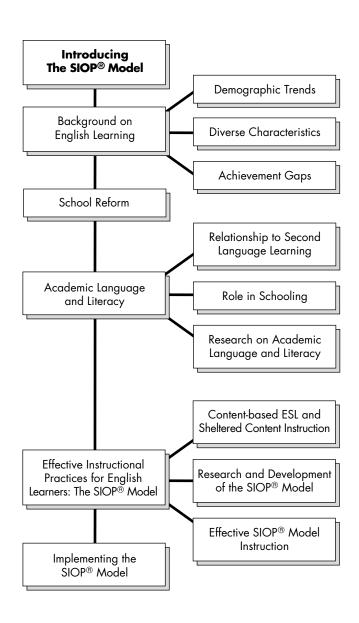
CHAPTER 1

Introducing the SIOP® Model



After reading, discussing, and engaging in activities related to this chapter, you will be able to meet the following content and language objectives.

Content Objectives

List characteristics of English learners that may influence their success in school.

Distinguish between contentbased ESL and sheltered instruction.

Explain the research supporting the SIOP Model.

Language Objectives

Discuss the benefits and challenges of school reform and their effects on English learners.

Develop a lexicon related to the SIOP Model.

Compare your typical instruction with SIOP instruction.

Javier put his head in his hands and sighed. He watched Ms. Barnett standing at the board and tried to understand what she was saying to the class. He looked at the clock; she'd been talking for twelve minutes now. She wrote some numbers on the board and he noticed his classmates getting out their books. Copying their actions, he opened his social studies book to the page matching the first number on the board. He looked at the words on the page and began to sound them out, one by one, softly under his breath. He knew some words but not others. The sentences didn't make much sense. Why



was this class so tough? He could understand the teacher much better in science. Mrs. Ontero let them do things. They would all crowd around a table and watch her as she did an experiment and then he got to work with his friends, Maria, Huynh, and Carlos, trying out the same experiment. He even liked the science book; it had lots of pictures and drawings. Mrs. Ontero always made them look at the pictures first and they talked about what they saw. The words on the pages weren't so strange either. Even the big ones matched the words Mrs. Ontero had them write down in their personal science dictionaries. If he forgot what a word meant in the textbook, he would look it up in his science dictionary. Or he could ask someone at his table. Mrs. Ontero didn't mind if he asked for help. This social studies class just wasn't the same. He had to keep quiet, he had to read, he couldn't use a dictionary, they didn't do things. . . . •

Javier is experiencing different teaching styles in his seventh-grade classes. He has been in the United States for fourteen months now and gets along pretty well speaking English with his classmates. They talk about CDs and TV shows, jeans and sneakers, soccer and basketball. But schoolwork is hard. Only science class and PE make sense to him. Social studies, health, math, language arts—they're all confusing. He had a class in English as a second language (ESL) last year, but not now. He wonders why Mrs. Ontero's science class is easier for him to understand than his other classes.

Ironically, Javier is luckier than a number of English learners. He has one teacher who provides effective instruction as he learns content through English,

a new language. If more of Javier's teachers learn the techniques that Mrs. Ontero uses, then Javier will have a chance to develop academic literacy in English and succeed in school. But it will take significant effort on the part of schools, districts, and universities to make this happen for Javier and other students like him.

Background on English Learners

Demographic Trends

Javier is one of many English learners in our schools. In fact, he represents the fastest growing group of students. During the decade from 1998–99 to 2008–09, the English learner population in pre-K–12 schools increased 51%, but the total pre-K–12 population, which includes these students, grew only 7.2% (NCELA, 2011). In 2008–09, 11% of the students in U.S. schools were English learners, equaling over 5.3 million students out of a total enrollment of close to 49.5 million. However, that percentage refers to the identified English learners currently in language support programs or still being monitored. The percentage would be much higher if we added in the students who have passed their proficiency tests but are still struggling with *academic* English, the language used to read, write, listen, and speak in content classes to perform academic tasks and demonstrate knowledge of the subject standards.

The rise in English learners conforms to the increase in the immigrant population in the United States. The results of the 2009 American Community Survey (U.S. Census Bureau, 2009) estimated that 12% of the population was foreign born and 20% spoke a language other than English. Of these 20% who were age 5 or older, 44% reported not speaking English very well (the U.S. Census Bureau's classification of limited English proficiency). Overall, almost 9% of the total U.S. population reported not speaking English very well. Furthermore, over 70% of English learners in our schools were born in the United States; that is, they are second- or third-generation immigrants, including 57% of adolescent English learners (ages 12 and older) (Batalova, Fix, & Murray, 2005).

The states with the largest percentages of immigrants in 2009 were California, Nevada, Florida, New York, and New Jersey. The top states with the largest percentages of people age 5 or older who reported not speaking English very well were California, Nevada, Arizona, Texas, Florida, New York, New Jersey, and Hawaii. However, the states with the fastest-growing limited English proficient (LEP) student populations were not the same as the top immigration states, except for Nevada. North Carolina, Colorado, Nevada, Nebraska, Oregon, Georgia, and Indiana all had more than 200% increases between 1993 and 2003 (Batalova, Fix, & Murray, 2005). Moreover, many English learners are in linguistically segregated schools. More than half of the LEP students in elementary and secondary schools were in schools where more than 30% of the student population was identified as limited English proficient.

Changes in the geographic distribution of English learners to these new destination states present many challenges to the numerous districts that have not served these students before. Academic programs are not well established;

sheltered curricula and appropriate resources are not readily available; and, most important, many teachers are not trained to meet the needs of these second language learners.

Diverse Characteristics

In order to develop the best educational programs for English learners, we need to understand their diverse backgrounds. These learners bring a wide variety of educational and cultural experiences to the classroom as well as considerable linguistic differences, and these characteristics have implications for instruction, assessment, and program design. When we know students' backgrounds and abilities in their native language, we can incorporate effective techniques and materials in our instructional practices.

All English learners in schools are not alike. They enter U.S. schools with a wide range of language proficiencies (in English and in their native languages) and much divergence in their subject matter knowledge. In addition to the limited English proficiency and the approximately 180 native languages among the students, we also find diversity in their educational backgrounds, expectations of schooling, socioeconomic status, age of arrival, personal experiences while coming to and living in the United States, and parents' education levels and proficiency in English. Some English learners are newcomers (i.e., new arrivals to the United States), some have lived in the United States for several years, and some are native born. Figure 1.1 shows some background factors that should be considered when planning programs and instruction so English learners can succeed in school.

- Some immigrant English learners had strong academic backgrounds before coming to the United States. Some are above equivalent grade levels in certain subjects—math and science, for example. They are literate in their native language and may have already studied a second language. Much of what these learners need is English language development so that as they become more proficient in English, they can transfer the knowledge they learned in their native country's schools to the courses they are taking in the United States. A few subjects not previously studied, such as U.S. history, may require special attention. These students have a strong likelihood of achieving educational success if they receive appropriate English language and content instruction in their U.S. schools.
- Some other immigrant students had very limited formal schooling—perhaps due to war in their native countries or the remote, rural location of their homes. These students have little or no literacy in their native language, and they may not have had such schooling experiences as sitting at desks all day, changing teachers with each subject, or taking high-stakes tests. They have significant gaps in their educational backgrounds, lack knowledge in specific subject areas, and need time to become accustomed to school routines and expectations. These English learners with limited formal schooling and below-grade-level literacy are most at risk for educational failure.

FIGURE 1.1

Factors Contributing to English Learner Diversity

English Knowledge

- Exposure to English
- Familiarity with Roman alphabet and numbers
- Proficiency in spoken English
- · Proficiency in written English
- English being learned as a third or fourth language

First Language (L1) Knowledge

- Proficiency in spoken L1
- Literacy in the first language

Educational Background

- On-grade level schooling in home country
- On-grade level schooling in U.S. schools (in L1 or English)
- Partial schooling in L1
- No schooling in L1
- · Partial schooling in English
- · No schooling in English
- Long-term English learner

Sociocultural, Emotional, and Economic Factors

- · Poverty level
- Mobility
- Exposure to trauma, violence, abuse, and other serious stressors
- · Refugee or asylee status
- · Parents' educational background

Other Educational Categories

- Special education
- Tier 2 or Tier 3 (Response to Intervention)
- Migrant
- · Reclassified English learner
- There are also English learners who have grown up in the United States but who speak a language other than English at home. Some students in this group are literate in their home language, such as Mandarin, Arabic, or Spanish, and will add English to their knowledge base in school. If they receive appropriate English language and content instruction, they too are likely to be academically successful.
- Some other native-born English learners who do not speak English at home have not mastered either English or their native language. There is a growing number of English learners in this group who continue to lack proficiency in English even after five, six, or more years in U.S. schools. These students are referred to as *long-term English learners* (Menken & Kleyn, 2010). They typically have oral proficiency in English, but lack English reading and writing skills in the content areas. They struggle academically.

Sociocultural, emotional, and economic factors also influence English learners' educational attainment (Dianda, 2008). Poorer students, in general, are less academically successful (Glick & White, 2004). Undocumented status affects socioeconomic and postsecondary educational opportunities. Mobility can impinge on school success: Students who had moved were twice as likely not to complete high school as those who had not faced such transitions (Glick & White, 2004). Refugee students who experienced significant trauma during journeys to refugee camps or to the United States may struggle in school. The parents' level of education also influences their children's success. Parents with more schooling are typically more literate and have more knowledge to share with their children, whether through informal conversations or while helping with homework.

Some students are dually identified, which has implications for educational services. Besides being an English learner, some have learning disabilities or other special education needs. Unfortunately English learners tend to be over- or underrepresented in special education because a number of districts struggle to distinguish between a delay in developing second language proficiency and a learning disability. Even when students are appropriately identified, districts have difficulty providing effective services to bilingual special education students. Others, such as English learners and redesignated English learners who score poorly on reading assessments, may need additional services to improve their reading achievement, such as Tier 2 or Tier 3 in a Response to Intervention program. While we believe that the SIOP Model we present in this book is the best option for Tier 1 instruction and may help avoid Tier 2 and 3 placements (see Echevarría & Vogt, 2011), not all schools utilize SIOP instruction. Other students are migrant English learners who may move from school to school in the same year, jeopardizing their learning with absences and potentially incompatible curricula across districts or states.

Achievement Gaps

While the number of students with limited proficiency in English has grown exponentially across the United States, their level of academic achievement has lagged significantly behind that of their language-majority peers. There exists growing evidence that most schools are not meeting the challenge of educating these students well. Consider the following statistics:

- On the National Assessment for Educational Progress (NAEP) exams for reading in 2009, English learners performed poorly at fourth and eighth grade.
 - Seventy-one percent of English learners in fourth grade scored Below Basic, but only 24% of the non-English learners did. Further, only 6% of English learners performed at Proficient or Advanced levels, while 34% of non-English learners reached those higher levels.
 - Three quarters of the eighth-grade English learners performed Below Basic (75%), but only 24% of the non-English learners did. Only 3% of English learners scored as Proficient in Reading, and none as Advanced, while 29% of non-English learners were Proficient and 3% were Advanced (NCES, 2009b).

- The pattern on the 2009 NAEP mathematics assessment was not much different.
 - Forty-three percent of English learners in fourth grade scored Below Basic, but only 16% of the non-English learners did. Further, only 12% of English learners performed at Proficient or Advanced levels, while 41% of non-English learners reached those higher levels.
 - Almost three quarters of the eighth-grade English learners performed Below Basic (72%), but only 26% of the non-English learners scored at that level. Further, only 5% of English learners performed at Proficient or Advanced levels, while 34% of non-English learners reached those higher levels (NCES, 2009a).
- Spanish-speaking students enter Kindergarten with a gap in language and math skills compared to English-only students. In some states, this gap widens as students progress to grade 5 (Rumberger, 2007); in others, it narrows, but non-English speakers do not come close to catching up (Reardon & Galindo, 2009).
- A five-year, state-wide evaluation study found that English learners with 10 years of schooling in California had less than a 40% chance of meeting the criteria to be redesignated as fluent English proficient (Parish et al., 2006). They pass the English language proficiency test, but do not pass the state content achievement tests.
- Since the No Child Left Behind (NCLB) Act was implemented in 2001, an increasing number of English learners are not receiving a high school diploma:
 - More English learners fail high school exit tests despite fulfilling all other graduation requirements (Biancarosa & Snow, 2004; Human Resources Research Organization, 2010, reported in Dietz, 2010; Kober et al., 2006; McNeil et al., 2008).
 - Students of color graduate at lower rates than White and Asian American students (Alliance for Excellent Education, 2010).
 - English learners are more likely to drop out than other student groups (Dianda, 2008).

The lack of success in educating linguistically and culturally diverse students is problematic because federal and state governments expect *all* students to meet high standards, and they have adjusted national and state assessments as well as state graduation requirements to reflect new levels of achievement and to accommodate requirements of the No Child Left Behind Act (2001). However, we test students before they are proficient in English. We should not be surprised if they don't score at the proficient level because by definition they are *not* proficient if they are classified as English learners.

Apart from the testing issues, English learners also have difficulty in school when program designs, instructional goals, and human and material resources do not match these students' needs. The number of English learners has increased without a comparable increase in ESL or bilingual certified teachers. Curricula that develop subject area knowledge in conjunction with academic English are lacking. State policies limit the number of years that students have access to language support services; in fact, in Massachusetts, Arizona, and California the goal is to move students into

regular classrooms after one year, even though research strongly shows students need more time with specialized language support (Saunders & Goldenberg, 2010).

We know that conversational fluency develops inside and outside of the class-room and can be attained in one to three years (Thomas & Collier, 2002). However, the language that is critical for educational success—academic language (Cummins, 2000)—is more complex and develops more slowly and systematically in academic settings. It may take students from four to seven years of study, depending on individual and sociocultural factors, before they are proficient in academic English (Collier, 1987; Hakuta, Butler, & Witt, 2000; Lindholm-Leary & Borsato, 2006; Thomas & Collier, 2002).

When policies and programs that complement the research on second language acquisition are in place, we see more positive outcomes. For example, analyses from New York City and the states of New Jersey, Washington, and California reveal that former English learners outperformed students as a whole on state tests, exit exams, and graduation rates (DeLeeuw, 2008; New York City Department of Education, 2004; State of New Jersey Department of Education, 2006; Sullivan et al., 2005). These results indicate that when English learners are given time to develop academic English proficiency in their programs and are exited (and redesignated) with criteria that measure their ability to be successful in mainstream classes, they perform, on average, as well as or better than the state average on achievement measures.

School Reform, Standards, and Accountability

Unfortunately, we do not yet have strong, research-based policies and programs in place nationwide for English learners; yet the pressure for academic success is high. The No Child Left Behind (NCLB) Act of 2001 holds schools accountable for the success of all of their students, and each state has standards for mathematics, reading, language arts, English language development, and science; all states implement high-stakes tests based on these standards.

NCLB has had positive and negative impacts on educational programs (Dianda, 2008). On the positive side, the education of English learners is part of school improvement conversations. More attention is paid to providing better educational opportunities for the learners and monitoring their language proficiency growth and academic progress. More funding is available to help teachers strengthen their instruction so students develop academic literacy skills and can access core content. More schools analyze assessment data to determine the progress of their efforts and adjust programs, instruction, and resources as indicated. Some states have allocated additional resources for English learner programs, such as grants for specialized services for students with interrupted educational backgrounds (Short & Boyson, 2012).

Negative effects of NCLB include penalties to schools and older students. Schools are labeled "low performing" or "needs improvement" if their subpopulation of English learners does not attain testing achievement targets set for native English speakers on tests that have not been designed or normed for English learners (Abedi, 2002). After three subsequent years of such labels, many schools face corrective action.

