The SIOP® Model and Young Learners

Alejandro is excited because his teacher, Mr. Adolfo, poured some cooking oil into bottles of water and let each student have a bottle to hold. Alejandro shakes the bottle and watches the water move. He likes the noise it makes. He shows his friend, Juan, how every time the water stops moving, the oil settles on top again. He tries to mix it up, but it keeps separating. The boys shake their bottles very hard, but the water and oil won't mix. Mr. Adolfo said that the oil makes the water dirty, and it is called water pollution. The word *pollution* is written on the board next to a picture of dirty water. Mr. Adolfo points to the word when he talks about dirty water. Yesterday the class watched a short video about oil that had spilled into the ocean. Then they sang a song about clean and dirty water. It was fun because after the song,



Mr. Adolfo put a little brown paint on each child's hands and then they rinsed their hands in a bucket. The water was cold! The children squealed with delight. They saw the dirty water in the bucket. Water pollution! Today Mr. Adolfo placed interesting materials about pollution in several of the learning centers so that during play time, the idea of water pollution was again reinforced for the children.

Next door in Miss Lawrence's class, the children are sitting on the rug together and Miss Lawrence is telling them about pollution. Resundo has a hard time understanding what she is saying. The teacher has been talking for a very long time. He tries to sit still, but he wants to move around and play with his friends. Miss Lawrence scolds Resundo and Alex because they begin to whisper to one another and giggle. Finally, the teacher tells the children they can get up. Resundo hopes that now it is time to play with trucks, but Miss Lawrence tells the children to sit at the tables. Miss Lawrence hands each child a paper with a picture of water. She then tells the children to color the picture to show that the water is polluted. He doesn't know what that means. He looks around and the other children also seem unsure of what to do. Miss Lawrence says a lot of words, including *pollution*. She seems to be getting annoyed because some children don't know what to do with the paper and others aren't coloring the way she wants.

Although these two pre-K classrooms are in the same building, you can see that the teaching styles differ significantly. In Mr. Adolfo's class, children are actively engaged, using interesting hands-on materials, talking about and singing about the concept of water pollution. Their experience with learning is positive and fun. In Miss Lawrence's class, she is telling children about water pollution, but the verbal description is lost on them. She expects the children to sit quietly and listen to her. Children feel anxious because while they want to please the teacher, either they don't understand what she wants them to do or they are unable to do it.

What Is the SIOP® Model?

In this chapter, we introduce you to the SIOP® Model and provide you with an overview of how the model works with young children. The SIOP® Model is an approach to teaching English learners that encourages the kind of instruction seen in Mr. Adolfo's class.

The Sheltered Instruction Observation Protocol (SIOP®) Model was developed through a U.S. Department of Education funded research project to define the components of effective sheltered instruction lessons and investigate its impact on student learning (Please see Appendix C in Echevarria, Vogt, & Short, 2010a to learn about the development of the SIOP® Model). Also referred to as content-based ESL, SDAIE (specially designed academic instruction in English), and structured English immersion (SEI), sheltered instruction:

- Is a means for making grade-level academic content (e.g., science, social studies, math, language arts) more accessible for English learners. Teachers modify instruction so that it is comprehensible for students.
- Includes the practice of highlighting key language features and incorporating strategies that increase interaction and practice using language.

SlOP® Model = the lesson planning and delivery system

SIOP® protocol = the instrument used to observe, rate, and provide feedback on lessons

The SIOP® Model research project began as a way to design and validate an observation protocol for assessing the effectiveness of sheltered instruction lessons. Until that time, there wasn't an agreed upon model of exactly what constituted an effective sheltered (SEI, content-based ESL, or SDAIE) lesson. The model evolved into a lesson planning and delivery system that guides teachers in implementing effective lessons. So, the SIOP® term applies to both the observation instrument for rating fidelity of lessons to the model and the instructional model for lesson planning and delivery (see The SIOP® Model Checklist, Appendix A). Figure 1.1 shows the terminology used to distinguish between these two uses. Details about how to use the SIOP® protocol are found in Chapter 9.

Although there are lots of techniques promoted as being good for teaching English learners, teachers are often unsure about how they apply to their own classroom and in what combination they should be used for best results. One of the reasons we created the SIOP® Model was that we wanted to provide teachers with a concrete, systematic way to make learning activities and interaction with English learners understandable and effective.

