ask themselves to guide strategies use. As another example, early in instruction the teacher may suggest a specific strategy for students to try, but as instruction progresses students should choose strategies for themselves. The main point of scaffolding is that teachers should try to identify how much support students need and to provide just enough support while still working toward the eventual goal of student independence.

Cooperative Learning and Strategies Instruction

Cooperative learning is compatible with strategies instruction. A simplified form of *cooperation* (for example, practicing in pairs and brainstorming study approaches) is one of the strategies emphasized in the Metacognitive Model of Strategic Learning (see Chapter 2). More formal cooperative learning approaches, such as Jigsaw and Teams-Games-Tournaments (Slavin, Karweit, & Madden, 1989) also can be used to facilitate strategies instruction. Cooperative learning is an excellent way to scaffold instruction because it provides instructional support while increasing student responsibility for learning. Cooperative settings are also useful for identifying students' background knowledge of a strategy or a topic.

Selecting Initial Strategies to Teach

Each of the strategies presented in Chapter 2 is designed to be flexible for a variety of tasks and student levels. Teachers should feel free to be creative in how they apply the strategies in their classrooms.

EXAMPLE

The following guidelines can help teachers as they choose the first strategies to teach.

- Start with the simplest strategies (such as *imagery/visualizing*) and build to more complex ones (such as *summarizing* or *organizational planning*).
- Start with strategies that the students already use, and show them how the strategy can be expanded for more advanced uses or for different tasks.
- Start with strategies that have the widest applications in the class. Think of how to adapt the strategy for reading, listening, speaking, and writing and for learning content. Examine curricular goals and select strategies that will help students reach the most goals.

Which of the factors discussed here are most likely to affect strategies instruction in your classroom? Are there any other factors that may have an impact? How will you develop instruction to address these factors?

What strategies will you select to begin strategies instruction? Refer to Chapter 2 for strategies descriptions and think about which strategies meet these guidelines for your situation.

- Determine which strategies could help with specific current challenges that students are facing, and start with the strategies that students need most.

- Make sure that the strategies are well-matched to instructional objectives and to the tasks that students are expected to do. For example, *selective attention* may be more appropriate at lower levels where vocabulary and structural knowledge is more limited, while *grammar-based inferring* might be better for students at higher levels. *Self-talk* is especially important for anxiety-producing activities, such as oral presentations and test-taking. *Questioning for clarification* may be more feasible when listening in a conversation than when reading a chapter in a novel.

- Start with strategies that the teacher understands well and finds effective. Teachers new to strategies instruction can build their own confidence and students' confidence by using strategies they believe in. Confused explanations of a strategy may only lead to unsuccessful attempts at using the strategy. The goal is for the whole class (teacher and students) to experience the effectiveness of strategies instruction.
- Try to determine the strategies that students use for similar tasks in their native language. Teach them the target language names for these strategies, and use those names as a basis for introducing learning strategies instruction.

Selecting Appropriate Tasks and Activities for Strategies Instruction

In effective strategies instruction, students learn how to apply strategies to legitimate learning tasks that could not otherwise be easily accomplished.

Integrate Strategies into Regular Course Work

Effective strategies instruction is not an extra activity or even a separate part of the regular language class. Rather, it is used to support language and content learning and to accomplish the goals of the curriculum. While initial explanations are needed, much of strategies instruction should occur while students are working on authentic, meaningful language tasks. Teachers should use the kinds of tasks and activities they would normally use for a lesson, integrating components of effective strategies instruction into the lesson, as described in this and the following chapters.

Use Appropriately Challenging Tasks

Lesson materials should present authentic language tasks and should be moderately challenging. If the task is too easy, students will not need strategies, but if it is too difficult, even appropriate strategies may not lead to success. The point of learning strategies instruction is for students to experience the benefits of using strategies. Students are not likely to apply strategies unless they can see how the strategies help them.

An Instructional Framework

A framework to guide instructional planning can help teachers incorporate learning strategies into their lessons. In this section, we describe a framework that has been used successfully by second language teachers. This instructional framework provides guidelines for teaching the learning strategies identified in the Metacognitive Model of Strategic Learning (see Chapter 2).