High schools are reluctant to enroll ninth-grade age or older English learners with no English, low native language literacy, and/or interrupted educational backgrounds because they are unlikely to meet NCLB's four-year graduation cohort requirement. Teachers report pressure to "teach to the test," reducing the implementation of creative lessons, project-based learning, and interdisciplinary units (Short & Boyson, 2012). Although more money is available for professional development, it is not always well spent. Numerous studies have shown that sustained, job-embedded, and research-based professional development is needed if comprehensive school reform is to become a reality, but one-shot workshops and disconnected interventions continue (Alliance for Excellent Education, 2011; Calderón & Minaya-Rowe, 2011; Darling-Hammond & Richardson, 2009; Wei et al., 2009).

Further standards-based reform is taking place. As of the 2011–12 school year, 44 states adopted a common set of K-12 English language arts and mathematics standards, called the Common Core State Standards (NGA & CCSSO, 2010a, 2010b). Educators in these states are working on implementation activities such as modifying their current curriculum frameworks to ensure the required standards are included and the U.S. Department of Education (USED) is requiring participating states to revise their NCLB assessments. On the one hand, these national standards are appealing because they place an emphasis on college and career readiness. If implemented as envisioned, high school graduates will be autonomous learners who effectively seek out and use resources to assist them in daily life, in academic pursuits, and in their jobs. On the other hand, the standards may be problematic for English learners. The developers decided not to address English learners' second language development needs in the standards. For instance, there are foundations of literacy in Grades K-5 (e.g., standards related to phonics) but not in Grades 6–12. This oversight ignores the needs of adolescent English learners, such as newly arrived immigrant students, who are not literate when they enter secondary school. It remains to be seen if and how states will accommodate the language development needs of English learners as they implement the Common Core. (See www.corestandards.org/assets/application-forenglish-learners.pdf for more information.)

Academic Language and Literacy



Click on Videos, then search for "Social and Academic Language" to see MaryEllen Vogt discuss the important differences between social or conversational language and academic language.

The foundation of school success is academic language and literacy in English. Age-appropriate knowledge of the English language is a prerequisite in the attainment of content standards. We learn primarily through language, and use language to express our understanding. As Lemke (1988, p. 81) explained,

... educators have begun to realize that the mastery of academic subjects is the mastery of their specialized patterns of language use, and that language is the dominant medium through which these subjects are taught and students' mastery of them tested.

Simply put, for English learners to have access to core content, they need academic language and literacy skills.

Educators and researchers in the field of second language acquisition and literacy have defined academic language or academic literacy in a number of ways. Most definitions incorporate reading, writing, listening, and speaking skills as part of academic language and refer to a specialized academic register of the formal written and spoken code. Although there is not yet a single agreed-upon definition, each one considers how language is used in school to acquire new knowledge and foster success on academic tasks (Bailey, 2007; Gibbons, 2002; Schleppegrell, 2004; Short, 2002). Without proficient oral and written English language skills, students are hard pressed to learn and demonstrate their knowledge of mathematical reasoning, science skills, social studies concepts, and so forth.

Relationship to Second Language Learning

Academic language is used by all students in school settings, both native English speakers and English learners alike. However, this type of language use is particularly challenging for English learners who are beginning to acquire English at the same time that school tasks require a high level of English usage. Participation in informal conversation demands less from an individual than joining in an academic discussion (Cummins, 2000). While the distinction is not truly dichotomous, it is widely accepted that the language skills required for informal conversation differ from those required for academic processes such as summarizing information, evaluating perspectives, and drawing conclusions. Certainly, one may converse in a cognitively demanding way—such as debating a current event that requires significant knowledge of both sides of the topic—but that is not the typical social conversation. The distinction becomes clearer when we recognize that students have the ability to converse in English without needing strong academic language skills. English learners appear to speak English well in hallways, on playing fields, and in small talk before a lesson begins, but struggle to use English well in classroom assignments or on tests. This situation occurs because they have not yet acquired a high level of academic language, which is cognitively demanding and highly decontextualized (Cummins, 1984).

Role in Schooling

The relationship between literacy proficiency and academic achievement grows stronger as grade levels rise—regardless of individual student characteristics. In secondary school classes, language use becomes more complex and more content area specific (Biancarosa & Snow, 2004). English learners must develop literacy skills for each content area *in* their second language as they simultaneously learn, comprehend, and apply content area concepts *through* their second language (Garcia & Godina, 2004; Short & Fitzsimmons, 2007).

Specifically, English learners must master academic English, which includes semantic and syntactic knowledge along with functional language use. Using English, students, for example, must be able to

- read and understand the expository prose in textbooks and reference materials,
- write persuasively,
- argue points of view,

- take notes from teacher lectures or Internet sites, and
- articulate their thinking processes—make hypotheses and predictions, express analyses, draw conclusions, and so forth.

In content classes, English learners must pull together their emerging knowledge of the English language with the content knowledge they are studying in order to complete the academic tasks. They must also learn *how* to do these tasks—generate the format of an outline, negotiate roles in cooperative learning groups, interpret charts and maps, and such. These three knowledge bases—knowledge of English, knowledge of the content topic, and knowledge of how the tasks are to be accomplished—constitute the major components of academic literacy (Short, 2002).

There is some general agreement about how best to teach academic language to English learners, including some targeted focus on the lexical, semantic, and discourse levels of the language as they are applied in school settings (Saunders & Goldenberg, 2010). Researchers such as Bailey and Butler (2007) found that there is content-specific language (e.g., technical terms like *latitude* and *longitude*, phrases like "We hypothesize that . . . ") and general academic language (e.g., cross-curricular words like effect, cause, however) that are used across subject areas. Similarly, there are general academic tasks that one needs to know how to do to be academically proficient (e.g., create a timeline, structure an argument) and more specific subject assignments (e.g., write a scientific lab report). Teachers and curricula should pay attention to this full range of academic language. As a result, the enhancement of English learners' academic language skills should enable them to perform better on assessments. This conclusion is bolstered by an older study: Snow et al. (1991) found that performance on highly decontextualized (i.e., school-like) tasks, such as providing a formal definition of words, predicted academic performance, whereas performance on highly contextualized tasks, such as face-to-face communication, did not.

The emphasis on teaching academic language is also reflected in the national ESL standards (Teachers of English to Speakers of Other Languages, 2006). Four of the five *Pre-K–12 English Language Proficiency Standards* specifically address the academic language of the core subject areas. Standards 2, 3, 4, and 5 state: "English language learners communicate information, ideas, and concepts necessary for academic success in the area of ______ [language arts (#2), mathematics (#3), science (#4), and social studies (#5)]." By late 2011, twenty-six states had adopted English language proficiency standards (ELP) similar to TESOL's, known as the WIDA (World-Class Instructional Design and Assessment) standards and the companion English language proficiency test, *ACCESS for ELLs*® (ACCESS: Assessing Comprehension and Communication in English State to State for English Language Learners), to guide and measure annual gains in English language proficiency (WIDA, 2005-11).

Research on Academic Language and Literacy

Findings from two major syntheses of the research on academic literacy and the education of English learners are useful to keep in mind as we plan instruction and programs for English learners. The National Literacy Panel on Language-Minority

FIGURE 1.2

Research Findings from the National Literacy Panel on Language-Minority Children and Youth

- 1. English language learners (ELLs) benefit from instruction in the key components of reading as defined by the National Reading Panel (NICHD, 2000) as phonemic awareness, phonics, fluency, vocabulary, and text comprehension.
- 2. Instruction in these five components is necessary but not sufficient to teach ELLs to read and write proficiently in English. Oral language proficiency is needed also, so ELLs need instruction in this area.
- **3.** Oral proficiency and literacy in the student's native language (L1) will facilitate development of literacy in English, but literacy in English can also be developed without proficiency in the L1.
- 4. Individual student characteristics play a significant role in English literacy development.
- 5. Home language experiences can contribute to English literacy achievement, but on the whole, the research on the influence of sociocultural factors is limited.

August & Shanahan, 2006, pp. 5-6

Children and Youth (hereafter NLP) (August & Shanahan, 2006) analyzed and synthesized the research on these learners with regard to English literacy attainment. Many of the studies that the thirteen-member expert panel examined looked at the reading and writing skills needed for successful schooling. The panel considered second language literacy development, crosslinguistic influences and transfer, sociocultural contexts, instruction and professional development, and student assessment. Figure 1.2 summarizes the findings of the NLP panel that appeared in the executive summary (August & Shanahan, 2006).

The second major review was conducted by researchers from the former National Center for Research on Education, Diversity & Excellence (CREDE). Their focus was on oral language development, literacy development (from instructional and cross-linguistic perspectives), and academic achievement. Both syntheses led to similar findings.

Following are some of the findings that are closely related to the topics in this book:

- Processes of second language (L2) literacy development are influenced by a number of variables that interact with each other in complex ways (e.g., first language (L1) literacy, second language (L2) oralcy, socioeconomic status, and more).
- Certain L1 skills and abilities transfer to English literacy: phonemic awareness, comprehension and language learning strategies, and L1 and L2 oral knowledge.
- Teaching the five major components of reading (NICHD, 2000) to English learners is necessary but not sufficient for developing academic literacy. English learners need to develop oral language proficiency as well.
- Oralcy and literacy can develop simultaneously.
- Academic literacy in the native language facilitates the development of academic literacy in English.

- High-quality instruction for English learners is similar to high-quality instruction for other, English-speaking students, but English learners need instructional accommodations and support to fully develop their English skills.
- English learners need enhanced, explicit vocabulary development.

These findings have formed the foundation of a recent book that offers applications for classrooms with English learners, *Improving Education for English Learners: Research-based Approaches* (California Department of Education, 2010). More information on these findings and their implications for developing academic literacy can be found in August and Shanahan (2006), Cloud, Genesee, and Hamayan, (2009), Freeman and Freeman (2009), Genesee et al. (2006), Goldenberg (2006), and Short and Fitzsimmons (2007).

Effective Instructional Practice for English Learners: The SIOP® Model

One positive outcome of the student performance measures put into place in response to the NCLB legislation is that schools have started to focus on the development of academic language and literacy skills in students who struggle academically, including English learners. Schools have sought to improve the educational programs, instructional practices, and the curricula and materials being offered to these students. Opportunities for ongoing professional development are moving teachers in the right direction. However, we have a long way to go, as the data and research findings about the poor performance of English learners on accountability measures presented in this chapter reveal.

This book, *Making Content Comprehensible for English Learners: The SIOP® Model*, offers a solution to one aspect of school reform needed for English learners' acquisition of English and academic achievement, namely classroom instruction. It introduces a research-based model of sheltered instruction, provides teaching ideas for each of the model's eight components, suggests ways to differentiate instruction in multi-level classrooms, and demonstrates through lesson scenarios how the model can be implemented across grades and subject areas. The model provides guidance for the best practices for English learners, grounded in more than two decades of classroom-based research, the experiences of competent teachers, and findings from the professional literature. It has been used successfully in both language and content classrooms and with this approach, teachers can help English learners attain the skills and knowledge associated with college and career readiness.

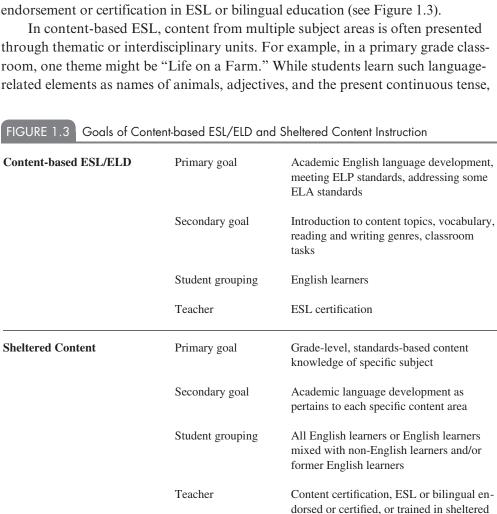
In addition, the SIOP Model has been used widely in classrooms that have a mix of English learners and English-speaking students. For many years, school district personnel around the U.S. have reported anecdotally that English speakers and English learners alike benefit when teachers use the SIOP Model in their classes, and they point to increased student achievement data to substantiate their reports. However, these were not controlled research studies. Recently, though, research studies have shown that all students in SIOP classes performed better than comparison or control groups (Echevarría, Richards-Tutor, Canges, & Francis, 2011; Echevarría,

Richards-Tutor, Chinn, & Ratleff, 2011; Short & Himmel, 2011). These findings indicate that English-speaking students are not disadvantaged when learning along with English learners in SIOP classes and that they also benefit from SIOP practices.

Content-based ESL and Sheltered Content Instruction

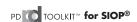
Currently in the United States, content-based English as a second language (ESL) and sheltered instruction are acknowledged methods for developing academic English and providing English learners access to core content coursework in grades K-12. Ideally, these two approaches work in tandem: one, with a primary focus on academic (and where needed, social) language development; the other, on content standards and topics. In the ESL classes, the curricula are tied to the state standards for English language proficiency, the students are all English learners, and the teacher is ESL or bilingual certified. In sheltered content instruction classes, the curricula are tied to the state subject area standards, the students may be all English learners or mixed with non-English learners, and the teachers have content certification plus an endorsement or certification in ESL or bilingual education (see Figure 1.3).

through thematic or interdisciplinary units. For example, in a primary grade classroom, one theme might be "Life on a Farm." While students learn such languagerelated elements as names of animals, adjectives, and the present continuous tense,



Adapted from Echevarria & Short, 2010, p. 259. Used with permission from California Department of Education, CDE Press, 1430 N. Street, Suite 3705, Sacramento, CA 95814.

techniques



Click on Videos, then search for "Sheltered Instruction" to see MaryEllen Vogt explain how SIOP® is "good teaching plus" (content and language taught concurrently).

they also solve addition and subtraction problems, read poems and sing songs about farm animals, and discuss the food chain, thus exploring objectives from mathematics, language arts, music, and science. For the high school classroom, a theme such as "urbanization" might be selected, and lessons could include objectives drawn from environmental science, geography, world history, economics, and algebra. Students with less proficiency might take field trips around a local city and create maps, transportation routes, and brochures. Advanced students might learn to use reference materials and computers to conduct research on the development of cities and their respective population growth. They might study persuasive language to debate advantages and disadvantages of urbanization.

In general, content-based ESL/ELD teachers seek to develop the students' English language proficiency by incorporating information from the subject areas that students are likely to study or from courses they may have missed if they are new immigrants. Whatever subject matter is included, for effective content-based ESL instruction to occur, teachers need to provide practice in academic skills and tasks common to mainstream classes (Mohan, Leung, & Davison, 2001; Short, 2002).

In sheltered content classes, English learners participate in a content course where teachers deliver grade-level objectives through modified instruction that makes the information comprehensible to the students while promoting the students' academic English development. The classes may be variously named ESL Pre-Algebra, Sheltered Chemistry, or the like, and a series of courses may constitute a program called Sheltered Instruction, or SDAIE (Specially Designed Academic Instruction in English). Sheltered instruction can extend the time students have for getting language support services while giving them a jump-start on the content subjects they will need for graduation.

Effective sheltered instruction is *not* simply a set of additional or replacement instructional techniques that teachers implement in their classrooms. Instead, it draws from and complements methods advocated for both second language and mainstream classrooms. For example, some techniques include cooperative learning, connections to student experiences, culturally responsive activities, targeted vocabulary development, slower speech and fewer idiomatic expressions for less proficient students, use of visuals and demonstrations, and use of adapted text and supplementary materials (Short & Echevarría, 2004).

