Making Content Comprehensible for Multilingual Learners: The SIOP® Model

sixth edition

JANA ECHEVARRÍA

Professor Emerita, California State University, Long Beach

MARYELLEN VOGT

Professor Emerita, California State University, Long Beach

DEBORAH J. SHORT

Founder and Director, Academic Language Research & Training

KATIE TOPPEL

English Language Development Specialist, Oregon

Pearson

Content Development: Jeff Johnston
Content Management: Bridget Daly
Content Production: Yagnesh Jani
Product Management: Drew Bennett
Product Marketing: Krista Clark
Rights and Permissions: Jenell Forschler

Please contact https://support.pearson.com/getsupport/s/contactsupport with any queries on this content.

Cover Image by Shutterstock/mangpor2004

Chapter Opener Photo Credits: Chapter 1: Kali9 /E+/Getty images; Chapter 8: FG Trade/E+/Getty image; Chapter 10: Tracy Fowler/MBI/Alamy Stock Photo.

Library of Congress Cataloging-in-Publication Data

Names: Echevarría, Jana, 1956- author. | Vogt, MaryEllen, author. | Short, Deborah, author. | Toppel, Katie, author.
Title: Making content comprehensible for multilingual learners : the SIOP® model / Jana Echevarría, MaryEllen Vogt, Deborah J. Short, Katie Toppel.
Other titles: Making content comprehensible for English learners
Description: Sixth edition. | Hoboken, NJ : Pearson, 2024. | Includes bibliographical references and index.
Identifiers: LCCN 2022044094 | ISBN 9780137878857 (paperback)
Subjects: LCSH: Revised edition of: Making content comprehensible for English learners. Fifth edition. 2017. | English language—Study and teaching (Elementary)—Foreign speakers. | Language arts—Correlation with content subjects.
Classification: LCC PE1128.A2 E248 2022 | DDC 372.652/1044—dc23/eng/20221027
LC record available at https://lccn.loc.gov/2022044094

ScoutAutomatedPrintCode

ISBN 10: 0-13-787885-0
ISBN 13: 978-0-13-787885-7

CHAPTER 1

Introducing the SIOP® Model

CONTENT OBJECTIVES

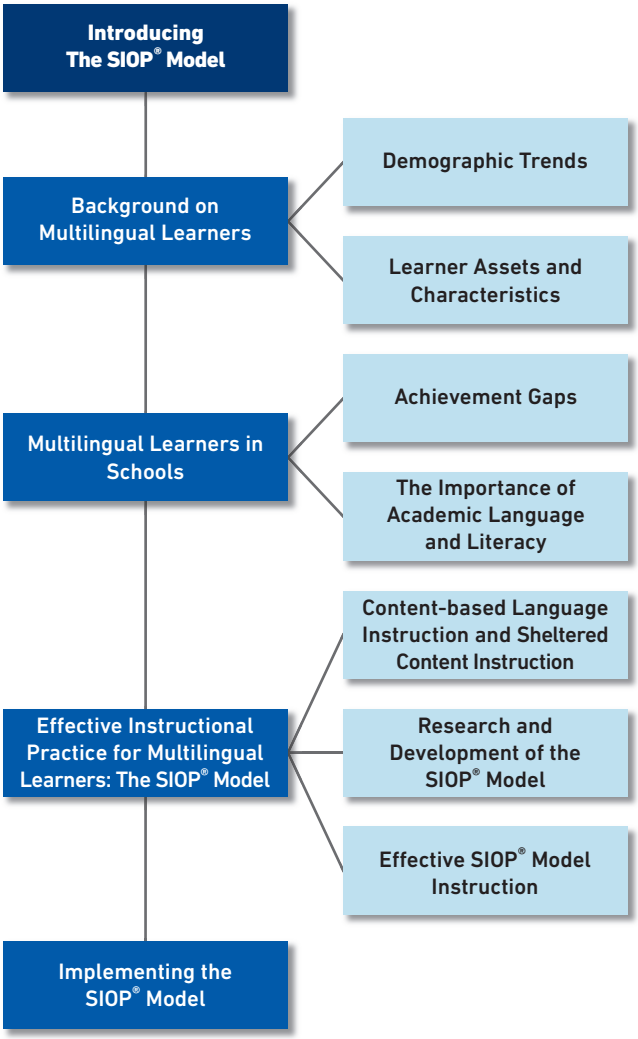
This chapter will help you to . . .

- List characteristics of multilingual learners that may influence their success in school.
- Distinguish between content-based language instruction and sheltered instruction.
- Explain the research supporting the SIOP Model.

LANGUAGE OBJECTIVES

This chapter will help you to . . .

- Describe the assets your multilingual learners bring to your classroom.
- Develop a lexicon related to the SIOP Model.
- Compare your typical instruction with SIOP instruction.



Dolores worried about her biology class, her first period class for the new school year. Last year she struggled in science and math. Her teachers would lecture and expect her to take notes, but they talked very quickly. The students were to read the chapters in the textbooks at night and answer questions or do math problems. It was hard for her to understand the information in the books because she didn't know many of the words, and in class she relied on her table mates for assistance. She never volunteered to speak if the teachers asked a question. If one called on her, she usually didn't know how to respond in English even when she had an idea of the answer, and the teacher would quickly call on someone else.