Overview

The Metacognitive Model of Strategic Learning described in Chapter 2 provides an organized menu of effective learning strategies that students can use for a variety of language tasks. Research comparing more effective to less effective language learners shows that while all students use some strategies, good language learners use strategies more effectively. But even the best students are often unaware of the strategies that they are using. By becoming aware of their strategies use, students can make active decisions to help them face learning challenges. This chapter and the remaining chapters in this book are concerned with how the teacher can show students how to use learning strategies to become more independent learners. The CALLA instructional framework (Chamot & O'Malley, 1994) is an effective way to plan learning strategies instruction through a progression from explicit learning strategies instruction through a progression from teacher-guided activities to students' independent use of strategies, similar to the progression required to facilitate language learning. The five basic phases in the CALLA instructional framework are as follows.

Preparation

Students prepare for strategies instruction by identifying their prior knowledge about and the use of specific strategies (see Chapter 4 for techniques for eliciting prior strategies knowledge).

Are your current instructional tasks appropriately challenging for strategies instruction? What modifications, if any, would make your current lesson materials more appropriate?

Presentation
The teacher demonstrates the new learning strategy and explains how and when to use it (see Chapters 2 and 5 for suggestions on presenting new strategies).

Practice
Students practice using the strategy with regular class activities of moderate difficulty (see Chapter 6 for a variety of Practice phase activities).

Evaluation
Students self-evaluate their use of the learning strategy and how well the strategy is working for them (see Chapter 7 for suggested evaluation activities).

Expansion
Students extend the usefulness of the learning strategy by applying it to new situations or learning tasks (see Chapter 8 for guidelines to help students transfer learning strategies to new contexts).

The CALLA framework for learning strategies instruction emphasizes explicitness, metacognitive knowledge, and scaffolded support as the teacher and students work through these phases. The five phases are recursive, which means that teachers can move between phases as needed to help students develop skills for understanding and using learning strategies. For example, after eliciting students' prior knowledge about strategies to use for a specific task (such as learning new vocabulary) in the Preparation phase, the teacher might model another strategy for the same task in the Presentation phase. Then the teacher could briefly return to Preparation to ask students if the modeling has reminded them of any additional strategies they have used themselves. Similarly, after students have had an opportunity to apply a new strategy to a real task during the Practice phase, the teacher might want to return to the Presentation phase in order to describe another strategy that works well in tandem with the first. The recursive nature of the CALLA instructional framework provides flexibility in planning language lessons that integrate learning strategies instruction. Figure 3.2 illustrates the recursive quality of CALLA instruction.

In this framework, strategies instruction is not taught at a special time of its own. Nor is it separated from content in special strategies lessons or strategies activities. Instead, discussions about strategies and thought processes become a natural part of regular class activities. Strategies instruction that follows this framework is intended to be integrated into the authentic, meaningful language activities that the teacher uses already.