In the 1990s, there was a great deal of variability in both the design of sheltered instruction courses and the delivery of sheltered lessons, even among trained teachers and within the same schools (August & Hakuta, 1997; Berman et al., 1995; Echevarría & Short, 2010). Some schools, for instance, offered only sheltered courses in one subject area, but not in other core areas. It was our experience as well that one sheltered classroom did not look like the next in terms of each teacher's instructional language; the tasks the students were to accomplish; the degree of interaction that occurred between teacher and student, student and student, and student and text; the amount of class time devoted to language development versus content knowledge; the learning strategies taught to and used by the students; the availability of appropriate materials; and more. In sum, there was no model for teachers to follow and few systematic and sustained forms of professional development.

This situation was the impetus for our research: to develop a valid, reliable, and effective model of sheltered instruction.



Click on Videos, then search for "Introduction to the SIOP® Model" to hear students describe what happens in classrooms that makes it difàcult for them to learn content. You will also learn about how and why the SIOP® Model was originally developed.

Research and Development of the Sheltered Instruction Observation Protocol (SIOP®) Model

We developed the Sheltered Instruction Observation Protocol (SIOP®) Model as an approach for teachers to integrate content and language instruction to students learning through a new language. Teachers would employ techniques that make the content concepts accessible and also develop the students' skills in the new language. We have been fortunate in securing funding and the participation of many schools and teachers since 1996 to research, develop, and refine the SIOP Model. Details of the SIOP Model research studies can be found in Appendix C of this book and in Short, Echevarría, and Richards-Tutor (2011). We present a brief overview here.

The first version of the Sheltered Instruction Observation Protocol (SIOP) was drafted in the early 1990s. We used it exclusively as a research and supervisory tool to determine if observed teachers incorporated key sheltered techniques consistently in their lessons. This early draft, like subsequent ones, pulled together findings and recommendations from the research literature with our professional experiences and those of our collaborating teachers on effective classroom-based practices.

The protocol evolved into a lesson planning and delivery approach, known as the SIOP Model (Echevarría, Vogt, & Short, 2000) through a seven-year research study, "The Effects of Sheltered Instruction on the Achievement of Limited English Proficient Students," sponsored by the Center for Research on Education, Diversity & Excellence (CREDE) and funded by the U.S. Department of Education. The study began in 1996 and involved collaborating middle school teachers who worked with the researchers to refine the features of the original protocol: distinguishing between effective strategies for beginner, intermediate, and advanced English learners; determining "critical" versus "unique" sheltered teaching strategies; and making the SIOP more user friendly. A substudy confirmed the SIOP to be a valid and reliable measure of sheltered instruction (Guarino et al., 2001).

Specifically, the SIOP is composed of 30 features grouped into eight main components:

- The features under Lesson Preparation initiate the lesson planning process, so teachers include content and language objectives, use supplementary materials, and create meaningful activities.
- Building Background focuses on making connections with students' background experiences and prior learning, and developing their academic vocabulary.
- Comprehensible Input considers how teachers should adjust their speech, model academic tasks, and use multimodal techniques to enhance comprehension.
- The Strategies component emphasizes teaching learning strategies to students, scaffolding instruction, and promoting higher-order thinking skills.
- Interaction prompts teachers to encourage students to elaborate their speech and to group students appropriately for language and content development.
- Practice & Application provides activities to practice and extend language and content learning.

- Lesson Delivery ensures teachers present a lesson that meets the planned objectives and promotes student engagement.
- The Review & Assessment component reminds teachers to review the key language and content concepts, assess student learning, and provide specific academic feedback to students on their output.

You will read about each component and its features in subsequent chapters of this book.

During four years of field testing, we analyzed teacher implementation and student effects. This CREDE research showed that English learners whose teachers were trained in implementing the SIOP Model performed statistically significantly better on an academic writing assessment than a comparison group of English learners whose teachers had no exposure to the model (Echevarría, Short, & Powers, 2006).

From 1999 to 2002, we field-tested and refined the SIOP Model's professional development program, which includes professional development institutes, videotapes of exemplary SIOP teachers (Hudec & Short, 2002a, 2002b), facilitator's guides (Echevarría & Vogt, 2008; Short, Hudec, & Echevarría, 2002), and other training materials.

We continued to test and refine the SIOP Model in several later studies. From 2004–2007, we replicated and scaled up the SIOP research in a quasi-experimental study in two districts at the middle and high school levels. The treatment teachers participated in the professional development program with summer institutes, follow-up workshops, and on-site coaching. Students with SIOP-trained teachers made statistically significant gains in their average mean scores for oral language, writing, and total proficiency on the state assessment of English language proficiency, compared to the comparison group of English learners (Short, Fidelman, & Louguit, 2012).

From 2005–2011 we participated in the Center for Research on the Educational Achievement and Teaching of English Language Learners (CREATE), looking first at the SIOP Model in middle school science classrooms (Himmel, Short, Richards, & Echevarría, 2009) and later at the SIOP Model as the professional development framework for a school-wide intervention (Echevarría & Short, 2011). The results from the Year 2 experimental study showed that students who had teachers who implemented the SIOP with greater fidelity performed better than those who did not implement SIOP® to a high degree (Echevarría, Richards-Tutor, Chinn, & Ratleff, 2011).

In addition, a number of school districts have conducted program evaluations on their implementation of the model that can be reviewed in *Implementing the SIOP® Model Through Effective Professional Development and Coaching* (Echevarría, Short, & Vogt, 2008).

A note about terminology is helpful before you read further. The SIOP term now refers to both the observation instrument for rating the fidelity of lessons to the model (as shown in Appendix A) and the instructional model for lesson planning and delivery that we explain in detail in the following chapters. Figure 1.4 shows the terminology we will be using in this book to distinguish between these two uses. In addition, we will use SIOP as a modifier to describe teachers implementing the model (SIOP teachers) and lessons incorporating the thirty features (SIOP lessons).

Effective SIOP® Model Instruction

As you continue to read this book, you will explore the components and features of the SIOP Model in detail and have the opportunity to try out numerous techniques for SIOP lessons. You will see that the SIOP Model shares many features recommended for high-quality instruction for all students, such as cooperative learning, strategies for reading comprehension, writers' workshop, and differentiated instruction. However, the SIOP Model adds key features for the academic success of these learners, such as the inclusion of language objectives in every content lesson, the development of background knowledge, the acquisition of content-related vocabulary, and the emphasis on academic literacy practice.

Here we briefly describe the instructional practices that effective SIOP teachers use. You can compare your typical instruction with that of SIOP teachers, and you might find that you are already on the path to becoming a skillful SIOP teacher yourself!

In effective SIOP lessons, language and content objectives are systematically woven into the curriculum of one particular subject area, such as fourth-grade language arts, U.S. history, algebra, or life science, or in one ESL level, such as beginner, intermediate, or advanced. Teachers must develop the students' academic language proficiency consistently and regularly as part of the lessons and units they plan and deliver (Echevarría & Graves, 2007; Short, 2002).

- Content teachers generally present the regular, grade-level subject curriculum
 to the students through modified instruction in English, although some special
 curricula may be designed for students who have significant gaps in their educational backgrounds or very low literacy skills.
- Content teachers identify how language is used in their subjects and give students explicit instruction and practice with it.
- ESL teachers advance students' English language development with curricula addressing language proficiency standards but incorporating the types of texts, vocabulary, and tasks used in core subjects to prepare the students for success in the regular, English-medium classroom.

Accomplished SIOP teachers determine students' baseline understandings in their subject and move them forward, both in their content knowledge and in their language skills through a variety of techniques.

 SIOP teachers make specific connections between the content being taught and students' experiences and prior knowledge, and they focus on expanding the students' vocabulary base.



Click on Videos, then search for "The SIOP® Model: Kendra Moreno" to learn about SIOP® implementation schoolwide.

- They modulate the level of English they use and the texts used with and among students.
- They make the content comprehensible through techniques such as the use of visual aids, modeling, demonstrations, graphic organizers, vocabulary previews, adapted texts, cooperative learning, peer tutoring, and native language support.
- Besides increasing students' declarative knowledge (i.e., factual information),
 SIOP teachers highlight and model procedural knowledge (e.g., how to accomplish an academic task like writing a science report or conducting research on the Internet) along with study skills and learning strategies (e.g., note-taking and self-monitoring comprehension when reading).

In effective SIOP lessons, there is a high level of student engagement and interaction with the teacher, with other students, and with text, which leads to elaborated discourse and critical thinking.

- Student language learning is promoted through social interaction and contextualized communication as teachers guide students to construct meaning and understand complex concepts from texts and classroom discourse (Vygotsky, 1978).
- Students are explicitly taught functional language skills, such as how to negotiate meaning, confirm information, describe, persuade, and disagree.
- Teachers introduce English learners to the classroom discourse community and demonstrate skills such as taking turns in a conversation and interrupting politely to ask for clarification.
- Through instructional conversations and meaningful activities, students practice and apply their new language and content knowledge.

Not all teaching is about the techniques in a lesson. SIOP teachers also consider their students' affective needs, cultural backgrounds, and learning styles. They strive to create a nonthreatening environment where students feel comfortable taking risks with language.

- SIOP teachers engage in culturally responsive teaching and build on the students' potentially different ways of learning, behaving, and using language (Bartolome, 1994).
- They socialize English learners to the implicit classroom culture, including appropriate behaviors and communication patterns.
- They plan activities that tap into the auditory, visual, and kinesthetic preferences of the students and consider their multiple intelligences as well (Gardner, 1993).

The SIOP Model is also distinguished by use of supplementary materials that support the academic text. The purpose of these materials is to enhance student understanding of key topics, issues, and details in the content concepts being taught through means other than teacher lecture or textbook prose.

- To present key topics or reinforce information, SIOP teachers find related reading texts (e.g., trade books), graphics and other illustrations, models and other realia, audiovisual and computer-based resources, adapted text, and the like.
- SIOP teachers use supplementary materials to make information accessible to students with mixed proficiency levels of English. For example, some students in a mixed class may be able to use the textbook, while others may need an adapted text.

When advances in technology are used effectively in the classroom, English learners can reap many benefits. Digital content is motivating for students, allows for a personalized learning experience, is multimodal, and can give students experience with meaningful and authentic tasks (Lemke & Coughlin, 2009).

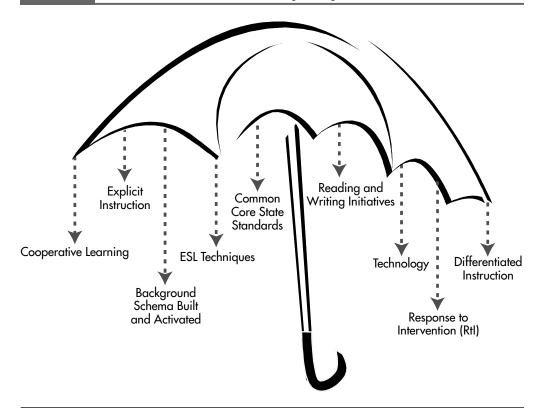
- Technology such as interactive whiteboards with links to the Internet, visual displays, audio options, and more offer a wealth of resources to support English learners' acquisition of new information and of academic English.
- Technology and digital learning "specifically provide the opportunity for increased equity and access; improved effectiveness and productivity of teachers and administrators; and improved student achievement and outcomes" (Alliance for Excellent Education, 2011, p. 2).
- SIOP teachers give students opportunities to use the technology for multiple purposes, such as access to information presented in the students' native language, cyber-group learning interactions such as simulations and virtual field trips, self-paced research, and writing and editing tools.

Depending on the students' proficiency levels, SIOP teachers offer multiple pathways for students to demonstrate their understanding of the content. In this way, teachers can receive a more accurate picture of most English learners' content knowledge and skills through an assortment of assessment measures than they could through one standardized test. Otherwise, what may be perceived as lack of mastery of the content is actually the normal pace of the second language acquisition process (Abedi & Lord, 2001; Solano-Flores & Trumbull, 2003).

- SIOP teachers plan pictorial, hands-on, or performance-based assessments for individual students, group tasks or projects, oral reports, written assignments, portfolios, and more common measures such as paper-and-pencil tests and quizzes to check student comprehension and language growth.
- Teachers use rubrics to measure student performance on a scale leading to mastery, and they share those rubrics with students in advance.

Teachers also dedicate some time to teaching students how to read and understand standardized test questions, pointing out the use of specific verbs or synonyms in the question stems and possible responses (Bailey & Butler, 2007; Kilgo, no date). It is important to recognize that the SIOP Model does not require teachers to discard their favored techniques or add copious new elements to a lesson. Rather, this model of sheltered instruction brings together *what* to teach by providing a

FIGURE 1.5 The SIOP® Model Framework for Organizing Best Practices



framework for *how* to teach it. It acts as an umbrella, allowing teachers the flexibility to choose techniques they know work well with their particular group of students (see Figure 1.5). It reminds teachers to pay attention to the language development needs of their students and to select and organize techniques that facilitate the integration of district- or state-level standards for ESL and for specific content areas.

Implementing the SIOP® Model

The goal of this book is to prepare teachers to teach content effectively to English learners as they develop their students' academic English ability. The SIOP Model may be used as part of a program for preservice and inservice professional development, as a lesson planner for sheltered content lessons, and as a training resource for university faculty. Research shows that professional development approaches that improve teaching include the following: sustained, intensive development with modeling, coaching, and problem solving; collaborative endeavors for educators to share knowledge; experiential opportunities that engage teachers in actual teaching, assessment, and observation; and development grounded in research but also drawing from teacher experience and inquiry, connected to the teachers' classes, students, and subjects taught (Borko, 2004; Darling-Hammond & Richardson, 2009). In our research studies, we found that SIOP implementation does not happen quickly.

Teachers may take one to two years before they implement the model consistently to a high degree (Short, Fidelman, & Louguit, 2012).

Effective implementation of the SIOP Model is one key to improving the academic success of English learners. Preservice teachers need to learn the model to develop a strong foundation in best practice for integrating language and content in classes with English learners. Practicing teachers need the model to strengthen their lesson planning and delivery and to provide students with more consistent instruction that meets language and content standards. Site-based supervisors and administrators use the model to train and coach teachers and systematize classroom observations. Teacher education faculty also present the SIOP Model in their methods courses and use it in student teacher supervision.

Any program in which students are learning content through a nonnative language could use the SIOP Model effectively. It may be an ESL program, a late-exit bilingual program, a dual language/two-way bilingual program, a newcomer program, a sheltered program, or even a foreign language immersion program. The model has been designed for flexibility and tested in a wide range of classroom situations: with students who have strong academic backgrounds and those who have had limited formal schooling; with students who are recent arrivals and those who have been in U.S. schools for several years; with students at beginning levels of English proficiency and those at advanced levels. For students studying in content-based ESL or bilingual courses, SIOP instruction often provides the bridge to the general education program. More discussion of getting started with the SIOP Model is found in Chapter 12.

Summary

As you reflect on this chapter and the impact of the SIOP Model on English learners' content and academic language learning, consider the following main points:

- Students who are learning English as an additional language are the fastest-growing segment of the school-age population in the United States, and almost all candidates in teacher education programs will have linguistically and culturally diverse students in their classes during their teaching careers. However, many of these future teachers—as well as most practicing teachers—are not well prepared to instruct these learners.
- School reform efforts, standards, and increased state accountability measures put pressure on schools and districts to improve their educational opportunities and practices with English learners. This pressure has had both positive and negative outcomes. Teachers can use the SIOP Model to help students meet Common Core standards and prepare English learners for college and careers.
- The SIOP Model has a strong, empirical research base. It has been tested across
 multiple subject areas and grade levels. The research evidence shows that the
 SIOP Model can improve the academic literacy of English learners.
- The SIOP Model does not mandate cookie-cutter instruction, but it provides a framework for well-prepared and well-delivered lessons for any subject area. As SIOP teachers design their lessons, they have room for creativity. Nonetheless,

- critical instructional features must be attended to in order for teachers to respond appropriately to the unique academic and language development needs of English learners.
- The model is operationalized in the SIOP protocol, which can be used to rate lessons and measure the level of SIOP implementation.
- Our research shows that both language and content teachers can implement
 the SIOP Model fully to good effect. The model is best suited for content-based
 ESL courses and sheltered content courses that are part of a program of studies
 for English learners, and for mainstream content courses with English learners
 and struggling readers. Together, these courses can be a promising combination
 when implemented school-wide.
- We need students like Javier to be successful in school and beyond. In the long run, such success will benefit the communities in which these students live and the national economy as a whole.