So, she walked into Biology with trepidation. She saw two friends already in the room at a lab table and sat with them. She looked around and saw vocabulary charts on the wall. There were words with pictures and sentences using each word. There were also charts of phrases that started sentences like "A key similarity/difference is __," "It is harder/easier __," and "In comparison/ In contrast, __." The whiteboard had some writing. "CO: We will explore the camouflage adaptation in an experiment. LO: We will use comparisons to describe the results." At the lab table she saw two sheets of paper—one white, one black sheet—and two envelopes. Looking inside, she saw white dots in one and black dots in the other.

The biology teacher, Ms. Ruiz, introduced herself and explained the lesson. She pointed to the sentences on the board: "Today we will do a lab so you can learn about animal adaptations like camouflage, and then we will write about our results using some comparative phrases." She gestured to the chart with sentence starters as she reminded the class about ways to state comparisons. She asked students to turn to a partner and define *camouflage* and *adaptation*, or give examples, if they knew of any. Dolores was pleased. She knew those words in Spanish. Where she grew up in Mexico, she had seen green leaf frogs and vine snakes. They blended in with the leaves and trees. She told her friend Alicia about them. When Ms. Ruiz asked students to share, she nervously raised her hand and described them. When she stumbled over a word in English, Ms. Ruiz encouraged her to say it in Spanish.

Ms. Ruiz next pointed to a vocabulary chart and discussed the words. She had the students pronounce them and then copy them in their notebooks. After that, she started a National Geographic video clip and explained it showed some camouflage adaptations among animals. They watched the brief clip twice, with closed captions, and then she asked them to compare two of the animals they saw. She encouraged students to use comparative language, both the phrases on the chart and others that students knew. Dolores was able to follow the discussion.

Next, Ms. Ruiz introduced the experiment and displayed directions on the interactive whiteboard. She passed out tweezers, a worksheet, and an index card to each student. She told the

students to gently pour the white dots on the black paper. They would have one minute to pick up as many dots as possible. They would count them and record the number collected on the worksheet. Then they would move the dots to the white paper and do the same. After that, they would work with the black dots, first on white paper, then black. Using a document camera, she modeled how to spread out the dots, pick them up, and record the information.

When they finished the experiment, Ms. Ruiz asked the lab partners to discuss what they discovered and connect the camouflage results to things they see in real life. She then asked the students to share out their conclusions. She reviewed the objectives for the day and said, "Post one thing that you learned on the class tablet before you leave." Dolores was surprised when the bell rang. The time went by so fast. She felt like she understood all that they had done. ■

Dolores had different learning experiences from one year to the next. The previous year, her science teacher used a more traditional approach. He lectured primarily and had the students work frequently in textbooks. He provided little language development or scaffolding for his multilingual learners—indeed, little scaffolding for any of his students. Dolores was quiet in class because she didn't know how to articulate her ideas in English. She had difficulty comprehending the textbook. She didn't learn much academic English in either science or math class.

This year, in contrast, held the promise of a more positive learning environment. Ms. Ruiz, the biology teacher, made the lessons easy to understand. She had pictures with words on the walls and showed video clips. She explained words and how to form different types of sentences. She let them do experiments and talk about them with their lab partners. Dolores gained the confidence to speak up in class. She could share things she knew from her life in Mexico. She could use her native language as a resource. Most importantly, she felt like she was learning English while learning science.

Dolores is fortunate to have a Biology teacher who uses the SIOP Model. Her thoughtful lesson planning enables all the students in class to learn the science content. Dolores and the other multilingual students benefit in particular because they are able to learn the material through English, their new language. Ms. Ruiz provides supports and engages them in activities that give them access to the grade-level curriculum. We have written this book to help more teachers learn the techniques that Ms. Ruiz uses, so that many more multilingual learners will have a chance to develop academic literacy in English and be successful in school.

Background on Multilingual Learners

English is the most popular new language to learn around the world. Some people learn English for their job or studies; others because they want to travel or communicate with speakers of English. In the United States, English is the medium of instruction in most elementary and secondary classrooms, so students with a home language other than English need to learn it to be successful in school.

In this book we refer to students who are not yet proficient in English language and literacy as *multilingual learners*. This term is similar to various names for these students that have been used by the federal government and state and local education agencies, such as *English language learner*, *English learner*, and *emergent bilingual*. With this term, we choose to emphasize the language assets these learners have rather than the language they are in the process of acquiring.

Multilingual learners typically receive language support services in their schools and may be at any level of English proficiency. Upon enrollment, they are identified for services via a home language survey and a subsequent English language proficiency assessment. They are usually assigned a proficiency level (e.g., beginning or entering) and placed in a bilingual, dual language, or English-medium program depending on the school or district options. Like the learners, these programs have different names. Most multilingual learners will receive a class period or two of designated English language development as well as instruction in the subject areas delivered through their home language or sheltered instruction. They exit language support programs when they meet the criteria, which usually includes at a minimum passing the state English language proficiency assessment.

Figure 1.1 lists common terms and acronyms for multilingual learners and their educational programs. Your district may use some of them, and you will also find these terms in research studies and federal and state educational policies. Note however, that definitions for some of these terms are fluid and may vary somewhat in your state. For further discussion about the use of categories, see Gunderson, 2021.