FIGURE 3.2

CALLA Instructional Sequence: Five Recursive Phases

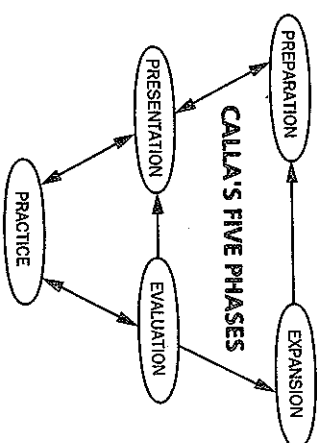
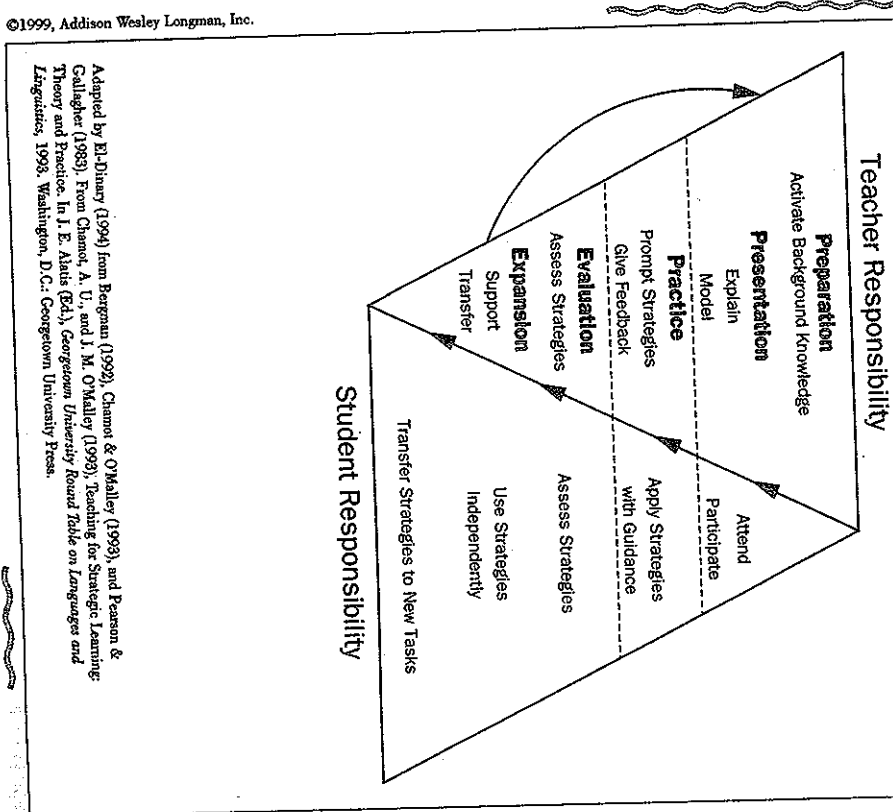


Figure 3.3 shows that strategies instruction starts out as more teacher-directed, with students taking more responsibility over time. An analogy for this framework is constructing a building from the ground up. First a foundation is poured (preparing students for strategies), then scaffolding is put in place to support the building in progress (presenting strategies and coaching students as they practice them). As the building is constructed, it begins to support itself, and the scaffolding is gradually removed (less explicit instruction and less coaching as students start using strategies independently and extending them to other areas). Yet, even once a building stands on its own, maintenance and repairs are occasionally needed (thus the need for strategies evaluation and evaluation of instruction, as well as the potential need to revisit earlier phases of instruction for additional support, as illustrated in Figure 3.2).

Figure 3.3 illustrates that even though there is a general progression from teacher direction to student independence, there are times when strategies instruction needs maintenance and repair, such as re-explaining a particular strategy or additional coaching to use a strategy that students seem to have forgotten. The instructional framework, like the strategies model, represents recursive phases. Even though all five phases might appear in an individual lesson, the overall progression from teacher direction to student independence will be more gradual over time.

FIGURE 3.3

Framework for Strategies Instruction



In learning strategies instruction, teachers pour a foundation for preparing students to learn about strategies by having them *activate background knowledge* of strategies they already use. This can be accomplished by conducting class discussions about what students do as they work on language tasks, having students keep learning strategies journals, and giving students questionnaires about strategies use.

After students' awareness of their own strategies gives them something to build on, the teacher can construct a scaffold for independent learning by explicitly presenting the Metacognitive Model of Strategic Learning. The teacher presents the idea that good learners **plan, monitor, problem-solve, and evaluate** during language tasks. The teacher also presents individual strategies to meet curricular goals and students' needs. Because good students may claim that they are already using strategies, it is important to acknowledge that good language learners use these processes naturally and automatically. It is also important to emphasize the value of explicit strategies instruction, as described in Chapter 5. Instruction that makes the strategies explicit helps students think about their strategies so they can develop conscious control of their learning and language use.

Although it is critical for teachers to present strategies in a way that students understand them, understanding a strategy is only the skeleton of the building. The real construction of independent learning happens when students practice strategies and try strategic thinking themselves. Again, it is important to practice strategies using moderately challenging tasks so students experience the benefits of the strategy. A moderate challenge that cannot be achieved without the strategy, but can be achieved with it, will show students the value of the strategy.