Discussion Questions

- 1. In reflecting on the content and language objectives at the beginning of the chapter, are you able to:
 - a. List characteristics of English learners that may influence their success in school?
 - b. Distinguish between content-based ESL and sheltered instruction?
 - c. Explain the research supporting the SIOP Model?
 - d. Discuss the benefits and challenges of school reform and their effects on English learners?
 - e. Develop a lexicon related to the SIOP Model?
 - f. Compare your typical instruction with SIOP instruction?
- 2. Consider one class of English learners. Identify the individual and sociocultural factors that may influence the educational success of these students. In what ways might instruction using the SIOP Model help them?
- 3. How would you characterize the type(s) of instruction offered to English learners in your school or schools you know: traditional ESL, content-based ESL, sheltered content, bilingual content, traditional content? Provide evidence of your characterization in terms of curricula and instruction. Are the English learners successful when they enter regular, mainstream content classes? Explain.
- 4. Many teachers using sheltered instruction, whether they had special training in a subject area or in second language acquisition, fail to take advantage of the language learning opportunities for students in sheltered content classes. Why do you think this is so? Offer two concrete suggestions for these teachers to enhance their students' academic language development.
- 5. Look at one of your own lesson plans. Which characteristics of the SIOP Model do you already incorporate? Consider the components and features of the model as found in Appendix A.

Lesson Preparation

After reading, discussing, and engaging in activities related to this chapter, you will be able to meet the following content and language objectives.

Content Objectives

Identify content objectives for English learners that are aligned to state, local, or national standards.

Incorporate supplementary materials suitable for English learners in a lesson plan.

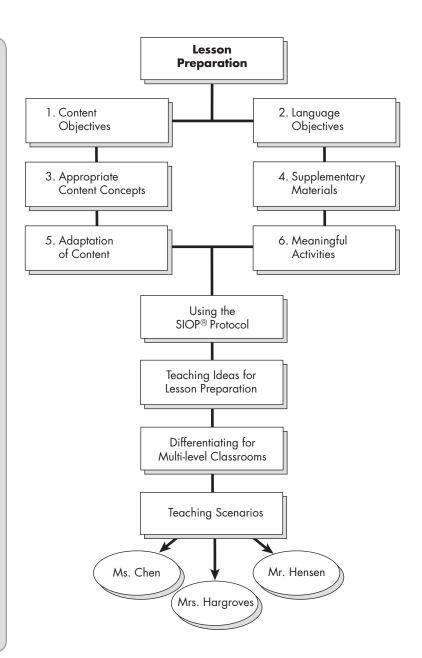
Select from a variety of techniques for adapting content to the students' proficiency and cognitive levels.

Language Objectives

Write language and content objectives.

Discuss advantages for writing both language and content objectives for a lesson and sharing the objectives with students.

Explain the importance of meaningful academic activities for English learners.



In this and subsequent chapters, we explain each SIOP (Sheltered Instruction Observation Protocol) Model component and its features. Each chapter begins with an explanation of the component, offers classroom activities, and then describes how three different teachers teach the same lesson. The lesson scenarios throughout the book are about varied topics and are for different grade levels.

This chapter introduces the first component of the SIOP Model, Lesson Preparation. We present background information and the



rationale for each of the six features in this component, list some teaching ideas for this component and for differentiating instruction in multi-level classrooms, and demonstrate through the teaching scenarios how the model can be implemented. As you read the scenarios, think about the SIOP features that have been explained in the chapter, and try to rate the lessons according to their best practice. Reflect on how effectively each teacher is meeting the needs of English learners in relation to each feature. At the conclusion of the teaching scenarios, we discuss our assessment of the teachers' efforts to provide SIOP instruction, and we invite you to compare your appraisal to ours. •

Background



Click on the SIOP® Lesson Plan Builder to create your own lesson plans. As we all know, lesson planning is critical to both a student's and a teacher's success. For maximum learning to occur, planning must produce lessons that target specific learning goals, enable students to make connections between their own knowledge and experiences and the new information being taught, give students practice using and applying the new information, and assess student learning to determine whether to move on or reteach the material. With careful planning, we make learning meaningful and relevant by including appropriate motivating materials and activities that foster real-life application of concepts studied.

Traditionally, to meet the needs of students who struggled with grade-level reading materials, texts have been rewritten according to readability formulae or lexile levels (Gray & Leary, 1935; Stenner & Burdick, 1997). The adapted texts included controlled

vocabulary and a limited number of concepts, resulting in the omission of critical pieces of information. We have learned that if students' exposure to content concepts is limited by vocabulary-controlled materials, the amount of information they learn over time is considerably less than that of their peers who use grade-level texts. The result is that the "rich get richer and the poor get poorer" (Stanovich, 1986). That is, instead of closing the gap between native English speakers and English learners, the learning gap is increased, and eventually it becomes nearly impossible to close. Therefore, it is imperative that we plan lessons that are not negatively biased against students acquiring English and that include age-appropriate content and materials.

This component, Lesson Preparation, is therefore very important to the SIOP Model. If properly prepared, a lesson will include most of the SIOP features in advance. It is then up to the teachers and class to accomplish them as the lesson unfolds. However, when planning, teachers have asked how they can meet all thirty features in a given period. We explain that a SIOP lesson may be single day or multiday in length. Over the course of several days, all thirty features should be met. See Vogt and Echevarría (2008, pp. 8–9) for a SIOP lesson planning flow chart.

As you learn the model, we strongly encourage you to write out lessons in detail. We suggest you use the SIOP protocol as a checklist to ensure all of the features are incorporated. You may want to try one or more of the lesson plan templates we have included in Appendix B or the templates in Chapter 7 of *Implementing the SIOP® Model Through Effective Professional Development and Coaching* (Echevarría, Short, & Vogt, 2008). All of these templates have been used successfully in classrooms. In addition, sample lesson plans and units can be found in the SIOP content books for English-language arts, mathematics, science, and history & social studies (Echevarría, Vogt & Short, 2010; Short, Vogt & Echevarría, 2011a, 2011b; Vogt, Echevarría & Short, 2010).

"How do I start implementing SIOP lessons?" is a frequent question from teachers new to the SIOP Model. We suggest that

- Elementary school teachers begin with one subject area, and
- Secondary school teachers begin with one course.

It is better to begin on a small scale so you do not have to write multiple SIOP lessons each day while you are learning the model. In some cases, teachers learn the SIOP Model over time, component by component, and they build their lesson planning skills in the same way. Once you have internalized the model, you may write less detailed lesson plans, and you will probably find that writing SIOP lessons across subject areas or courses is easier.



SIOP® FEATURE 1:

Content Objectives Clearly Defined, Displayed, and Reviewed with Students

In effective instruction, concrete content objectives that identify what students should know and be able to do must guide teaching and learning. When planning content objectives, keep the following principles in mind:



Click on SIOP® Lesson Plans & Activities, then visit the SIOP® Lesson Plan Templates and the Sample SIOP® Lesson Plans.

Students will be able to (SWBAT) Students will (SW) We will Today I will Our job is to

- Plan objectives that support school, district, or state content standards and learning outcomes. The Common Core State Standards for English language arts and mathematics are a source of content objectives and well-implemented SIOP instruction can help students meet them.
- Write lesson-level objectives (something that can be taught and learned in one lesson or two) and use student-friendly language that suits the age and proficiency levels in the class. Content objectives and state standards are frequently complex and not written in a manner that is accessible to English learners or students in primary grades. Sometimes standards are too generic or broad—such as "Explain the geopolitical shifts of countries' alliances in the twentieth century and their economic impact"—to be useful as a single lesson's learning goal.
- Write objectives in terms of student learning, not as an agenda item. See Figure 2.1 for several ways that teachers in our research studies have started their objectives. You will note that all focus on the student.
- Limit the number of content objectives to only one or two per lesson to reduce the complexity of the learning task and to ensure that instruction can meet the objectives.
- Share objectives with the students, orally and in writing. Typically teachers do not consistently present objectives to students. As a result, students do not know what they are supposed to learn each day. SIOP teachers tell students the objectives for every lesson.
- Review the objectives at the end of the lesson to determine if students have mastered them. Use that assessment when deciding whether to move to the next topic or spend some time reteaching.

We know from our research studies and professional development experiences that presenting objectives each day can be challenging for teachers. But the effort is worth it. One of the sheltered teachers who was learning the SIOP Model reported her growing awareness of the importance of clearly stated content objectives that are displayed for English learners:

The objectives are still going on in my class. They're on the board every day and the students are getting used to seeing them, reading them out loud, and

evaluating whether or not we achieved them at the end of each class. I still have questions about the wording and what's a good objective . . . but that will come with time and more discussion and study. I just wanted to say that defining the objectives each day definitely brings more focus to my planning and thinking, and it helps bring order to my classroom procedures. So far, it has not been too burdensome and the habit is definitely forming.

Content-based ESL teachers sometimes need assistance in identifying appropriate content objectives to add to their lessons. They may feel unprepared for in-depth instruction on a content topic, they may not know the key concepts that should be taught, and they may not know what types of activities usually support the topic. For these reasons, we advocate that content and language teachers collaborate closely as they prepare lessons and help their students meet language and content goals.

The bottom line for English learners is that content objectives need to be written in terms of what students will learn or do; they should be stated simply, orally and in writing, and tied to specific grade-level content standards.

Examples of content objectives and language objectives, discussed below, can be found throughout each chapter in this book, in 99 Ideas and Activities for Teaching English Learners with the SIOP® Model (Vogt & Echevarría, 2008), in Helping English Language Learners Succeed in Pre-K-Elementary Schools (Lacina, Levine, & Sowa, 2006), in lesson plans presented in Science for English Language Learners (Fathman & Crowther, 2006), and in the SIOP content books mentioned above.



SIOP® FEATURE 2:

Language Objectives Clearly Defined, Displayed, and Reviewed with Students



Click on Videos, then search for "Incorporating Language Objectives" to see an example of integrating language objectives. While carefully planning and delivering content objectives, SIOP teachers must also incorporate into their lesson plans objectives that support students' academic language development, and ESL teachers may have to build social language skills too (Francis et al., 2006; Gersten et al., 2007; Saunders & Goldenberg, 2010; Torgesen et al., 2007). The same principles we discuss above for content objectives also should apply to planning language objectives. Language objectives should be stated clearly and simply, and students should be informed of them, both orally and in writing. They should be limited in number for a given lesson and reviewed at the end. The objectives should be drawn from the state English language proficiency standards and English language arts standards. Most importantly, the objectives should represent an aspect of academic English that students need to learn or master.

Although incorporating language objectives in all content lessons is a hallmark of the SIOP Model, we recognize that many content teachers are not used to thinking about the language demands of their subject. What we propose in the SIOP Model calls for a new perspective on your subject area. It is not sufficient to only

have a deep understanding of topics in your content area; rather, an effective teacher also needs to know how language is used in the content area in order to convey information (orally or in text) and to use and apply that information (through class reading, writing, and discussion activities). It also requires you to know your students' proficiency levels so the language objectives can be targeted to what they need to learn about the academic language of history, science, mathematics, or other subjects, but not be at a level too high for their current understanding.

Because it may be a new way of thinking for you, here are some points to keep in mind from research on second language acquisition:

• When considering which language objectives to include in a lesson and how to write them, it is important to keep in mind that acquiring a second language is a process. As such, language objectives may cover a range from process-oriented to performance-oriented statements over time so that students have a chance to explore, and then practice, before demonstrating mastery of an objective. The following objectives from a SIOP language arts class show the progression of objectives that might be taught over several days:

Students will be able to

- 1. Recognize similes in text (Day 1)
- 2. Discuss the functions of similes (Days 1–2)
- 3. Write three similes (Day 2)
- 4. Write a paragraph that describes a setting using similes (Days 3–4)

For the first lesson (Day 1), students learn to recognize similes in text, perhaps by focusing on the key words *like* and *as*, and the class discusses the purpose of similes. After that (Day 2), they might discuss reasons why authors use similes and then generate their own similes in decontextualized sentences. On Day 3 they describe a setting using similes and turn that description into a paragraph, an authentic purpose. On Day 4 the teacher might have students edit their paragraphs and then share some aloud.

Figure 2.2 displays possible verbs for objective statements that reflect this process-to-performance continuum.

FIGURE 2.2 Process-to-Performance Verbs

Process-Or	iented>	Performa	nce-O	riented
Explore		Define		
Listen to			Draft	
Recognize	Discuss in small groups			Write Give an oral presentation Edit

- It is important to distinguish between receptive and productive language skills. English learners tend to develop receptive skills (listening and reading) faster than productive skills (speaking and writing), but all the skills should be worked on in a unified way. Students don't have to learn to speak, for instance, before they learn to read and write (August & Shanahan, 2006; Saunders & Goldenberg, 2010).
- We cannot ignore oral language practice and focus our objectives only on reading and writing. We know from research (Goldenberg, 2008; Guthrie & Ozgungor, 2002) that the absence of planned speaking practice—be it formal or informal—by English learners in content classrooms is detrimental to the development of academic English. Gibbons (2003) argues that skillful teachers should take advantage of oral interaction to move students from informal, everyday explanations of a content topic (e.g., a scientific process) to the more specialized academic register of the formal written and spoken code.
- A focus on function and form is necessary to move students to advanced levels of academic English and full proficiency, which also set students up to be college and career ready. The ESL and English language arts teachers play important roles in making this happen, but content teachers should not let students coast in class. If some English learners are ready to produce more sophisticated language (in a geometry proof, during an historical debate, in a science lab report), they should be challenged to do so. Schleppegrell and colleagues (Schleppegrell, 2004; Schleppegrell, Achugar, & Orteíza, 2004) have conducted linguistic analyses of the lexical and grammatical forms that construe meaning in written and spoken school discourse and have identified implications for instruction. SIOP teachers might make the development of specialized grammar and lexical forms part of their scope and sequence of language objectives (Dutro & Kinsella, 2010; Ellis, 2006; Hinkel 2006).
- The more exposure students have and the more time students spend using academic language, the faster they will develop language proficiency (Echevarría & Graves, 2010; Saunders & Goldenberg, 2010). If the ESL teacher is the only educator who works on language development with an English learner during the school day, less progress will be made than if all the teachers on the English learner's schedule attend to language development and practice (Snow & Katz, 2010).
- It is important to assess the language objectives to determine if students are making progress toward mastery. You can plan for multi-level responses from the students according to their proficiency in English. For example, use group response techniques (e.g., thumbs-up/thumbs-down) for students who are in the early stages of English language development. For students who are more proficient English speakers, incorporate activities that involve partner work and small group assignments so that English learners can practice their English in a less-threatening setting. When possible, accept approximations and multiple word responses rather than complete sentences because this supports English development. However, it is also appropriate to require English learners, depending on their level of proficiency, to give answers in one or two complete sentences. This develops language skills because it requires students to move

beyond what may be their comfort zone in using English. You will find this topic discussed in more detail in Chapter 9.

You also need to know about sources of language objectives. The first place to start is the state English language proficiency (ELP) standards. Second, as we mentioned in Chapter 1, look at the WIDA standards. The WIDA consortium has compiled a list of "Can Do" descriptors that can help teachers identify the kind of language tasks students should be able to perform according to five differing levels of English proficiency and different grade-level clusters. (To view these descriptors, go to http://www.wida.us/standards/CAN_DOs/)

The State and Common Core English language arts standards are other resources. Some states have content area standards that include a strand focused on communication. Ideas for objectives will be found in all of these official documents as well as in local district curricula and instructional materials. By reviewing the course textbook and other materials, you can see if there are language skills and academic vocabulary that students need to develop in order to comprehend the information.