Demographic Trends

Dolores is one of many multilingual learners in our schools. In fact, she represents the fastest growing group of K–12 students (U.S. Dept. of Education, Office of English Language Acquisition, 2021a). Recent data report that in Fall 2019, 10.4% of the students in U.S. K–12 schools were multilingual learners, equaling more than 5.1 million students out of a total enrollment of 49.2 million. It is noteworthy that multilingual learners in Grades K–2 constitute 15% or more of the total student enrollment in each grade. In terms of elementary and secondary proportions, 60.3% of the multilingual learners were reported in grades K–5 and 39.5% in grades 6–12 (U.S. Department of Education, National Center for Education Statistics, 2021).

The five states that enroll the largest numbers of elementary and secondary multilingual learners are California, Texas, Florida, New York, and Illinois. Those with the fewest number of multilingual learners in school are Vermont, Wyoming, West Virginia, North Dakota, and New Hampshire. Fourteen states enroll multilingual learners in greater percentages than the national average (ranging from 19.6% to 10.6%) when compared to total student enrollment: Texas, California, New Mexico, Nevada, Illinois, the District of Columbia, Rhode Island, Alaska, Washington, Delaware, Maryland, and Massachusetts (U.S. Department of Education, National Center for Education Statistics, 2021).

Although close to 400 different languages are spoken in the homes of our elementary and secondary students, a very large percentage of multilingual learners (75.7%) have Spanish as a home language. The other top languages, albeit at much

FIGURE 1.1 Common Terms Associated with Multilingual Learners and Their Educational Programs

Student-related

Dual language learner (DLL)
Emergent bilingual (EB)
English language learner (ELL)
English learner (EL)
English learner student with a learning disability (ELSWD) [also dually identified student]
English only (EO) [monolingual English speaker]
English speakers of other languages (ESOL)
Ever EL—Someone who was an identified English learner at some time in school
Former English (language) learner (FEL/FELL)
Fully English proficient/Fluent English proficient (FEP)
Limited English proficient (LEP)
Long-term English (language) learner (LTEL/LTELL)
Multilingual learner (ML/MLL)
Never EL—Someone who was never identified as an English learner
Newcomer—Someone who is newly arrived to the United States and new to English [definitions/criteria vary]
nonEL—Non-English learner (may be someone who was an English learner but has reached proficiency; may be someone who was never an English learner)
Students with (limited or) interrupted formal education (SIFE/SLIFE)

Program-related

Bilingual education (BE)
Content-based ESL (CBESL)
Content-based language instruction (CBLI)
Dual language (DL)
English as a new language (ENL)
English as a second language (ESL)
English as an additional language (EAL)
English language development (ELD)
English language proficiency (ELP)
English to speakers of other languages (ESOL)
Home language survey (HLS)
First language (L1) [also home language, primary language, native language]
Languages other than English (LOTE)
Multi-tiered systems of support (MTSS)
Response to Intervention (RTI)
Second language (L2)
Sheltered instruction (SI)
Specially designed academic instruction in English (SDAIE)
Structured English immersion/Sheltered English immersion (SEI)
Transitional bilingual instruction (TBI)
Two-way immersion (TWI)

smaller scale, are Arabic (2.6%), a variety of Chinese (2.0%), and Vietnamese (1.5%). The other languages are spoken by fewer than 1% of the multilingual learner population (U.S. Department of Education, National Center for Education Statistics, 2021).[1]

[1] It may be noted that 2.1% of the multilingual learners were reported as having English as their home language. This might include students who were adopted from another country but live in a household that speaks English and students in households where multiple languages are spoken.

It is also important to recognize that the number of multilingual learners reported in the data refers to the students who have been identified as eligible for language support services in their school districts; these students were evaluated by a home language survey and an English language proficiency assessment tool. The number does not include the multilingual learners who have exited the language support programs but are still struggling with some aspects of *academic* English, the language used to read, write, listen, and speak in subject area classes to perform academic tasks and demonstrate knowledge of the subject standards. The increases in multilingual learner enrollment will continue over the next several decades, so all educators need to be prepared to address these students' language and academic needs.

Learner Assets and Characteristics

In order to develop the best educational programs for multilingual learners, we need to know our students and understand their diverse backgrounds. Our learners bring a wide variety of educational and cultural experiences to the classroom as well as considerable linguistic assets and other funds of knowledge (Gonzalez, Moll, & Amanti, 2005; Paterson, 2021; TESOL, 2018). They differ in a number of ways as well, from home language and country of origin to former educational experiences to age of arrival in the United States and socioeconomic status. These characteristics have implications for instruction, assessment, and program design. When we know our students' backgrounds and abilities, we can incorporate effective techniques and materials in our instructional practices.

> "We need to know our kids well as individuals, and as interactive members of our classroom community, in order to balance all of their needs and create a flexible learning environment that helps to move everyone forward."
>
> Kirstin Miller, High School Math Teacher, Kentucky

Multilingual Learner Assets. Let's begin by considering our multilingual learners' strengths. Their assets are related to language and cultural practices in the home, schooling in other countries, and individual abilities and qualities. Teachers therefore need to be aware of the language and literacy skills their students have and use outside of school. When we leverage these assets in the classroom, we promote student agency and access in service of educational equity. We encourage students to draw on their meta skills (e.g., metalinguistics and metacognition) and full repertoire of knowledge, no matter the language context in which it has been learned.