After initial practice, students need the support of reminders to use the strategies they have learned. Teachers can also support strategic thinking by asking students to explain how they figured out the responses they gave in class. For correct responses, this helps the student build awareness of effective thought processes; for incorrect responses, it helps students identify where their thinking went astray.

Another scaffold that students need as they practice new learning strategies is feedback about how they are applying strategies. Teachers can provide feedback by praising effective thinking and by pointing out the strategies that students are using. Early in strategies instruction, teachers should frequently prompt students to choose strategies for a task. If students have trouble choosing, the teacher can suggest specific strategies. Teachers also need to give students feedback when they use strategies, praising them for being strategic. As students become more

See Chapter 4 for ideas about preparing students for strategies instruction.

See Chapter 5 for ideas about how to present explicit strategies instruction.

What language learning task would be appropriate for your students to practice strategic thinking? Choose a task that could not be achieved without strategies, but that will allow your students to recognize the value of using strategies.

How will you emphasize strategies use while presenting your usual material?

Chapter 6 provides more detailed guidelines on the practice phase of learning strategies instruction.

Chapter 7 explores different ways to encourage student self-evaluation of strategies, including the use of student learning journals, class experiments, and questionnaires.

Then have you successfully transferred a strategy that you find effective in one area or task in your work or life to another area or task? Have these experiences with your students.

Chapter 8 provides suggestions and examples for the Expansion phase of strategy instruction.

independent in using strategies, the teacher can fade out prompting and coaching, making cues less frequent and less explicit.

All forms of practicing and coaching strategies use should be integrated into the curriculum, taking place in the context of regular language tasks. The instructional changes made by integrating strategies into the curriculum should not be reflected in the content but rather in the emphasis, that is, putting students' thinking in the spotlight and encouraging effective use of strategies.

Once students have had a chance to practice a strategy, the teacher should ask them to evaluate how well the strategy is working and which strategies might be best for a given task or problem. It is critical that students learn to identify whether a strategy is helping them and to learn to choose alternative strategies when one is not working. In our own research it became apparent that more effective language learners can apply alternative strategies when the first strategy is not successful in solving a problem, whereas less effective students tend to keep repeating the same strategy (or give up), even though it is not helping them (Chamot et al., 1996).

After students have internalized a strategy for one kind of task, the teacher can encourage them to expand its use by transferring it to other situations. If the strategy was introduced as a way to understand directions in the target language, the class can explore how it could help when giving someone else directions. Learning strategies introduced to assist in listening comprehension can be adapted for reading comprehension, and memory strategies can be applied to any type of information to be remembered, from vocabulary to subject matter content. Nonetheless, students rarely make such connections on their own, and sometimes the potential for transfer is not obvious.

There are several ways in which teachers can support the transfer of strategy use. One is to simply tell students about other situations in which they could use the strategy or to prompt them to try the strategy as they work on a new task. In many cases, however, the teacher will need to explain how to modify the strategy to fit the different task. It may also be useful to conduct class discussions in which students brainstorm other times that the strategy could help. Another way to support transfer is to provide a variety of contexts for practicing the strategy.

Sometimes students will make the connection on their own and transfer a strategy to a new situation. Whenever a student does this, teachers should seize the opportunity to point out and praise the expansion of the

strategy. It may also be useful to talk about the challenge of recognizing new ways to apply strategies. Students may pay more attention to expanding familiar strategies when they realize that doing this is not always automatic.

Conclusion

This chapter described important factors that impact the planning of successful learning strategies instruction, including student beliefs, teacher beliefs, classroom context, and instructional approach. Guidelines for selecting initial strategies to teach and appropriate tasks and activities were outlined. The application of the CALA instructional framework to language learning strategies instruction was described, and examples of recursive teaching and scaffolding were provided.

As with helping students to become proficient in a language, helping them to become independent strategic learners takes extensive explaining, modeling, and coaching. All of these strategies instruction activities take place while students are working on curricular goals. The reward for these efforts is a classroom of thinkers who can learn the language more efficiently and more thoughtfully.