Currently used in all fifty states in the U.S. and in numerous countries, the SIOP® Model is an empirically validated way of teaching children who are learning a second language at the same time they are learning new concepts, skills, and information in that new language. The SIOP® Model was not originally designed for pre-K classrooms, but given the wide interest, we have undertaken a description of how it can be applied to working with younger children in that setting. In early childhood education (ECE) settings, some of the features of the SIOP® Model may be adjusted from the way they are implemented in elementary and secondary settings because of the unique learning needs of young children. This means that some of the features that focus on academic knowledge or educational background may be redefined for the pre-K child. In those particular cases, we will explain the application to those young learners (see Chapters 4–7).

The SIOP® Model: 8 Components and 30 Features

The SIOP® Model is composed of thirty features grouped into eight components essential for making content comprehensible for English learners: Lesson Preparation, Building Background, Comprehensible Input, Strategies, Interaction, Practice & Application, Lesson Delivery, and Review & Assessment. A full explanation of each component and feature, including the theoretical and research background as well as practical applications, can be found in *Making Content Comprehensible for Elementary English Learners: The SIOP® Model* (Echevarria, Vogt & Short, 2010a). Appendix A in this book includes a checklist of the SIOP® features and may be particularly useful for planning lessons with young learners. Appendix B includes the comprehensive and abbreviated forms of the SIOP® protocol. By considering the

indicators of the protocol, you can begin to understand how closely a lesson might meet the features of the SIOP® Model.

The following discussion provides an overview of the model as teachers would use it for preschool learning activities or kindergarten lessons. Please refer to the SIOP® features in Appendix A as you read through the discussion of each component.

Lesson Preparation

As teachers plan lessons to meet the needs of their students, they develop language and content objectives linked to state curriculum standards. These objectives are shared daily with students and presented in a child-friendly form (see Chapter 4 for examples of content and language objectives). In this way, students know what they are expected to learn and can take an active part in assessing their own progress. Tara Paul, district Curriculum Director, says the following about preschoolers and objectives: "The students really understand that the objectives are their 'job' and what they are going to do with the activity. Every day both content and language objectives are written, 'Today I will....' This is a consistent way to help the students learn those key words." (Tara's program is described in Chapter 8.) Through SIOP® lessons, students gain important experience with content and skills as they progress toward proficiency in their second language. Teachers include supplementary materials, such as picture books, models, real objects, and hands-on and computer-based resources to improve comprehensibility. Sometimes teachers adapt the content or the task depending on the students' background knowledge and level of English proficiency. In early childhood programs, less adaptation may be needed than in secondary schools, for example, because native English speakers and English learners are still acquiring basic proficiency with language. Planned activities must be meaningful, and they need to prepare English learners for elementary school by giving them practice with the academic language, tasks, and topics they will encounter.

Building Background

Effective SIOP® lessons connect new concepts with the students' personal experiences and previous learning, usually involving their home and families. The SIOP® Model underscores the importance of building a broad vocabulary base for students to develop preliteracy skills, the foundation needed to eventually be effective readers, writers, speakers, and listeners. Key vocabulary is taught within the context of learning activities and play. Also, songs and games are used to teach word structures, word families, and word relationships. Songs and chants help with pronunciation and intonation, too. Learning activities should provide opportunities for students to use this vocabulary orally.

Comprehensible Input

Accomplished SIOP® teachers use sheltered and ESL techniques to make content comprehensible, including:

- demonstrations and modeling
- gestures, pantomime, and role-play

- visual aids such as illustrations, real objects, video, and other media
- restating, repeating, and reducing the speed of the teacher's presentation
- previewing important information, and
- hands-on, experiential activities.

SIOP® teachers adjust their speech to the students' proficiency levels and explain academic tasks clearly using visuals and models. In the vignette at the beginning of the chapter, at the very least, Miss Lawrence should have shown the children a completed model of a picture of water colored to indicate water pollution. She could have used simple phrases such as *dirty water* to describe the picture. Perhaps then children would have known what she wanted them to do with the picture.