One final critical source for successful SIOP lesson implementation is your colleagues. If you are a content or grade-level classroom teacher, pair up with an ESL or bilingual teacher. Tap his or her expertise for language topics and knowledge of the English learners' academic language needs. If you are an ESL teacher, you have a plethora of language objectives at your disposal. You need to partner with one or more content teachers to identify content objectives that the English learners need assistance with and align them to your language objectives. You may want to focus on thematic units to cover a variety of content topics or focus on one subject area per quarter.

Writing Content and Language Objectives



Click on Videos, then search for "Objectives" to see Deborah Short discuss the importance of writing content and language objectives in lessons. All the content and language objectives should evolve from the lesson topic and be part of the instructional plan. After a teacher writes content and language objectives, posts them, and discusses them with the students at the start of class, at some point in the lesson explicit instruction must be provided on these objectives. Students would then have practice opportunities aligned to the objectives and be assessed on their progress toward meeting them at the close of the lesson. In other words, each objective is what we want the students to learn, and each needs explicit attention. An objective is not a by-product of an activity but the foundation of one.

Remember: Writing an agenda or list of activities on the board is not the same as writing the content and language objectives!

Content objectives, as mentioned earlier, are usually drawn from the state subject area standards. Consider this standard of learning from Virginia: "Students will investigate and understand the basic needs and life processes of plants and animals." It is too broad to be addressed in one lesson, but it is written in a straightforward manner. Surprisingly, however, it is an objective for kindergarten. Posting this

objective word for word in the kindergarten classroom would not be helpful for your students. How might you revise it to present to five- and six-year-olds? You might write the following on a lesson plan: "Students will identify parts of a tree and their functions"; but for the students you might post a tree picture and write on the board, "Identify parts of a tree. Tell what the parts do." When you explain it, you might elaborate, "Today you will learn about parts of a tree (point to the tree picture). You will be able to identify the parts (point to the different parts) and tell what the parts do (explain that leaves make food for the tree)."

After you have rewritten the state standard as an appropriate content objective for the kindergartners, you will need to plan the lesson and determine a language objective. One teacher we worked with combined the science lesson with a reading of *The Giving Tree* (Silverstein, 1988). For his language objective, he decided on "Students will listen to *The Giving Tree* and act out the story miming vocabulary words (trunk, branch, leaf)." He explained to the students that they would listen to a story, look at the pictures, name the parts of the tree, and then act out parts of the tree when he read the story again. In this lesson he would therefore reinforce the skill of listening for specific information and have students physically demonstrate their understanding of vocabulary terms.

Language objectives should be planned to meet learning goals and prepare students for the type of academic language they need to understand the content and perform the activities in the lesson. But the activities alone are not language objectives, although they could be language practice. In some lessons, language objectives may focus on developing students' vocabulary, introducing new words and concepts, or teaching word structure to help English learners discern the meaning of new words. Other lessons may lend themselves to reading comprehension skills practice or the writing process, helping students to brainstorm, outline, draft, revise, edit, and complete a text. Sometimes objectives will highlight functional language use, such as how to request information, justify opinions, negotiate meaning, provide detailed explanations, and so forth. Higher-order thinking skills, such as articulating predictions or hypotheses, stating conclusions, summarizing information, and making comparisons, can be tied to language objectives, too. Sometimes specific grammar points can be taught as well; for example, learning about capitalization when studying famous historical events and persons.

A colleague of ours, Amy Washam, who is a very experienced SIOP professional developer, uses some effective techniques to help teachers conceptualize language in their lesson planning process:

First, I ask teachers what they would need in order to learn another language fluently enough to attend a graduate course in a country where that language is spoken. Teachers brainstorm ideas, which often include a tutor, a specialized glossary of key terms in the course, extra time spent in the country before the class starts practicing the language, and language learning programs on tape that they can listen to over and over.

I tell them that what they listed—modeling, repetition, feedback, practice speaking the language—are all good language activities for their English learners. But they also need to have a language target for each activity.

So next I ask teachers to think of an English learner they have worked with recently and write down all of the reasons this student is not considered English proficient in their class. Common reasons cited are poor reading comprehension, technical difficulties in writing, problems with English pronunciation, and limited background knowledge which results in limited academic vocabulary.

My response at this point is "The reasons you listed for your student not being classified as English proficient are your language objectives. You can have language objectives for reading comprehension, academic vocabulary development, grammar, and even pronunciation." I then push them to think about their planning and ask, "Is it more important for this student to work on the content standards in their classes or the list of skills that you say this student does not possess yet in English?"

Now they typically say both are important. So we move to the next step, responding to these questions:

- 1. What language will students need to know and use to accomplish this lesson's content objectives?
- 2. How can I move my students' English language knowledge forward in this lesson?

We suggest you consider the following four categories as the starting point for generating language objectives. Think about how language will be used in your lesson: in your speech, in class discussion, in the reading assignments, in writing tasks, and in the lesson activities. Then, given the content topic and an understanding of the students' level of academic language acquisition, write an objective that complements the topic and that you will explicitly address in the lesson.

- Academic Vocabulary. Key words needed to discuss, read, or write about the topic of the lesson (e.g., names of important people, places, and events; scientific and mathematical terms; social studies or health concepts) can be the focus of language objectives. Vocabulary for a lesson can be drawn from three subcategories, which are described in detail in Chapter 3:
 - Content vocabulary: These key words and technical terms are subject specific. They are often the highlighted words in textbooks. Students need them to understand lesson concepts but they are generally low-frequency words (i.e., not regularly used outside of the classroom), particularly those in high school courses. (Ask yourself: When was the last time you used mitosis in conversation?)
 - General academic vocabulary: These words include cross-curricular academic terms (e.g., circumstances, impact, observe), transition words and logical connectors (e.g., however, because, next), and language function words (e.g., compare, persuade). This category includes medium and high-frequency words that are used in academic and social conversations.

- Word parts: This category refers to roots, prefixes, and suffixes. Attention to the structure of words can help expand a student's vocabulary knowledge considerably. For example, if a student knows that vis is the root meaning "to see," she can begin to guess the meaning of words like vision, visual, invisible, and visualize.
- Language Skills and Functions. This category reflects the ways students use language in the lesson. Students are expected to read, write, listen, and speak, but how well they do so varies. English learners need some direct instruction in these language skills, along with opportunities to practice. The skills taught need to link to the topic of the lesson. In a language arts class, for example, will students need to read and find evidence in the text? In social studies, will they need to listen to an audio recording or watch a video and identify the speaker's point of view regarding an historical conflict? In science class, will they have to record their observations during an experiment? Any lesson may also call for students to use language for a specific purpose—to describe, compare, or predict, for example. English learners need instruction here as well, particularly in ways to articulate their descriptions or comparisons or predictions.
- Language Structures or Grammar. Teachers can pay attention to the language structures in the written or spoken discourse of their class and teach students the structures that are widely used. For example, students might be struggling with a text that includes the passive voice, imperatives, or if-then sentences. If so, the teacher may teach students how to interpret these sentences. If you are a content teacher, we are not asking you to become a grammar expert, but we do want you to be aware of the syntax used in your subject area. If you are an ESL teacher, this category might offer the opportunity to teach some grammar that will really advance the students' language proficiency.
- Language Learning Strategies. This category provides a way for teachers to give students resources to learn on their own. Strategies to be taught may include corrective strategies (e.g., reread confusing text), self-monitoring strategies (e.g., make and confirm predictions), prereading strategies (e.g., relate to personal experience, visualize), or language practice strategies (e.g., repeat or rehearse phrases, imitate a native speaker). Teaching students with Latin-based native languages to consider cognates when they see new academic terms is a very powerful strategy as well. More discussion on strategies is found in Chapter 5.

In Figure 2.3, we show how language objectives might be written for these four categories. One column shows language objectives for third-grade math lessons on geometric shapes. Another column shows language objectives for a high school chemistry unit. These objectives are illustrative and would not all be placed in one lesson; they could be used over a series of lessons. Note that it is important to include a variety of language objectives over the course of one week. Many teachers feel comfortable teaching vocabulary as their language objective. This is a good

FIGURE 2.3 Categories and Examples for Developing Language Objectives

Type of Language Objective	Elementary (Grade 3) Math Example	High School Chemistry Example
Academic Vocabulary	Students will be able to define the terms <i>square</i> , <i>rectangle</i> , <i>rhombus</i> , <i>trapezoid</i> , and <i>parallelogram</i> orally and in writing.	Students will be able to define the terms <i>chemical reaction</i> , <i>chemical change</i> , and <i>physical change</i> orally and in writing.
What it means instructionally	Teacher teaches (or reminds) students how to define a term: state attributes, give an example, draw a picture, tell what it does, or use in a sentence.	Teacher teaches (or reminds) students how to define a term: state attributes, draw an illustration, use in a sentence, give an analogy, provide an antonym, tell its function, or identify group membership and distinguishing characteristics.
Language Skills and Functions	Students will be able to listen to teacher descriptions in order to draw different types of parallelograms.	Students will be able to formulate questions and generate hypotheses before conducting an experiment.
What it means instructionally	Teacher teaches a listening comprehension skill—paying attention to key words—and asks students to draw the shapes or construct them on a geoboard.	Teacher teaches (or reminds) students of the way to form these language functions: formulate a question and then state a hypothesis, perhaps with sentence starters like "Will the?" and "We predict that"
Language Structures	Students will be able to use comparative phrases, such as greater than, larger than, smaller than, less than, and equal to orally and in writing when comparing geometric figures and angles.	Students will be able to use adverbs of time in their lab report to describe their observations.
What it means instructionally	Teacher introduces (or reviews) these comparative phrases and also shows the corresponding mathematical symbols (i.e., >, <, and =).	Teacher teaches (or reviews) adverbs of time (e.g., first, next, later, after three minutes, for several hours) and shows models of usage in a lab report.
Language Learning Strategies	Students will be able to visualize and relate the geometric shapes to their lives.	Students will be able to rehearse an oral presentation with a peer.
What it means instructionally	Teacher explains how to visualize and make a personal connection and how to articulate the mental image, perhaps through a think-aloud.	Teacher teaches class how to listen and give feedback to an oral presentation on certain criteria (e.g., rate of speech, word choice) and provides class time for rehearsing.

first step, but it is not the complete picture of the language development our English learners need to be successful in school and beyond.

Sometimes the content and language objectives that you write will be closely linked, as in the following middle school science lesson:

- We will determine characteristics of different igneous and sedimentary rocks.
- We will write comparative sentences about the two types of rocks.

In order to help students meet these objectives, the teacher will have to discuss the two types of rocks, let students make observations, offer criteria for making comparisons (e.g., hardness, color, presence of crystals), and model comparative sentence formation.

At other times, the language objective might extend the content knowledge, as in this upper elementary geography lesson:

- Students will be able to (SWBAT) identify specific landforms on a map of South America.
- SWBAT present an oral report about one landform and its influence on economic development.

In this lesson, learning to read a map is likely to be easier for the students than learning to give an oral presentation. The teacher may have to explain the key of a map, but finding the landforms (assuming they had been taught in a prior lesson) would not be too time consuming. However, guiding students in giving oral presentations will take more effort. Besides providing time for students to research a landform and cull the information into a set of facts to present, the teacher must help students with articulating their information orally and adding non-linguistic aspects to the presentation such as eye contact and intonation.

For language arts and reading teachers, teasing apart language and content objectives can be tricky. Certain curriculum concepts like *plot* and *setting* are clearly ingredients for language arts content objectives, but some potential objectives like "produce writing that conveys a clear point of view and maintains a consistent tone" could be either a language or a content objective. We encourage language arts and reading teachers to nonetheless consistently identify a content and a language objective for each lesson, even if some might be placed in either category. Because we are aiming for whole-school implementation of the SIOP Model, having students recognize and expect both types of objectives across all their classes is a valuable goal.

The following objectives are from an eighth-grade language arts class. Either could be the content objective or the language objective. We might label the first as the language objective because learning to use descriptive adjectives is a skill applicable across content areas. The second, focusing on characterization, falls neatly into the language arts curriculum.

- Students will use descriptive adjectives to write sentences about the characters.
- Students will compare traits of two characters in a story.

FIGURE 2.4 Sample Verbs for Writing Content and Language Objectives

Verbs for Content Objectives	Verbs for Language Objectives
Identify	Listen for
Solve	Retell
Investigate	Define
Distinguish	Find the main idea
Hypothesize	Compare
Create	Summarize
Select	Rehearse
Draw conclusions about	Persuade
Determine	Write
Find	Draft
Calculate	Defend a position on
Observe	Describe

As you write your objectives, keep the verbs in Figure 2.4 in mind. Although the verbs are not exclusive to one type or another, they are more common to the category presented. Over time, add to this list to further distinguish between the content and language goals of your lesson. Also be sure to use active verbs; stay away from *learn*, *know*, and *understand*.

Note that even if you have students with mixed levels of English proficiency in class, we do not suggest you write different language objectives per proficiency level. Instead, write an objective that all students should attain based on the content concepts in the lesson, but adjust the intended outcomes to match the students' ability levels. Some students may master the objective by the end of the lesson; others will be at some point on a path toward mastery.

After you have written your content and language objectives, we suggest you refer to this checklist to evaluate them:

The objectives are aligned to state or district standards.
The objectives are observable.
The objectives are written and will be stated simply, in language the students can understand.
The objectives are written in terms of student learning.
The content objective is related to the key concept of the lesson.
The language objective promotes student academic language growth (i.e., it is not something most students already do well).
The language objective connects clearly with the lesson topic or lesson activities
The objectives are measurable. I have a plan for assessing student progress on meeting these objectives during the lesson.



SIOP® FEATURE 3:

Content Concepts Appropriate for Age and Educational Background Level of Students

SIOP teachers must carefully consider the content concepts they wish to teach and use district curriculum guidelines and grade-level content standards as guides. In SIOP classrooms, this entails ensuring that although materials may be adapted to meet the needs of English learners, the content is not diminished. When planning lessons around content concepts, consider the following:

- the students' first language literacy,
- their English language proficiency,
- their schooling backgrounds and academic preparation for grade-level work,
- their background knowledge of the topic,
- the cultural and age appropriateness of instructional materials, and
- the difficulty level of any text or other material to be read.

Our goal as SIOP teachers is to provide the grade-level curriculum to our English learners. By employing the type of techniques we propose in the SIOP Model, teachers skillfully make that content comprehensible to students. Sometimes we adapt the materials being read or the materials used to accomplish a task. The following considerations are worth keeping in mind.