We know, for example, that children make guesses and predictions at home. These then act as precursors to academic language development in school, where the students learn to call these notions *estimates, hypotheses*, or *theories* depending on the subject area. In some cultures, older children mentor younger siblings in performing chores and other tasks. Teachers can build on these relationship roles to construct collaborative learning environments in the classroom. Multilingual learners may have social-emotional skills, such as resilience and acceptance of ambiguity, that can serve them well as they deal with challenging assignments and unfamiliar academic discourse. See Figure 1.2 for some of the assets that teachers should learn to recognize in their multilingual learners.

Diverse Characteristics. Next let's turn to other characteristics that make our multilingual learners diverse. We cannot plan programs and pathways through school by assuming these students are all alike, because they are not. They enter our classrooms with a wide range of language proficiencies (both in English and

FIGURE 1.2 Multilingual Learner Assets

Oral language skills in the home language—Many aspects of the home language learned through oral interaction can apply or transfer to learning academic English (August & Shanahan, 2006; Genesee et al., 2006; Guglielmi, 2008). These include phonemic awareness and phonics; grasp of vocabulary cognates; knowledge of prefixes, suffixes, and roots; listening comprehension strategies; and functional language use (e.g., comparing, evaluating, describing).

Reading and writing skills in the home language—Knowing how to read and write in the home language facilitates learning those skills in a new language (August & Shanahan, 2006; Genesee et al., 2006). Consider students who can read and find the main idea in a home language text. Those learners have mastered the cognitive reading strategy already. They may need to learn the words and syntax of English, but not how to find the main idea.

Metalinguistic awareness—Having the big picture of how language works (as a concept) provides a foundation for learning a new language. For example, knowing that words can be nouns and verbs and that a relationship between a noun and a verb gives meaning to an utterance can be applied to the new language even if the order of words in a sentence differs from the home language.

Out-of-school literacy skills—Students use literacy outside of school, sometimes for family purposes (e.g., making a shopping list, reading a utility bill) and sometimes for personal reasons (e.g., using social media, listening to music). These practices help them understand that literacy is used for different purposes and is found in different formats. These skills also allow students to learn new knowledge outside of school that may be applicable to a lesson.

Educational backgrounds—Through schooling in their home country, some children may be at or above grade level relative to the curricula in their U.S. school. These students need to learn English, but have few gaps in their academics.

Language brokering roles—School-age multilingual learners often assume the role of language broker in families where the adults do not speak English well. Students learn to engage with others using English, experiencing different interaction patterns, and being responsive to others' utterances. They learn to turn-take turns in conversation, answer questions, ask for clarification, paraphrase, interpret, and translate, among other functions.

Cultural funds of knowledge—In their homes, children participate in language and cultural practices and activities that can be shared in the classroom. Teachers may learn about these funds of knowledge through home visits, interviews, and projects that students complete. Teachers may select instructional materials and plan authentic classroom tasks around these funds that connect with the curriculum. They may invite parents or members of the community as guest speakers.

Familial supports—Family support and parental engagement have positive impacts on children's schooling success. Teachers can partner with the families to determine ways that families can support at home what is being learned at school. Parents, other family members, and guardians can in turn convey family values, communication patterns, storytelling practices, work goals, and aspirations for their children to the teachers.

Life experiences—Our students do not enter schools as blank slates. Many have had life experiences that are pertinent to the curricula. Some students farmed in their home countries and know about plant growth, animal reproduction, and more. Other students' families had market stalls, and they learned about supply and demand, revenue, and debt. Some have lived in different climatic zones and biomes or have traveled across countries and continents. These learners have much to offer the instructional process and can help build background on certain subject-area topics for others in the class.

Social and emotional skills—Many multilingual learners have or are developing social and emotional skills and competencies. Their varied experiences and backgrounds may have led to their development of skills such as persistence, planning and organization, perspective taking, team work, analysis and decision making, emotional awareness, and more. These skills can be building blocks for academic development, especially when teachers foster affirming and supportive learning environments.

Individual talents and abilities—All students have unique qualities. Some may be athletic and learn teamwork and perseverance during sports. Some may have musical gifts and can translate symbols into sounds. Some have part-time jobs where they learn responsibility, problem solving, and resourcefulness. Others draw, dance, write poems, make videos, cook, construct, garden, and more. These abilities and interests can be highlighted in lessons for making input comprehensible and for making output relevant.

in their home languages) and much divergence in their subject matter knowledge. We find diversity in their educational backgrounds, literacy levels in the home language, expectations of schooling, socioeconomic status, age of arrival, personal experiences while coming to and living in the United States, parents' education levels and proficiency in English, and much more. Of course, our learners have individual personalities and talents as well. Some multilingual learners are newcomers (i.e., new arrivals to the United States), some have lived in the United States for several years, and many were born in the United States. Foreign-born multilingual learners may be immigrants, refugees, asylees, unaccompanied minors, permanent residents, or naturalized citizens.