Strategies

The SIOP® Model calls for explicit instruction and practice in learning strategies. It is important to teach young children learning strategies so they can acquire and reflect on information themselves. Young children are using strategies all the time as they learn new words and figure out how to put sentences together. Teachers and parents do not always articulate and explain the strategies, however. To help students become more independent learners, teachers using the SIOP® Model also scaffold instruction by initiating instruction at the students' current performance level and providing support to move them to a higher level of understanding. See Chapter 5 for more examples for implementing the Strategies component.

Interaction

Students learn through interaction with one another and with their teachers. They need extensive oral language practice to develop vocabulary and to learn more about lesson concepts. Teachers provide models of appropriate speech, word choice, intonation, and fluency, but student–student interaction is also important and needs to occur regularly so English learners can practice using language in a variety of ways for various purposes (see Chapter 3 for more discussion of language uses). Teachers should keep in mind that young English learners acquire language rather easily from native English speaking peers. The interaction features remind teachers to encourage elaborated speech, to group students appropriately for language and content development (sometimes by age, other times by language proficiency), and to provide sufficient wait time for students to process questions and answers in their new language. Furthermore, teachers should allow students to use their native or home language in order to express themselves or to assist them with comprehension.

Practice & Application

Practice and application of new material is critical for all learners. Our SIOP® Model research found that lessons with hands-on, visual, and other kinesthetic tasks benefit English learners because students practice the language and content knowledge through multiple modalities. Effective SIOP® lessons, therefore, include a variety of activities that encourage students to practice and apply not only the content they are learning but also their language skills. It is important for lessons to begin to build literacy skills by linking reading, writing, listening, and speaking skills together.

Lesson Delivery

Successful delivery of a SIOP® lesson means that the content and language objectives were met, the pacing was appropriate, and the students had a high level of engagement. The art of teaching and classroom management skills play a role in effective lesson delivery. Having routines; making sure students know where materials are, what they are expected to do, and what the lesson objectives are; and designing meaningful activities that appeal to children are important factors in the success of the lesson.

Review & Assessment

Each SIOP[®] lesson or learning activity should wrap up with dedicated time for review. English learners need to revisit key vocabulary and concepts, and teachers should use frequent comprehension checks and other informal assessments to measure how well students retain the information. Accomplished SIOP[®] teachers also offer multiple pathways for students to demonstrate their understanding. Young learners may use oral language, pictures, and movement to show what they know.

Research-Validated Approach

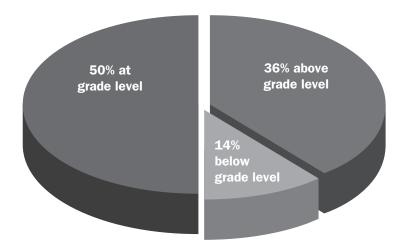
The SIOP® Model described in this book is the product of several research studies conducted since the early 1990s. A description of the solid and growing research base that shows how the SIOP® Model positively impacts student achievement is seen in Appendix C. The SIOP® Model is grounded in the professional literature and in the experiences of the researchers and participating teachers who worked collaboratively in developing the observation instrument. The theoretical underpinning of the model is that language acquisition is enhanced through meaningful use and interaction.

Today, schools and districts that serve English learners have been informed that they should utilize programs that are "scientifically-based," namely those with research evidence of student success. Although there are a variety of research-based techniques that are effective with English learners (August & Shanahan, 2006), few comprehensive interventions designed specifically for English learners have collected, analyzed, and published achievement data on English learners to date. That is why the SIOP® Model offers such promise. In the national research study for the Center for Research on Education, Diversity & Excellence (CREDE), students who had teachers in content classes who had been trained in the SIOP® Model performed significantly better on a standardized state academic writing assessment than a comparison group of similar students whose teachers had not been trained in the model (Echevarria, Short & Powers, 2006). Subsequent studies have shown that the SIOP® Model has had a positive impact on English learner achievement as well (see Appendix C). Further, there is research support for the individual features of the SIOP® Model (August & Shanahan, 2006).

SIOP® Professional Development

In our extensive work with teachers, we have found that high-quality professional development is critical for improving instruction for English learners—and for all children. Although sometimes teachers prefer to pick and choose among their favored

86% of third grade students who began in Alston's full-day SIOP[®] kindergarten program in fall 2001 performed at or above grade level on third grade state assessments.