- In general, it is inappropriate to use the curriculum materials and books from much earlier grades. Students in high school who are developing literacy for the first time should not be reading about "doggies and birdies," for example. Other materials should be found, and if necessary, the teacher should provide the scaffolding needed to understand the content concepts.
- In some cases, students with major gaps in their educational backgrounds may be placed in newcomer programs or specialized classes that pull objectives and content concepts from earlier grades in order to provide the foundational knowledge the students need to perform grade-level work successfully and catch up to their classmates (Short & Boyson, 2004, 2012). Ideally, specialized courses would be developed to accelerate the learning of students with limited formal schooling, such as FAST Math developed by Fairfax County (VA) Public Schools (Helman & Buchanan, 1993), which can help students gain several years' worth of mathematics instruction in one subject area in six months or one year.
- We should also be mindful of concepts our upper elementary and secondary English learners may have already learned through their life experiences or prior schooling. Sometimes, an illustration or demonstration can help students recall a concept and then the teacher can help them learn new English words to describe the concept and add to their understanding of it. As Torgesen and colleagues (2007) point out, "ELLs who already know and understand a

- concept in their first language have a far simpler task to develop language for the concept in English than do students who lack knowledge of the concept in either language" (p. 92).
- To help students make connections to the content topics, reflect on the amount of background knowledge needed to learn and apply the concepts, and plan ways to build or activate students' prior knowledge related to them. For example, fourth-grade students typically learn about magnetism, yet some adolescent English learners may not have studied this concept. Rather than diminish the content, use what prior knowledge students do have, perhaps about attraction, and then explicitly build background on magnetism as a foundation for the lesson.
- Another way to build background for a small group of learners so they are ready for the content concepts is through a small group minilesson that precedes the regular whole class lesson (Rance-Roney, 2010; Vogt, 2000). This minilesson provides a "jump start" by reviewing key background concepts, introducing vocabulary, leading a picture or text "walk" through the reading material, engaging in simulations or role-plays, or participating in hands-on experiential activities. The jump-start minilesson develops context and gives access to children who may lack appropriate background knowledge or experience with the grade-level content concepts. In heterogeneous classes in which English learners study with native English speakers, peer tutors can be used to teach some of the requisite background information as well. Another option, where available, is to provide the minilesson in the students' native language.
- In schools where an ESL teacher and a content/classroom teacher work collaboratively with the same group of students, the ESL teacher can offer lessons that build background and vocabulary before the English learners study the topic in their regular or sheltered content class.



SIOP® FEATURE 4:

Supplementary Materials Used to a High Degree, Making the Lesson Clear and Meaningful

Information that is embedded in context allows English learners to understand and complete more cognitively demanding tasks. Effective SIOP instruction involves the use of many supplementary materials that support the core curriculum and contextualize learning. This is especially important for students who do not have gradelevel academic backgrounds and/or who have language and learning difficulties. Because lectures and pencil-and-paper activities centered on a text are often difficult for these students, remember to plan for supplementary materials that will enhance meaning and clarify confusing concepts, making lessons more relevant.

A variety of supplementary materials also supports different learning styles and multiple intelligences because information and concepts are presented in a multifaceted manner. Students can see, hear, feel, perform, create, and participate in order to make connections and construct personal, relevant meanings. The use of technology (e.g., interactive whiteboards) and multimedia can enhance student understanding



Click on Videos, then search for "Supplementary Materials" to see an example of the effective use of supplementary materials. and engagement with the content topics and related language practice opportunities. Supplementary materials provide a real-life context and enable students to bridge prior experiences with new learning. Where possible, choose materials that are culturally responsive to student backgrounds.

Examples of supplementary materials and resources that can be used to create context and support content concepts include the following:

- Hands-on Manipulatives: These can include anything from Cuisinaire rods and tangrams for math to microscopes for science to interactive maps for social studies. Manipulating objects physically can reduce the language load of an activity; beginning students in particular can still participate and demonstrate their understanding.
- Realia: These are real-life objects that enable students to make connections to
 their own lives. Examples include play money (coins and bills) for a unit on
 money, historical realia such as photos, recordings, and clothing from the 1920's
 Jazz Age, or nutrition labels on food products for a health unit.
- Pictures and Visuals: Photographs and illustrations are available that depict nearly any object, process, or setting. Web sites, magazines, commercial photos, and hand drawings can provide visual support for a wide variety of content and vocabulary concepts and can build background knowledge. Models, graphs, charts, timelines, maps, props, and bulletin board displays also convey information. Many teachers now have electronic document viewers that they use to display book pages, photos, and more to the class. Many teachers also use PowerPoint slides. Students with diverse abilities often have difficulty processing an inordinate amount of auditory information and so instruction that is supported with visual clues is more beneficial to them.
- Multimedia: A wide variety of multimedia materials are available to enhance teaching and learning. These range from simple tape recordings to videos, DVDs, interactive CD-ROMs, and an increasing number of resources available on the Internet. Brief video clips at www.pbs.com, and www.nationalgeographic.com are effective tools. For some students and tasks, media in the students' native language may be a valuable source of information. It is important to preview Web sites for appropriateness and readability, especially when using them with beginning and intermediate-level students.
- **Demonstrations:** Demonstrations provide visual support and modeling for English learners. If you have a lesson task that includes supplementary materials, then you can scaffold information by carefully planning demonstrations that model how to use the materials and follow directions. Students can then practice these steps in groups or alone, with you or other experienced individuals nearby to assist as needed.
- Related Literature: A wide variety of fiction and nonfiction texts can be included to support content teaching. Many content teachers create class libraries with trade books on key topics. Some teachers ask librarians to set aside books on related topics as well. Students can read these as supplements to the textbook. They offer a more relaxing way to look at a topic in more depth. Class libraries

- can promote more independent reading among students, which is valuable for vocabulary development and reading comprehension practice.
- Hi-lo Readers and Thematic Sets: Some publishers offer classic literature as well as fiction and nonfiction selections in a hi-lo format. The stories are of high interest but lower readability levels and tend to include many visuals and a glossary. Some books are grouped into thematic sets (e.g., Civil Rights Leaders Around the World) and can accompany different content area courses. The books in each set are written at different reading levels (e.g., one below-level book, two on-level books, one above-level book). They are useful for classes that have students with multiple proficiency levels in English.
- Chapter Summaries: Some textbook publishers provided one-page summaries of each chapter. These overviews present the key ideas. The summaries are often available in Spanish and sometimes in other languages as well. They can be used to preview the topic or to review it afterwards.
- Adapted Text: A type of supplementary reading material that can be very effective for English learners, as well as struggling readers, is adapted text. Without significantly diminishing the content concepts, a piece of text (usually from a grade-level textbook) is adapted to reduce the reading level demands. Complicated, lengthy sentences with specialized terminology are rewritten in smaller chunks. Definitions are given for difficult vocabulary in context. Please note that we are not advocating "dumbing down" the textbook, an approach that in the past yielded easy-to-read materials with virtually no content concepts left intact. Rather, we suggest that the major concepts be retained but the reading level demands of the text be reduced.



SIOP® FEATURE 5:

Adaptation of Content to All Levels of Student Proficiency

In many schools, teachers are required to use textbooks that are too difficult for English learners to read. We have previously mentioned the problem of "watering down" text to the point where all students can read it; content concepts are frequently lost when the text is adapted in this way. We also know English learners cannot be expected to learn all content information by listening to lectures.

Therefore, we must find ways to make the text and other resource materials accessible for all students, adapting them so that the content concepts are left intact. Several ways of doing this have been recommended for students who have reading difficulties (Readance, Bean, & Baldwin, 2001; Ruddell, 2007; Vacca & Vacca, 2010), and they work equally well for English learners. These approaches can be used throughout a lesson, as a prereading instructional strategy, as an aid during reading, and as a postreading method for organizing newly learned information.

Native language supports can help with adapting the content too. If some students are literate in their native language, texts written in that language may be used

to supplement a textbook or clarify key concepts. Students may conduct research using native language materials and share the information with classmates in English. Increasingly, the Internet offers native language Web sites, especially for the more commonly taught languages, and authentic materials such as newspapers can be found online. For students who are not literate in their native language but have oral skills, native language broadcasts, podcasts, audio books, and access to knowledgeable adults who speak their language may be additional sources of information.

Suggestions for adapting text to make it more accessible include the following:

- Summarizing the text to focus on the key points of information: This approach can help focus the learning on key historical events, steps for solving a math problem, or understanding the plot in a story. The new text might be written as an outline, a list of bulleted points, or a graphic organizer like a flow chart.
- Elaborating the text to add information: This approach may make a text longer, but the adapter can embed definitions of difficult words or provide more background information.

Although time consuming, rewriting text is an effective modification of curricular materials because information is organized in small sequential steps, or logical chunks of information. Short, simpler sentences are rewritten from long, complex, dense ones. An example of a complex sentence from a science text follows: "Electrons have negative electric charges and orbit around the core, nucleus, of an atom." A simple adaptation of this sentence is, "Electrons have negative charges. They orbit around the core of the atom. The core is called the nucleus."

Ideally, rewritten paragraphs should include a topic sentence with several sentences providing supporting details. Maintaining a consistent format promotes easier reading for information-seeking purposes. All sentences included in the rewritten text should be direct and relevant to the subject. In the following example, a paragraph of original text is taken from an anthology theme in a reading series (Cooper et al., 2003). This passage was excerpted from a piece of nonfiction literature, *Into the Mummy's Tomb*, written by Nicholas Reeves.

Original text: "Tutankhamen's mummy bore a magnificent mask of burnished gold, which covered its face and shoulders. Its headcloth was inlaid with blue glass. The vulture and cobra on its forehead, ready to spit fire at the pharaoh's enemies, were of solid gold" (p. 237).

We have rewritten the original text as follows:

Adapted text: "King Tutankhamen's mummy wore a magnificent mask, made of very shiny gold. It covered the face and shoulders of the body. The part of the mask over the forehead looked like a gold headcloth. Blue glass was sewed into the headcloth. Shapes of a vulture (a type of bird) and a cobra (a type of snake) were above the eyes on the mask. They were made of solid gold. They looked like they could attack King Tut's enemies."

As you compare the texts, you see some thought was involved in the rewrite. Some words, like "magnificent," are Latin cognates and should be kept if you have students who speak a language like Spanish or Portuguese. Some patterns and expressions are repeated, such as "made of," because once students figure them out they can read more fluently the next time they encounter them. Here are some guiding principles to keep in mind when rewriting text:

- Decide what students need to learn from the text.
- Focus on concrete concepts first, then abstract.
- Reduce nonessential details.
- Relate new information to students' experiences (e.g., include a familiar analogy).
- Use visual representations—maps, charts, timelines, outlines.
- Simplify vocabulary but keep key concepts and technical terms.
- Elaborate to explain concepts if necessary.
- Check word choice and sentence order (e.g., for a question, begin with the question word; for an if-then statement, begin with the if clause).

Obviously, adapting text like this takes time, and it is not easy to do. Note here that the adapted version is slightly longer than the original, which often happens when definitions are included. If you have a large number of English learners in your classroom, adapted text can be very beneficial, and it is worth the time and effort to provide students with more accessible material. Be sure to have a colleague read the adapted text to make sure it clarifies rather than confuses the content.



SIOP® FEATURE 6:

Meaningful Activities That Integrate Lesson Concepts with Language Practice Opportunities for Reading, Writing, Listening, and/or Speaking

To the extent possible, lesson activities should be planned to promote language development in all skills while English learners are mastering content objectives. We want to provide oral and written language practice that is relevant to the lesson concepts, but remember that activities that generate language practice are not language objectives unless you are teaching about a language skill or structure needed to accomplish the activities.

Students are more successful when they are able to make connections between what they know and what they are learning by relating classroom experiences to their own lives. These meaningful experiences are often described as "authentic," because they represent a reality for students. That is, classroom experiences mirror what actually occurs in the learner's world. Authentic, meaningful experiences are especially important for English learners because they are learning to attach labels and terms to things already familiar to them. Their learning becomes situated rather than abstract when they are provided with the opportunity to actually experience what they are being taught.

Too often, however, English learners are assigned activities that are not meaningful and are unrelated to the content and activities pursued by the other English proficient students in their classes. It is essential that content standards that apply

to students with English proficiency also apply to English learners, and that the planned activities reflect and support these standards.

Consider a class of fifth-grade students studying insects—butterflies in particular. While the rest of the class learns the scientific names and habitats of varied kinds of butterflies, the teacher has the English learners color and cut out pictures of butterflies to make a butterfly mobile. This activity is neither authentic nor is it relevant for these students. In this instance, the teacher obviously has not provided meaningful activities that support the grade-level science content standards.

As you continue to read this chapter and the remaining ones, you will find a host of teaching ideas for meaningful activities that integrate the concepts with language practice. The resources listed in Appendix D provide many more as well.



Teaching Ideas for Lesson Preparation

- Presenting Objectives to the Class. Effective SIOP teachers do more than just go through the motions by writing the objectives on the board and reading them quickly to the class. Getting the students involved in thinking about the objectives is a teaching opportunity that should not be squandered. Here are some ways to make the presentation of objectives more productive. Other ideas can be found in Echevarría, Vogt, and Short (2010c, p. 21).
 - Ask students to pick out important words from the objective and highlight them—for example, the verbs and nouns.
 - Ask students to paraphrase the objectives with a partner, each taking a turn, using the frame: "We are going to learn _____."
 - Present the objective and then do a Timed Pair-Share, asking students to predict some of the things they think they will be doing for the lesson that day.
- Number 1, 2, 3 for Self-Assessment of Objectives (Short, Vogt, & Echevarría, 2011a, p. 71; Vogt & Echevarría, 2008, p. 179). In this activity, students are asked to diagnose their knowledge about a topic and then take some responsibility for learning new information during the lesson. At the beginning of the lesson, display the objectives and ask students to rate themselves on how well they understand each one. You may read each aloud and have students show with their fingers which of the following ratings fit:
 - 1. I understand this concept.
 - 2. It looks familiar, or I have studied something like this before.
 - 3. I don't know this.

At the end of the lesson, return to the objectives and ask students to rate again, "How well did you meet the objective today?"

- 1. I can teach the concept to someone else.
- 2. I understand most of it but not everything.
- 3. I don't understand completely. I need more time/practice/examples.

- **Jigsaw Text Reading** (Aronson et al., 1977). Originally designed as a cooperative learning activity for all students, Jigsaw works well with English learners when there is a difficult-to-read text.
 - 1. Form cooperative learning "home" groups and then have one or two members from each come together to form a new group of "experts."
 - 2. Assign each new "expert" group a different section of the text to be read. This group either reads the text orally taking turns, or partners read to each other, or group members read the text silently.
 - 3. Following the reading, each "expert" group reviews and discusses what was read, determining the essential information and key vocabulary. You may have a worksheet for them to complete to record key information.
 - 4. Check carefully with each "expert" group to make sure all members understand the material they have read.
 - 5. After you are confident that the "experts" know their assigned information, they return to their "home" groups and teach fellow group members what they learned.

This process scaffolds the learning of English learners because in both groups they are working with others to understand the text. Some classmates may have more background information on the topic. Text can be read with other students, reducing the demands of tackling lengthy sections alone. Depending on English proficiency, English learners may join an "expert" group individually or with a partner. It is important that you form the "expert" groups rather than letting the students choose their own group members.

- Graphic Organizers. These schematic diagrams are ubiquitous in today's class-rooms, but that does not reduce their value. When preparing a lesson, teachers should think about possible graphic organizers that can provide conceptual clarity for information that is difficult to grasp. They help students identify key content concepts and make relationships among them (McLaughlin & Allen, 2002). Graphic organizers also provide students with visual clues they can use to supplement written or spoken words that may be hard to understand.
 - When used before reading, graphic organizers can build background for complex or dense text.
 - When used *concurrently with reading*, they focus students' attention and act as a guide to the information. They help students make connections (e.g., Venn diagram), take notes, and understand the text structure (e.g., a timeline informs students the text will be organized chronologically).
 - When used *after reading*, graphic organizers can be used to record key content information or personal understandings and responses (Buehl, 2001).

Graphic organizers include story or text structure charts, Venn diagrams, story or text maps, timelines, discussion webs, word webs, thinking maps, and flow charts. Vogt and Echevarría (2008) include a number of templates for these graphic organizers.