The following discussion offers a broad overview of some of the multilingual learners who enter our schools:

- A number of our foreign-born multilingual learners had strong academic backgrounds before coming to the United States. Some are at or above equivalent grade levels in certain subjects—math and science, for example. They are literate in their native language and may have started studying a second or even a third 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.
- Other foreign-born students had very limited formal schooling or an interrupted education—perhaps due to war in their native countries, life in a refugee camp, the need to work, 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 classrooms for different subjects, 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 multilingual learners with limited formal schooling and below-grade-level literacy are most at risk for educational failure.
- In the past decade, the number of foreign-born, unaccompanied minors has increased. These students, who are younger than 18 years old, come to the United States without a parent. Many experience hardships and trauma during the journey. Some are able to connect with relatives living in the United States and others are housed with a court-appointed guardian. Many have weak educational backgrounds and face challenges once in U.S. schools.
- There are also many multilingual learners who have grown up in the United States but who speak a language other than English at home. In fact, these students comprise the majority of multilingual learners in both elementary and secondary school programs. 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.

Among the types of multilingual students described above, we also have some students with other characteristics that have implications for educational services.

- Students who are newly arrived to the United States may be referred to as *newcomer students*. They may be placed in a specialized newcomer program if they have very low levels of English language proficiency and/or are below grade level in their academics, especially if they enroll in middle or high school, as they have less time to catch up before graduation. Students with limited or interrupted formal education are a subset of newcomer students. (Custodio & O'Loughlin, 2017; Short & Boyson, 2012)
- Multilingual learners who do not exit their language support program after five or more years in U.S. schools are referred to as *long-term English learners* (U.S. Department of Education, 2016). They typically have oral proficiency in English but lack English reading and/or writing skills. They struggle academically (Kieffer & Parker, 2016; Menken, Kleyn & Chae, 2012; Rodriguez, Carrasquillo, Garcia & Howitt, 2020) and often are unable to pass state English language proficiency tests and/or other measures that are required for them to be reclassified as fully English proficient (Saunders & Marcelletti, 2013). Targeted interventions may be planned for these students, especially if they have completed all the available levels/years of service in the language support programs.
- Forty percent of school-aged migratory children (also known as *migrants*) are multilingual learners (U.S. Department of Education, Office of English Language Acquisition, 2021d). They move from school to school within the same academic year as their family travels for work. This situation jeopardizes their learning with absences and potentially incompatible curricula and assessments across districts or states.
- A small number of immigrant students have temporary protected status, a designation by the federal government that may be granted to foreign-born individuals who are unable to return to their country primarily due to safety concerns, such as an ongoing war or the aftermath of a major natural disaster. They, too, may have experienced hardships and trauma.

Some students are dually identified, meaning they should receive services from two educational categories. For example, besides being multilingual learners, some children have learning disabilities or are gifted and talented.

- Multilingual learners tend to be over- or underrepresented in special education because their school districts struggle to determine if a student's difficulty is due to a learning disability, a lack of schooling, a delay in developing second language proficiency, or another reason (National Center for Learning Disabilities, 2020). It is not recommended that a school wait longer than one year to begin the referral process for special education consideration; interventions can begin sooner, however. When students are appropriately identified, federal regulations require that they receive instructional hours for English language development as well as for identified special education needs (U.S. Department of Justice, Civil Rights Division, & U.S. Department of Education, Office of Civil Rights, 2015).

- Some multilingual learners and former multilingual 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 Multi-tiered System of Support (MTSS) (or Response to Intervention [RTI]) program. 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 Chapter 10).
- Some students have abilities that fit the criteria for gifted and talented services, but their participation in these programs is much lower than that of students who have English proficiency. Schools may struggle to identify them, particularly if they have low or no proficiency in English and speak a language other than Spanish. Some schools may have barriers to participation such as certain course prerequisites, English proficiency, reclassification status, and false assumptions that teachers of these courses can't provide scaffolds to give students access to the subject material. As a result, multilingual learners are underrepresented in gifted and talented programs and in advanced coursework, such as higher-level mathematics and Advanced Placement and International Baccalaureate courses (Kiefer & Thompson, 2018; U.S. Department of Education, Office of English Language Acquisition, 2021c). The U.S. Department of Education, however, directs school districts to make sure their admission policies and practices do not limit multilingual learners' participation in these programs and courses (U.S. Department of Education, Office of English Language Acquisition, 2017).

The diverse characteristics described above represent some of the background factors that should be considered when planning programs and instruction so multilingual learners can succeed in school. Figure 1.3 shows these characteristics and additional important points that influence multilingual learners' educational attainment and should be kept in mind.

FIGURE 1.3 Diverse Characteristics of Multilingual Learners

Status Related to Country of Origin

- U.S. born
- Naturalized U.S. citizen
- Permanent resident
- Immigrant
- Refugee
- Asylee
- Unaccompanied minor
- Temporary protected status

Knowledge of the English Language

- Exposure to English (social and academic)
- Familiarity with Roman alphabet and Arabic numbers
- Familiarity with English sounds (phonemes)
- Proficiency in oral English (speaking and listening)
- Proficiency in written English (reading and writing)
- English being learned as a third or fourth language

(continued)

FIGURE 1.3 **Diverse Characteristics of Multilingual Learners *(continued)***

Knowledge of the Home Language

- Proficiency in home language oral skills (speaking and listening)
- Proficiency in home language written skills (reading and writing)
- Metalinguistic awareness
- Cross-linguistic transfer