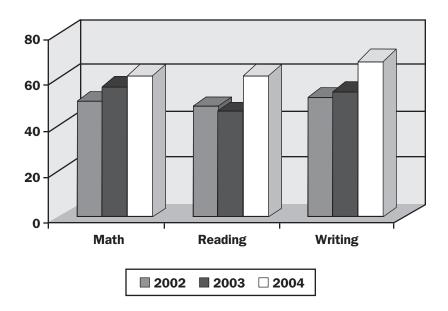


techniques and strategies, research has demonstrated that such practice is ineffective. When implemented consistently as a whole, the features of the SIOP® Model have been shown to improve the achievement of English learners; they are not as effective when they are used selectively or occasionally (Echevarria, et al., 2010a; Echevarria, Short & Powers, 2006; Short, Fidelman & Louguit, in press).

In one school, Lela Alston Elementary, the SIOP® Model was used for ongoing school-wide professional development, beginning in the 2002–03 school year. The school served approximately 400 Latino children in grades K–3. Ninety-seven percent of the children received free or reduced price lunch and 74% were limited English proficient. The commitment to high levels of implementation of the SIOP® Model by having teachers learn SIOP® components one at a time, then observing and coaching teachers led to impressive results. Eighty-six percent of third grade children who began in Alston's full-day kindergarten were performing at or above grade level by Grade 3, seen in Figure 1.2. Figure 1.3 shows children's steady growth from year to year on the state standardized test. On these measures, Alston children outperformed schools with similar demographics across the state (Echevarria, Short & Vogt, 2008).

If you are a teacher, you may begin using the SIOP® Model as a guide to teaching your English learners more effectively. You may want to assess your areas of strength and those that need improvement. As you consider your self-assessment, you may decide to focus on one component at a time. For example, if you are unfamiliar with comprehensible input techniques, you may want to read about them and practice implementing them as a first step. Or, you may need to become accustomed to writing content and language objectives (see Chapter 4) and the way those objectives influence learning activities. As your proficiency in implementing one component of the SIOP® Model is attained, other components of the Model should be added to your teaching repertoire. You might want to use the SIOP® lesson plan checklist in Appendix A as a way to reflect on your teaching.

Arizona's Instrument to Measure Standards (AIMS) Test Scores during SIOP® Implementation



We highly recommend that you begin some form of study of the SIOP® Model to develop a deeper understanding of the needs of English learners and the kind of practices you can use to enhance children's growth across all domains. You might begin a book study with colleagues, or form a professional learning group in which you discuss ideas for lessons, try them out, debrief the outcome, and even observe one another and provide feedback using the SIOP® checklist. Perhaps the SIOP® Model is being used by other teachers with older children in your school or district and you can attend their inservice trainings. The point is that collaboration is the key to professional growth.

A number of school districts have conducted evaluations on their implementation of the model. See *Implementing the SIOP® Model Through Effective Professional Development and Coaching* (Echevarria, Short & Vogt, 2008) for district information and specific ideas for professional development.

Since high-quality early childhood programs contribute to positive outcomes for children, including improved school readiness, higher academic achievement, lower dropout rates, higher high school graduation rates, and higher rates of college attendance (NAEYC, 2009), it is important that teachers implement the features of the SIOP® Model consistently so that we can offer the most appropriate instructional setting possible for young English learners.

The features of the SIOP® Model mirror recommended practice for teaching all young children and reflect many of the Guidelines for Developmentally Appropriate Practice of the National Association for the Education for Young Children (NAEYC, 2009). In fact, NAEYC's position statement says, "Teachers also need to have at the ready a well-developed repertoire of teaching strategies to employ for different purposes" (p. 8). The features of the SIOP® Model provide just such a repertoire—one that is coherent and systematic.

Concluding Thoughts

As you reflect on this chapter and how the SIOP® Model relates to pre-K classrooms, remember the following important points:

- The SIOP® Model is a research-validated approach for teaching English learners.
- The features of the SIOP[®] Model reflect recommended practice and provide the repertoire of teaching techniques called for by the National Association for the Education for Young Children (NAEYC).
- Professional development enhances effective teaching practice.
- When implemented consistently as a whole, the features of the SIOP® Model have been shown to improve the achievement of English learners; they are not as effective when they are used selectively or occasionally.