- Outlines. Teacher-prepared outlines equip students with a form for note-taking while reading dense portions of text, thus providing scaffolded support. These are especially helpful if major concepts, such as the Roman numeral level of the outline, are already filled in. The students can then add other information to the outline as they read. For some students, an outline that is entirely completed may be helpful to use as a guide to reading and understanding the text. Figure 2.5 shows an example of a scaffolded outline for a reading on the circulatory system.
- Audio Supported Text. Technology tools have the promise of making teaching more meaningful and rewarding. Through audio supports, teachers can help convey new information to students, scaffolding their understanding of the main concepts. Translation and interpretation tools have improved considerably in the past decade. Teachers can now type a sentence or paragraph about a concept to be studied into a Web site that provides translation services and have the concept rewritten in a student's native language. Many sites offer an audio version students can listen to. Several textbook publishers are providing the text on CD or Web site, too, and some have audio options in English or Spanish. Students are encouraged to listen to the audio text while they follow along in the book. For some students, multiple exposures to the audio version of the text

FIGURE 2.5 Scaffolded Outline

I. Major Organs A. Heart 1. Pumps blood throughout the body

П

The Circulatory System

В
1
2
II. Major Vessels
A. Artery
1. Takes blood away from heart
2
B. Vein
1
2.
C
 Connects arteries and veins .
III. Types of Blood Cells
A. Red blood cells
1
В
1. Fights disease
C. Platelets
1

may result in a more thorough understanding. Ideally, audio support should be available for both home and school learning center use.

We want to make sure that we are clear, however, that the native language audio supports are just that: supports. Our goal is to help students understand text and information presented orally in English, and our job is to teach the vocabulary, sentence structure, connections between sentences and paragraphs, and other necessary information to the students so they can increase their independence. But if we can give them the gist of what they will be learning in English beforehand through their native language, we can then build on that (new) prior knowledge, and, with careful lesson planning, advance their language skills and strengthen that content knowledge.



Differentiating Ideas for Multi-level Classes

The Lesson Preparation component offers teachers multiple opportunities to meet the needs of students with different abilities or language proficiency levels in their classrooms. Although it takes time to prepare a lesson for different groups of students, the investment pays off when all your students learn the material and you do not have to reteach.

- The first step is knowing your students: their literacy skills both in English and in their native language, their schooling backgrounds (including courses they have studied), their learning styles and multiple intelligences. With this knowledge you can have realistic expectations for what they can accomplish and plan activities accordingly.
- The second step is to consider where in your lesson students will need some differentiated instruction.
 - Is it when you introduce new content? If so, should you use different materials or a different presentation style? Should you modulate your speech? Preteach vocabulary?
 - Is it when students must perform a task to practice or apply the new information or language goal? If so, you may have to consider how you will group the students. Or you may assign different tasks to different groups (based on language proficiency or learning style, for example). Or you may prepare different handouts.
 - Is it when you are checking for comprehension? Then you might plan leveled questions so you can address students in ways that they comprehend the question and have a chance to respond. Or you may prorate the assignment students complete (e.g., a 1-page report versus a 3-page report).

A few specific examples of differentiated activities follow.

• Differentiated Sentence Starters (Short, Vogt & Echevarría, 2011a, pp. 30–31). This technique converts the practice of using teacher-developed leveled questions into sentence starters that the students might use orally or in writing.

- 1. Begin with the essential question of a lesson.
 For example: How did the Renaissance affect Italian political and cultural development?
- 2. Write questions at a variety of levels of difficulty for each question. For example: (a) How did the Renaissance impact the style of art in Italy? (b) What was the political system like before and after the Renaissance?
 - (c) What was the significance of the Renaissance?
- 3. Convert the questions into sentence starters.

 For example: (a) The impact of the Renaissance on art was (b) Before the Renaissance, the political system was After it, the political system (c) The significance of the Renaissance was
- 4. Post the questions and have the students respond, either by self-selecting a sentence starter or being assigned one.
- Leveled Study Guides. You can write study guides to accompany assigned text or a unit's topics specifically for diverse students' needs and their stages of language and literacy development. All students are expected to master the key concepts in the text or unit; however, some need support for comprehension and some can delve more deeply into the material. For students who can easily read the text material, write a study guide so they can extend and enrich the subject material, and be sure to include challenging questions or tasks. For students who need a little support, write a study guide with definitions and "hints" for unlocking the meaning to lead them through the text. Include fewer challenging questions and tasks. For some English learners and struggling readers, create a study guide with brief summaries of the text or topic along with more manageable questions and tasks. Questions, tasks, and statements on the leveled study guides can be marked with asterisks as follows (from most manageable to most challenging):
 - *All students are to respond to these questions/statements/tasks.
 - **Group 1 students are required to complete these questions/statements/tasks.
 - ***Group 2 students are required to complete these questions/statements/tasks.

Of course, the option to try the more challenging questions or statements should be open to all students.

• Highlighted Text. A few literature anthologies or content textbooks may be marked and reserved for students acquiring English and/or for those with delayed literacy development. Overriding ideas, key concepts, topic sentences, important vocabulary, and summary statements are highlighted (by the teacher or other knowledgeable person, using a highlight pen or highlight tape) prior to the students using the books. Students are encouraged to first read only the highlighted sections. As confidence and reading ability improve, more of the unmarked text is attempted. The purpose of highlighted text is to reduce the reading demands of the text while still maintaining key concepts and information.

Rating Lessons with the SIOP® Protocol

As we mentioned at the start of this chapter, we want to give you the opportunity to learn to use the SIOP protocol, both for your own teaching and for coaching other teachers. So, after we describe each teacher's lesson below, we will ask you to score the SIOP features for this component on a scale of 4–0, with 4 meaning the feature was well implemented and 0 meaning it was not present. You will probably notice that some ratings for the features will seem quite obvious to you (usually those that merit 0, 1, or 4 on the scale) while others will be more challenging.

It is important that you rate each feature as reliably as possible. That is, you need to develop consistency in your rating by having a clear understanding of each feature and how it "looks" during a SIOP lesson. Therefore, it is very important that you discuss with other teachers, coaches, or supervisors how you determined your ratings on the various SIOP features for the lessons depicted in this book. Some teachers work with a partner to establish reliability. A number of schools have SIOP teacher groups that meet to read the scenarios and discuss the ratings. After these groups deepen their understanding of how the features should be implemented, they may watch video clips of instruction and rate those lessons, too. With practice in multiple classes and subject areas and discussion about the ratings you give, you will develop consistency in your ratings. Chapter 11 provides more explanation on scoring and interpreting the SIOP protocol.

Although we organized this book so that you can score the lessons as you read, in real life, you may not want to give scores on each feature, especially as teachers are learning to implement the model. You can record comments and note if a feature is present or absent, and then use the protocol to offer targeted feedback. You will also notice that five of the thirty features have an NA option (see Appendix A). After years of research, we determined that those five (such as Adaptation of Content, in Lesson Preparation) might not be needed in every SIOP lesson. Adaptation of Content, for example, may not be necessary in a class with advanced English learners.

The Lesson

The lesson described below is intended to teach fourth-grade children about the Gold Rush, in particular, about the trails taken by the pioneers to get from the eastern and midwestern parts of the United States to California.

The Gold Rush (Fourth Grade)

The classrooms described in the teaching scenarios in this chapter are in a suburban elementary school with heterogeneously mixed students. English learners represent approximately 30% of the student population, and the children speak a variety of languages. In the fourth-grade classrooms of teachers Ms. Chen, Mrs. Hargroves, and Mr. Hensen, the majority of the English learners are at the intermediate stage of English fluency.

(continued)

The Gold Rush (Fourth Grade) (continued)

As part of the state's fourth-grade social studies curriculum, Ms. Chen, Mrs. Hargroves, and Mr. Hensen have planned a unit on the California Gold Rush. The school district requires the use of the adopted social studies series, although teachers are encouraged to supplement the text with primary source materials, literature, illustrations, and realia. The content topics for the Gold Rush unit include westward expansion, routes and trails to the West, the people who sought their fortunes, hardships, settlements, the discovery of gold, the life of miners, methods for extracting gold, and the impact of the Gold Rush.

Each of the teachers has created several lessons for this unit. The first is presented here, a 55–60 minute lesson on routes and trails to the West. Specifically, the content of this lesson covers the Oregon Trail, the Overland Trail, and the route around Cape Horn.

Teaching Scenarios

To demonstrate how Ms. Chen, Mrs. Hargroves, and Mr. Hensen prepared their first lesson on the trails west, we visit them in their fourth-grade classrooms. As you read, think of the SIOP features for Lesson Preparation: content objectives, language objectives, content concepts, supplementary materials, adaptation of content, and meaningful activities.

Ms. Chen

As Ms. Chen began the first day's lesson on the Gold Rush, she referred students to the content objectives written on the board: (1) Find and label the three main routes to the West on a map; (2) Tell one or two facts about each of the three trails. After reading the content objectives aloud, Ms. Chen then explained the language objectives: (1) Write sentences explaining how the three routes to the West were given their names; (2) Tell how the structure of some words gives clues to their meaning.

Next, Ms. Chen asked the students to brainstorm why people would leave their comfortable homes and travel great distances to seek their fortunes. She listed students' responses on the board and then asked them to categorize the words or phrases, using a List-Group-Label activity. The children determined the following categories: For Adventure, To Get Rich, For a Better Life. Examples of phrases under the first category included *riding in a wagon train, seeing new places, climbing mountains,* and *becoming a gold miner*.

Ms. Chen then assigned her students a quick-write about the Gold Rush. She distributed two or three picture books on the topic for each of the table groups (four or five children per group) and directed students to use their background knowledge, the List-Group-Label categories and phrases, and the books to generate a brief paragraph on the Gold Rush. Students were encouraged to work quietly with a partner, and each pair was expected to have a brief paragraph written for later whole-class discussion.

While the rest of the class were preparing their quick-writes, Ms. Chen asked the six English learners with very limited English proficiency to meet her at the table in the back of the room. For five to seven minutes, she provided the small group of students with a jump start for the Gold Rush unit they were about to begin. She introduced key

vocabulary with illustrations and simple definitions, led the students through a picture and text walk of two picture books and the textbook chapter, showed the trails on the U.S. map, and talked about where the pioneers began their journey and where they were heading in California. Ms. Chen showed the students some samples of fool's gold (iron pyrite) and asked them how they thought the gold miners were able to get the gold from the earth. After the brief jump-start lesson, Ms. Chen convened the entire class for a brief discussion of the quick-writes and a whole-class introduction to the unit. Several of the groups volunteered to share their quick-writes with the entire class.

Ms. Chen then referred to the key vocabulary she had previously written on the board: Oregon Trail, Overland Trail, Route around Cape Horn. She asked students to think about the names of the trails they were going to be reading about, and she asked, "Why are streets given their names?" She then asked students to call out some of the names of streets on which they lived. They offered First Street, River Avenue, Main Street, and Mill Creek Road, among others. Ms. Chen then suggested that trails, routes, streets, avenues, and highways are frequently named after geographical landmarks. She explained that often we learn about places and surrounding areas by examining their names.

Following a shared reading of the social studies text, Ms. Chen asked the students to examine the map of the United States on the wall and try to determine why the three main trails to the West were named as they were. The children volunteered appropriate ideas for the first one, the Oregon Trail. Ms. Chen then wrote "Over + land = Overland." One child said, "I get it! They went over the land!" The teacher reinforced this by pointing out the "over the land" route on the wall map. She then wrote "Route around Cape Horn" on the board and asked students to think about the name's meaning while directing them to look at the map. One child said, "See, the land looks kind of like a horn. And they had to sail around it!" To check understanding, Ms. Chen asked each student to tell a partner in a complete sentence why the three western routes were given their respective names. These reasons were shared with the others in their groups.

Next, Ms. Chen distributed a duplicated map of the United States to each group. She asked three students to come to the wall map and point to the Route around Cape Horn, the Overland Trail, and the Oregon Trail. She then modeled with an electronic document reader how to locate and color in the trails, and then directed the students to work together as a team to complete their groups' maps.

In the few remaining minutes, Ms. Chen distributed a skeleton outline of the chapter that students would complete individually the following day. The outline had subheadings labeled for each of the trails: "Location," "Characteristics," "Challenges," and "Advantages." She told the groups they would have about ten minutes to begin working on the outline, using their maps and their text chapter. Ms. Chen wrapped up the lesson by reviewing the content and language objectives and by having several students report a number of facts about each of the trails.

On the SIOP form in Figure 2.6, rate Ms. Chen's lesson on each of the Lesson Preparation features.

Mrs. Hargroves

Mrs. Hargroves began her lesson on the trails west by stating, "Today you'll learn about the Oregon Trail, the Overland Trail, and the Route around Cape Horn.

Lesson Preparation Component of the SIOP® Model: Ms. Chen's Lesson FIGURE 2.6 1. Content objectives clearly Content objectives No clearly defined content defined, displayed and objectives for students for students implied reviewed with students 2 3 2. Language objectives clearly Language objectives No clearly defined language defined, displayed and for students implied **objectives** for students reviewed with students 3. Content concepts **Content concepts** Content concepts inappropriate appropriate for age and somewhat for age and educational educational background appropriate for age background level of students level of students and educational background level of students 2 4 3 Some use of No use of supplementary 4. Supplementary materials used to a high degree, making the supplementary materials lesson clear and meaningful materials (e.g., computer programs, graphs, models, visuals) 3 1 NA 5. Adaptation of content (e.g., Some adaptation of No significant adaptation text, assignment) to all levels **content** to all levels of of content to all levels of of student proficiency student proficiency student proficiency 3 2 6. Meaningful activities that Meaningful activities No meaningful activities that integrate lesson concepts that integrate lesson integrate lesson concepts (e.g., interviews, letter concepts but provide with language practice writing, simulations, models) few language practice with language practice opportunities for

reading, writing, listening, and/or

speaking

opportunities for reading,

writing, listening, and/or

speaking

We'll also be working on maps, and I want you to color the Overland Trail a different color from the color you use for the Cape Horn route. When you learn about the Oregon Trail, you'll complete the map with a third color. By the time you're finished, you should have all three routes drawn on the map using different colors." She held up a completed map for the students to see as an example.

Mrs. Hargroves then presented a brief lecture on the trails west, using the map in the textbook to point out where the pioneers traveled. She referred students to pictures in the book and answered questions. She read the chapter title and the first few paragraphs about the trails west and then assigned the remainder of the chapter as independent reading. She suggested that if students had difficulty with any words, they should hold up their hands and she would circulate to give assistance.

After about twenty minutes, Mrs. Hargroves asked students to stop reading. She distributed the U.S. maps and colored pencils and asked the students to work with a partner to complete their maps by locating and coloring in the three trails. When most were finished, Mrs. Hargroves asked three of the students to show and explain their maps to the other students. All maps were then submitted for a grade. At the conclusion of the lesson, students were given the following writing assignment for homework: "If you had been a pioneer, which trail would you have chosen? Why?"

On the SIOP form in Figure 2.7, rate Mrs. Hargroves's lesson on each of the Lesson Preparation features.

Mr. Hensen

Mr. Hensen began his lesson on westward expansion by introducing the topic and asking how many children had been to California. He then asked, "How did you get to California? Did you go by car? By plane? By boat? Or did you go by wagon train? Today you're going to learn how the pioneers made their voyages to California." Mr. Hensen then showed a brief video on the westward expansion. At the end of the video, he introduced the terms Oregon Trail, Overland Trail, and Route around Cape Horn, and then read aloud two paragraphs from the textbook that described the routes. Then he numbered off the students to form six new groups and quickly moved students into the groups. With their team members, students did a Jigsaw activity for the remainder of the chapter, and when they had finished reading, everyone returned to their original home groups to report on what they had read. The English learners with limited English proficiency were partnered with other students during the Jigsaw reading activity.

Mr. Hensen then wrote the names of the three trails on the board, and on his wall map he pointed out where the pioneers had traveled along the three routes. He directed the groups to divide the three trails, with one or two students in each group drawing the Oregon Trail and the other students drawing either the Overland or Cape Horn trails. Their next task was to tell the other students in their group how to draw and color their maps, using the map in the text and the language on the board as a guide. Mr. Hensen circulated through the room while the children completed the mapping activity, assisting as necessary. At the lesson's conclusion, students were directed to pass in their maps. Those maps that were not finished were assigned as homework.