Educational Background

- On grade-level schooling in home country
- On grade-level schooling in U.S. schools (in home language or English)
- Partial/interrupted schooling in home language
- No schooling in home language
- Entrance age in U.S. schools
- Partial/interrupted schooling in English
- No schooling in English
- Receiving language support services for five years or less
- Receiving language support services for more than five years
- Expectations for schooling
- Degree of absenteeism

Social, Cultural, Emotional, and Economic Factors

- Age of arrival in the United States
- Poverty level
- Free or reduced lunch status
- Mobility
- Living situation (e.g., homelessness, crowded conditions)
- Exposure to trauma, violence, abuse, and other serious stressors
- Refugee or asylee status
- Undocumented status
- Parents' educational background
- Parents' level of English proficiency
- Cultural norms for communication
- Access to technology (e.g., equipment, Internet, bandwidth)
- Access to health/mental health services

Other Educational Categories

- Special education status
- Tier 2 or Tier 3 intervention (MTSS or RTI)
- Gifted and talented status
- Migrant status
- Exited/Former/Reclassified/Monitored multilingual learner—Years 1 and 2 after exit
- Exited/Former/Reclassified multilingual learner—Years 3 and 4 after exit

Multilingual Learners in Schools

Our multilingual learners enter U.S. schools where academically rigorous, standards-based instruction and assessment is the norm. The federal government holds schools accountable for the success of all students, and each state has standards for mathematics, reading/language arts, English language development, and science, at

a minimum. All states are required to administer high-stakes tests based on these standards and report results annually. A positive change over the past two decades is that schools and districts are expected to teach grade-level academic content to multilingual learners right from the start, either in English or in their home language, in addition to English language development classes.

As a result of changes in education policy since 2001, the education of multilingual learners is a regular part of school improvement conversations, with attention given to providing better educational opportunities for the learners and monitoring their language proficiency growth and academic progress. Schools now regularly analyze assessment data to determine the progress of their efforts and to adjust programs, instruction, and resources as indicated. Some federal and state funding is available to help practicing teachers strengthen their instruction so students develop academic literacy skills and can access core content. Schools can tap these funds to provide sustained professional development opportunities, including job-embedded coaching. Some states have also allocated additional resources for multilingual learner programs, such as grants for specialized services for newcomers and students with interrupted educational backgrounds (Short & Boyson, 2012).

Unfortunately, although national standards for teacher education colleges and universities state that prospective teachers need to understand how to work with diverse students, including multilingual learners, and that they should keep students' culture and language differences in mind when planning lessons (see http://caepnet.org/standards/introduction), the standards do not detail specific coursework that should be taught. English language development teachers, bilingual teachers, and dual language teachers are well trained to teach in and about English, but courses on second language acquisition, ELD techniques for integrating language and content, and cross-cultural communication are rarely required for others studying to be teachers in U.S. schools (National Academies of Sciences, Engineering, and Medicine, 2017). Consequently, many general education teachers are underprepared to serve multilingual learners when they exit their preservice institutions (National Council on Teacher Quality, 2015). The burden for preparing these general education teachers to meet the educational needs of multilingual learners therefore falls on schools and districts and must be accomplished through inservice professional development.

Achievement Gaps

Despite more attention being given to multilingual learners and the programs serving them, the challenging academic standards and assessments have not resulted in closing the achievement gap between multilingual learners and students proficient in English. For the past 20 years, the achievement gap between these student groups on national tests has changed very little, a difference of more than 20 points in mathematics and more than 30 points in reading and in science. Consider the following statistics:

- The average scale score gap between English learners[2] and non-English learners on the fourth-grade National Assessment for Educational Progress (NAEP) exam for reading ranged from 35 points in 2003 to 33 points in

[2] The U.S. Department of Education, which oversees NAEP, uses "English learners" for the students we refer to as "multilingual learners" in this book.

2019, with minor variation during the intervening years. A similar gap existed in the eighth-grade reading exam, albeit with slight widening, from 43 points in 2003 to 45 points.

- The average scale score gap between English learners and non-English learners on the fourth-grade NAEP mathematics exam remained almost the same, 23 points in 2003 to 24 points in 2019. The gap widened somewhat in the eighth-grade mathematics exam, from 38 points in 1996 to 42 points in 2019.
- Similarly, the average scale score gap between English learners and non-English learners on the NAEP science exam was relatively the same, from 32 points in 2005 to 33 points in 2019. The gap also widened somewhat in the eighth-grade science exam, from 42 points in 1996 to 46 points in 2019.

A closer look at the most recent data available at the time of this writing can be found in Table 1.1. In this table showing the performance of English learners and non-English learners in 2019 on the fourth-grade and eighth-grade NAEP reading, mathematics, and science exams, you can see that the achievement of all students is quite low. In none of the three subjects did even half of the non-English learners

TABLE 1.1 Performance of English Learners and Non-English Learners on NAEP Exams in 2019

Reading/Language Arts					
4th Grade	Average Scale Score	Below Basic	Basic	At or above Proficient	Advanced
non ELLs	224	29%	32%	29%	10%
ELLs	191	65%	25%	8%	1%
8th Grade					
non ELLs	266	24%	40%	31%	4%
ELLs	221	72%	24%	4%	0%*
Mathematics					
4th Grade	Average Scale Score	Below Basic	Basic	Proficient	Advanced
non ELLs	243	16%	39%	35%	10%
ELLs	220	41%	43%	15%	1%
8th Grade					
non ELLs	285	28%	36%	25%	11%
ELLs	243	72%	22%	4%	1%
Science					
4th Grade	Average Scale Score	Below Basic	Basic	Proficient	Advanced
non ELLs	155	23%	38%	38%	1%
ELLs	122	59%	33%	8%	0%*
8th Grade					
non ELLs	157	29%	34%	35%	2%
ELLs	111	81%	16%	3%	0%*

Sources: National Student Group Scores and Score Gaps reports for Reading/Language Arts, Mathematics, and Science on website, https://www.nationsreportcard.gov

reach the proficient level. For English learners, the results are more troubling. For five of the six exams reported, 90% to 97% of the students who are still acquiring English failed to reach the proficient level.

- National assessments are not the only area of achievement where multilingual learners do more poorly than students who are proficient in English.
- Multilingual learners are more likely to drop out of high school than all students. In 2019, 5.1% of all students were status dropouts[3] but the rate was 17.5% for students identified as speaking a language other than English at home and speaking English less than very well (U.S. Department of Education, National Center for Education Statistics, 2021).
- Although the 4-year cohort high school graduation rates for all students improved from 2010–11 to 2017–18, multilingual learners still graduated at a lower rate (68%) than all students (85%), a group which includes multilingual learners. The gap between the two groups has narrowed somewhat during this time (U.S. Department of Education, Office of English Language Acquisition, 2020).
- In 2017–18, multilingual learners were overrepresented in the number of students who were retained (i.e., not promoted) in grades K–12 (U.S. Department of Education, Office of English Language Acquisition, 2021b).

Why do these achievement gaps continue to exist for multilingual learners as a group, despite decades of educational reform?

- One factor is the assessments themselves. Multilingual learners take subject-area tests in English (except in a few states) before they are proficient in the language. Compounding the situation is that these assessments have been designed and normed on native English speakers. These tests are not valid or reliable for multilingual learners (Abedi & Linquanti, 2012), so it is not surprising they do not attain the testing achievement targets set for native English speakers.
- Another factor is the quality of instruction. We discussed earlier the underpreparation of many general education teachers. Many have had to learn on the job how to effectively instruct multilingual learners. In 2017–18, 64% of all teachers reported having at least one multilingual learner in class. However, only 10% had a major, minor, or certification in ESL and only 44.8% of them took any undergraduate or graduate course on teaching these learners before their first year of teaching (U.S. Department of Education, National Center for Education Statistics, 2021). Related to this are the low expectations that teachers, administrators, and counselors may hold for multilingual learners, which can lead to placement in low-level academic courses and a mistaken belief that challenging assignments and higher-order thinking tasks should be avoided due to the students' limited proficiency in English (Sugarman, 2019).
- Localized policies for admission to gifted and talented programs and advanced coursework, such as requiring English proficiency, reclassification status, certain prerequisite courses, and lack of identification assessments in languages other

[3] Status dropout refers to students who are not enrolled in high school and do not have a high school credential (e.g., a regular diploma or GED).

than English, limit multilingual learners' access to challenging curricula. Similarly, policies pushing for a 4-year high school graduation rate may cause students with limited or interrupted educational backgrounds to drop out because they do not believe they have time to learn English and pass all the required courses for a diploma (Rodriguez, Carrasquillo, Garcia, & Howitt, 2020).

- Another important reason is perhaps the simplest. Acquiring a new language takes time. Moreover, as students move up in proficiency level and in grade level, they have more language and content to learn. We know that conversational fluency (also known as *social language* or *basic interpersonal communicative skills* [BICS]) develops inside and outside of the classroom and can be attained in one to three years (Thomas & Collier, 2002). However, the language that is critical for educational success—academic language (or cognitive/academic language proficiency [CALP]) (Cummins, 2000)—is more complex and develops more slowly and systematically in academic settings. Multilingual learners typically need four years of instruction or more to reach grade-level proficiency in academic English (Greenberg Motamedi, 2015; Kieffer & Parker, 2016).

In contrast to the disappointing findings when current multilingual learners are compared to all students, there is some hopeful news. When school districts and states disaggregate data and analyze the achievement of their former multilingual students—those who have reached proficiency in English and exited their language support programs—some positive achievement outcomes have come to light. The biennial report to Congress on Title III programs (U.S. Department of Education, Office of English Language Acquisition, 2021a) examined the performance of former multilingual learners on statewide assessments of mathematics, reading/language arts, and science tests. Although these tests and achievement levels vary by state, and not all states submitted data, a review of the percentage of students who participated and reached the proficient or above proficient level shows how well former multilingual learners did compared to current multilingual learners and all students who took the exams.

In Table 1.2, we can see that former multilingual learners outperformed all students, as well as current English learners, in mathematics and reading/language arts in the 2017–18 school year.[4] They did not, however, outperform all students in science.

TABLE 1.2 Students Who Scored At or Above Proficient on Statewide Assessments for School Year 2017–2018

	Mathematics	Reading/language arts	Science
All students	45.2%	50.5%	55%
English learners	25.4%	23.8%	21%
Former English learners	46.3%	52.6%	44%

Source: U.S. Department of Education, Office of English Language Acquisition, 2021a

[4] 2017–2018 was the most recent school year for which data analyses were available at the time of this writing.