On the SIOP form in Figure 2.8, rate Mr. Hensen's lesson on each of the Lesson Preparation features.

FIGURE 2.7 Lesson Preparation Component of the SIOP® Model: Mrs. Hargroves's Lesson

4	3	2	1	0	
1. Content objectives clearly defined, displayed and reviewed with students		Content objectives for students implied		No clearly defined content objectives for students	
4	3	2	1	0	
 Language objectives clearly defined, displayed and reviewed with students 		Language objectives for students implied		No clearly defined language objectives for students	
4	3	2	1	0	
3. Content concepts appropriate for age and educational background level of students		Content concepts somewhat appropriate for age and educational background level of students		Content concepts inappropriate for age and educational background level of students	
4	3	2	1	0	
4. Supplementary materials used to a high degree, making the lesson clear and meaningful (e.g., computer programs, graphs, models, visuals)		Some use of supplementary materials		No use of supplementary materials	
to a high degree, making the lesson clear and meaningful (e.g., computer programs,	3	supplementary	1		
to a high degree, making the lesson clear and meaningful (e.g., computer programs, graphs, models, visuals)	3	supplementary materials	1	materials	
to a high degree, making the lesson clear and meaningful (e.g., computer programs, graphs, models, visuals) 4 5. Adaptation of content (e.g., text, assignment) to all levels	3	supplementary materials 2 Some adaptation of content to all levels of	1	0 NA No significant adaptation of content to all levels of	

	JRE 2.8 Lesson Preparation Co	mponen	t of the SIOP® Model: Mr. H	Hensen's Le	esson
	4	3	2	1	0
1.	Content objectives clearly defined, displayed and reviewed with students		Content objectives for students implied		No clearly defined content objectives for students
	4	3	2	1	0
2.	Language objectives clearly defined, displayed and reviewed with students		Language objectives for students implied		No clearly defined language objectives for students
	4	3	2	1	0
3.	Content concepts appropriate for age and educational background level of students		Content concepts somewhat appropriate for age and educational background level of students		Content concepts inappropriate for age and educational background level of students
	4	3	2	1	0
4.	Supplementary materials used to a high degree, making the lesson clear and meaningful (e.g., computer programs, graphs, models, visuals)		Some use of supplementary materials		No use of supplementary materials
	4	3	2	1	0 N
5.	Adaptation of content (e.g., text, assignment) to all levels of student proficiency		Some adaptation of content to all levels of student proficiency		No significant adaptation of content to all levels of student proficiency
	4	3	2	1	0
6.	Meaningful activities that integrate lesson concepts (e.g., interviews, letter writing, simulations, models) with language practice		Meaningful activities that integrate lesson concepts but provide few language practice opportunities for		No meaningful activities that integrate lesson concepts with language practice

Discussion of Lessons

1. Content Objectives Clearly Defined, Displayed, and Reviewed with Students

Ms. Chen: 4 Mrs. Hargroves: 2 Mr. Hensen: 1

During their planning, Ms. Chen, Mrs. Hargroves, and Mr. Hensen approached the task of writing and delivering content objectives in different ways.

- A review of Ms. Chen's lesson plan book indicated the following objectives for her first lessons on the Gold Rush: "Students will be able to (1) identify the three main routes to the West on a map; (2) state at least one distinct fact about each of the three trails." She wrote the content objectives on the whiteboard and she clearly, explicitly, and simply stated them in a manner that was comprehensible to her students: "Find and label the three main routes to the West on a map; and tell one or two facts about each of the three trails." (See Figure 2.9 for Ms. Chen's lesson plan.) Her lesson received a "4."
- Mrs. Hargroves wrote a content objective in her plan book but not on the board, and she orally stated what she wanted her students to learn and do in simple terms. However, her English learners might have had difficulty understanding what the purpose was for the activities they were to do. Some students may have inferred that the purpose for the lesson was the coloring activity rather than learning where the trails and routes were. Further, the content objectives were not written on the board or overhead for the students to see. Her lesson was rated "2" for this feature.
- A review of Mr. Hensen's lesson plan book revealed no content objectives for the Gold Rush lesson on routes and trails. He did not state any content objectives for the students, but just began the lesson with a brief discussion and the video. Some students may have been able to infer the purpose of the map work, but English learners may have been unaware of the purpose of these assignments. His lesson received a "1."
- 2. Language Objectives Clearly Defined, Displayed, and Reviewed with Students

Ms. Chen: 4

Mrs. Hargroves: 0

Mr. Hensen: 2

The three teachers incorporated language objectives into their lesson planning and delivery to varying degrees.

• Ms. Chen wrote the following language objectives on the board and read them orally to her students: (1) Write sentences explaining how the three routes to the West were given their names; (2) Tell how the structure of some words gives clues to their meaning. Ms. Chen provided opportunities for students to meet

FIGURE 2.9 Ms. Chen's SIOP® Lesson Plan

	Date: Feb. 10-11		Grade/Class/	Subject: 4 - Soc	ial Studies		
	Unit/Theme: Gold Rush		Standards: History—Social Studies 4.3				
	Content Objective(s):Students will		find and labe	13 routes to Wea	st on map;		
	SW tell 1-2 facts about each trail						
	Langua	age Obiective(s):	Students will	write senter	nces explaining hor	v 3 routes got	
					s clues to meaning		
		Key V	ocabulary	Supplementary Materials			
		gon Trail			Picture books	Outlines	
		crland Trail			Iron Pyrite	P' " \	
	Kov	te around Cape I	torn		U.S. Map (Pow	ertoint Slide)	
				SIOP F	eatures		
	Skel.	Preparation		Scaffolding		Grouping Options	
	utline		ion of Content	/ Madal	n	✓ Whole class	
Jump	start		Background	_✓ Guide	d practice endent practice	✓ Small groups	
			Past Learning es incorporated		rehensible input		
		List/E	aroup/Label				
		Integration of I <u>✓</u> Reading		Application / Hands	-on maps	Assessment _✓ Individual	
		✓ Writing	•	✓ Meani	ngful	✓ Group	
		_✓ Speakin			to objectives	_✓ Written Oral	
		_ ∠ Listenin	8 	_v FIOIIIC	tes engagement	Olai	
Min.	Lesso	on Sequence					
5		Content/lang. of		leave their	homes to seek G	orchung (2	
	2. Brainstorm — Why would people leave their homes to seek fortunes? 3. List – Group – Label: Categorize brainstormed words & phrases						
10		EOS - Quick					
		5. ELs — Jumpstart text/fool's gold/pictures					
5	6.	6. Quick Write Share Out					
10	7. Intro. Vocabulary: Why are streets given their names? 8. Shared reading — pp. 124-128						
10	Comment of the first than the first of						
	10.	Pass out U.S. ma	ps —	ŭ		·	
_		Model with Pon			1 .		
5 10	12.	Skeleton Outline (Start, if time)	e — VVork in gr	oups - fill in	categories -		
	Refle	ections:					
			d, but everyone	finished the	maps. Next time,	save Skeleton outlines for	
		day. Kids loved		•	,	1	

the objectives by encouraging class and small group discussion, assigning sentences about the three trails, and having each student convey important facts related to the lesson. Further, she scaffolded students' understandings of the names of the routes and trails by having them examine the names of familiar street names, and she led them through an analysis of the names of the historical routes, such as "over + land." She pointed out the compound word and supported students' approximations. At the end of the lesson, she orally reviewed the language objectives for the students. Her lesson was rated a "4."

- Mrs. Hargroves did not include any language objectives in her lesson plan and she did not suggest any to the students. She did not discuss the meanings of the names or terms used in her demonstration and explanations, nor did she encourage her students to use the terminology and concepts during discussion. Further, Mrs. Hargroves expected students to read the textbook with very little support. She mostly conveyed information orally, and she expected students to complete the writing assignment as homework with no modeling or assistance. Her lesson received a "0."
- Although Mr. Hensen had no stated language objectives, he did write key vocabulary on the board. He scaffolded the mapping activity and the text reading by having the children work in groups and by having each group member explain the map and key words to the others. This activity was appropriate for beginning English learners because they were supported by each other, and their oral explanations were not "public" for the entire class. The lesson would have been more effective had Mr. Hensen explained his language objectives to the children, emphasizing the importance of listening carefully and of giving clear directions. Though one purpose of the lesson was to build listening and speaking skills, the children were not informed of these objectives either orally or in writing. His lesson was rated a "2."
- 3. Content Concepts Appropriate for Age and Educational Background Level of Students

Ms. Chen: 4

Mrs. Hargroves: 4

Mr. Hensen: 4

Each of the teaching scenarios indicates that the three fourth-grade teachers, **Ms. Chen, Mrs. Hargroves,** and **Mr. Hensen,** were teaching a unit on the Gold Rush. The content concepts were appropriate because they are congruent with the fourth-grade state and district standards for the social studies curriculum. Each lesson was rated a "4."

4. Supplementary Materials Used to a High Degree, Making the Lesson Clear and Meaningful

Ms. Chen: 4

Mrs. Hargroves: 1

Mr. Hensen: 3

 Ms. Chen used a number of supplementary materials to make the content more accessible to the learners: picture books on the Gold Rush, a sample rock of fool's gold, and the wall map of the United States, as well as technology (the document reader) to model how students might color the trails on their maps. Her lesson received a "4" on this feature.

- Mrs. Hargroves used only the wall map and the textbook during her lecture and when the students were coloring their maps. She did not demonstrate, model, or show visuals or other resources to support student learning other than the illustrations in the textbooks. Because Mrs. Hargroves delivered the content orally, some English learners may have had difficulty making connections between the lecture and the text illustrations and maps. Her lesson received a "1."
- Mr. Hensen's video enabled his English learners and other students to connect with the pioneers in the Gold Rush, and his use of the wall map enhanced student learning about the location of the three trails. His lesson was rated "3."
- 5. Adaptation of Content to All Levels of Student Proficiency

Ms. Chen: 4

Mrs. Hargroves: 0

Mr. Hensen: 3

- Ms. Chen adapted the grade-level content for her English learners and struggling readers in a number of ways. First, she had students brainstorm, categorize, and then quick-write information about the Gold Rush. She then differentiated instruction by providing a "jump start" for her English learners by preteaching the lesson concepts and key vocabulary. She also had a variety of picture books that were easier to read and more comprehensible than the textbook. In addition, she used a skeleton outline that included key information. The students used this outline to organize their understanding of the content concepts. Her lesson was rated "4."
- Mrs. Hargroves did not adapt the content for her English learners, other than by lecturing on the topic. Without any supplementary support except the pictures in the textbook and her oral reading of the first few paragraphs, the English learners may have had difficulty learning key concepts just by listening and reading independently. Further, Mrs. Hargroves did not paraphrase or clarify important points during her lecture, nor did she explain or define key language or vocabulary before or during reading. Her lesson plans made no mention of other ways to adapt the content or text. Her lesson received a "0."
- Mr. Hensen provided access to the textbook content through the Jigsaw activity and the video. He grouped the students for their reading so that they read with the support of others and then later conveyed what they had learned to another group of students. However he did not preteach vocabulary they might need to know to fully understand the reading. He also had the students complete their work on the maps in small groups, and he encouraged them to help each other with the assignment. His lesson was rated "3."

6. Meaningful Activities That Integrate Lesson Concepts with Language Practice Opportunities for Reading, Writing, Listening, and/or Speaking

Ms. Chen: 4 Mrs. Hargroves: 2 Mr. Hensen: 4

- Recall that **Ms.** Chen asked students to brainstorm what they knew about the Gold Rush in order to activate and build background. She later asked them to name the streets they lived on. The purpose of this was to make the names of geographic locations meaningful, connecting to familiar street names and then to routes to California. Her jump-start activity for the English learners included picture walks and discussion of key vocabulary, and the students were able to see and hold fool's gold, which simulated the feel and look of gold. The picture books supported their learning, and the skeleton outline provided a meaningful way to summarize the key concepts. Students located and colored in the trails on the U.S. maps after watching modeling by Ms. Chen. Her lesson received a "4."
- Mrs. Hargroves's lesson plan included her lecture, the mapping activity, and the independent reading. Locating the trails by coloring the map was meaningful for students if they understood what they were doing; however, if they were unable to access the text or the lecture, the mapping activity may have been irrelevant. Mrs. Hargroves's lesson received a "2." It was teacher centered, with lecture and independent seatwork the predominant activities. She expected students to complete the homework assignment based only on the information they could gather from the lecture and text. If students did not understand the lecture or comprehend the chapter, it is unlikely that they would be able to write a meaningful essay on what they learned.
- Mr. Hensen activated prior knowledge and background when he asked which students had traveled to California. He also showed the video on the westward expansion, incorporated a Jigsaw reading activity, and had the students complete and explain their maps in triads. All of these activities helped make the content concepts more comprehensible for his English learners, and were considered to be meaningful and appropriate. His lesson was rated a "4."

(For more examples of lesson and unit plans in social studies and history for grades K-12, see Short, Vogt, and Echevarría, 2011a.)

Summary

As you reflect on this chapter and the benefits of lesson planning with clear content and language objectives in mind, consider the following main points:

• Lesson Preparation is a critical foundation for delivering a high-quality SIOP lesson. Thoughtful planning leads to effective teaching—but a great plan does not always guarantee a great lesson for English learners. They require sensitive

- teachers who realize that curriculum must be grade-level appropriate, based on content standards and learning outcomes.
- All SIOP lessons need attention to language with at least one objective devoted
 to furthering the English learners' academic English development. This should
 be a learning objective—an achievement target, not an activity—and teachers
 must teach to the objective during the lesson.
- If children lack background knowledge and experience with content concepts, effective sheltered teachers provide it through explicit instruction and they enhance student learning with appropriate supplementary materials. They provide scaffolded support by adapting dense and difficult text.
- SIOP teachers situate lessons in meaningful, real-life activities and experiences
 that involve students in reading, writing, and discussion of important concepts
 and ideas.
- The principles of effective sheltered instruction and content-based ESL instruction should be reflected in teachers' lesson plans. As we explore the other features of the SIOP Model and see how teachers apply many other important principles in their classrooms, remember that the first step in the instructional process is comprehensive and thoughtful lesson design.

Discussion Questions

- 1. In reflecting on the content and language objectives at the beginning of the chapter, are you able to:
 - a. Identify content objectives for English learners that are aligned to state, local, or national standards?
 - b. Incorporate supplementary materials suitable for English learners in a lesson plan?
 - c. Select from a variety of techniques for adapting content to the students' proficiency and cognitive levels?
 - d. Write language and content objectives?
 - e. Discuss advantages for writing both language and content objectives for a lesson and sharing the objectives with students?
 - f. Explain the importance of meaningful academic activities for English learners?
- 2. What are some advantages to writing both content objectives and language objectives for students to hear and see? How might written objectives affect teacher and student performance in the classroom?
- **3.** Think of a lesson you have recently taught or one you might teach. What would be an appropriate content objective and language objective for that lesson?
- **4.** What are some ways that curriculum intended for younger learners can be used effectively as a supplement for teaching grade-level content concepts? Give examples.

- 5. Many teachers in sheltered settings rely on paper-and-pencil tasks or lectures for teaching concepts. Think of a curricular area (e.g., science, language arts, math, social studies) and discuss some meaningful activities that could be used to teach a concept in that area. What makes each of these activities "meaningful," and how would they provide language practice?
- 6. Begin writing a SIOP lesson. Identify the topic and content and language objectives. Find or create supplementary materials and adapted content as needed. Determine at least one meaningful activity the students can engage in during the lesson. Decide how many class periods will be needed to complete the lesson. When you finish, share your initial lesson plan with a colleague and garner feedback. Revise your lesson.