We also see that when policies and programs are established with second language acquisition research and evidence-based practices in mind, multilingual learners perform well. For example, studies have shown that students instructed through two languages outperformed those who studied only in English on academic and English language proficiency measures, including the state tests (Steele, et al., 2017; Umansky & Reardon, 2014; Valentino & Reardon, 2015). A study of New York City's graduation rates revealed former multilingual learners outperformed students as a whole (New York City Department of Education, 2022). These findings remind us that for the vast majority of our students, acquiring English as a new language is a temporary endeavor; once they have achieved English proficiency, the cognitive benefits of bilingualism can lead to their academic success.

The Importance of Academic Language and Literacy

One key area where we know that multilingual learners need support is in developing academic language and literacy skills in English. These skills serve as the foundation for school success because we learn primarily through language and use language to express our understanding. Age-appropriate knowledge of the English language is a prerequisite in the attainment of content standards because as the grade levels rise, language use becomes more complex and more content area-specific. The skills students need to be college and career ready are more extensive than knowledge of vocabulary words and paragraph formation. They include analytical reading and writing, effective communication and interaction, critical thinking, and creativity. The emphasis on teaching academic language is reflected in national and state standards and assessments for English language proficiency. (See, for example, standards from California, ELPA21, New York, Texas, and WIDA).

We argue that academic language is a second language for *all* students. Even native English speaking students do not enter kindergarten or first-grade classrooms using embedded clauses and long, modified noun phrases in their conversations, nor do they analyze text for an author's use of imagery or write problem–solution essays about local issues. They learn these ways of using language for specific purposes over time in school. And school is where children and young adults mostly use academic language.

In *Developing Academic Language with the SIOP® Model* (Short & Echevarría, 2016, p. 2), we explain that academic language is different from everyday conversation:

> [W]hile there is no singular definition, there is consensus that academic language includes the application of reading, writing, listening, and speaking skills to knowledge of vocabulary, language structures, language functions, genres, discourse patterns, and strategic competencies that students need to be successful in school with spoken and written academic text. There is also agreement that academic language demands and linguistic elements vary, at least partially, by subject area.

Although academic language is used in school settings by all students, this type of language use is particularly challenging for multilingual learners who are beginning to acquire English at the same time that school tasks require a high level of

English usage. Multilingual learners do double the work: they 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 (Short & Fitzsimmons, 2007).

Using English, multilingual 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, multilingual learners must integrate their emerging knowledge of the English language with the content information 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 much more. 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 & Echevarría, 2016). Teachers and curriculum developers should pay attention to this full range of academic language.

Effective Instructional Practice for Multilingual Learners: The SIOP® Model

When we first started working on the SIOP research in the mid 1990s, we had a vision for the education of multilingual learners. We wanted them to receive grade-level content curricula through specialized instruction that would use techniques to make the content comprehensible and that would also promote their English language development. We wanted them to be placed in content classes from the start of their schooling, not wait 2–3 years and only receive ESL and electives during that period, as was the standard practice in the early 1990s. We had a vision that all teachers would teach both language and content to the multilingual learners. Thus, all teachers would hold high expectations for the learners and be responsible for their success in school.

For this to happen, the general education teachers needed to learn and apply what were then common ESL techniques and also develop an understanding of how academic language is used in their subject areas and then learn how to teach aspects of that language to the students. We referred to this practice as *sheltered content instruction*. In addition, the ESL teachers had to shift how they taught English to make it more content-based and relevant to the language demands of the other classes that students took. So language teachers were asked to integrate content topics and teach related vocabulary, incorporate reading and writing tasks that would reflect the genres found in core subject areas, and promote academic conversations.

Of course, those who taught newcomer students at the lowest proficiency levels also had to cover social and school communicative language as well.

Educational reforms over the past two decades have led schools and districts to focus on developing academic language and literacy skills in students who struggle academically, including multilingual 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. There is still work to be done along with consistent application of legal requirements and best practices[5], but progress is being made. There is, for instance, general agreement that it is best to teach academic language to multilingual learners with some targeted focus on the lexical, semantic, and discourse levels of the language as they are applied in school settings (Saunders & Goldenberg, 2010; WIDA, 2020). A growing number of researchers have found that letting students use everyday vernacular and/or their home language before learning the academic and technical language helps them assimilate the content better (García, Ibarra Johnson, & Seltzer, 2017; Gibbons, 2015; Paterson, 2021).

Content-based Language Instruction and Sheltered Content Instruction

Now, more than 25 years after we started researching SIOP, content-based language instruction (also known as *Content-based ESL* and *Designated ELD*) and sheltered instruction (also known as *Integrated ELD* in CA and *Sheltered/Structured English Immersion*) are acknowledged methods for developing academic English and providing multilingual learners access to core content coursework in grades K–12 (U.S. Department of Education, Office of English Language Acquisition, 2021a). Ideally, these two approaches work in tandem: one focuses on academic (and where needed, social) language development while addressing content topics; the other focuses on making content standards and topics accessible while teaching the academic language of the particular subject area.

As you see in Figure 1.4, in the content-based language classes, the curricula are tied to the state standards for English language proficiency, the students are all multilingual learners, and the teacher is certified in ELD/ESL or bilingual education. In sheltered content instruction classes, the curricula are tied to the state subject area standards, and the students may be all multilingual learners or mixed with native English speakers and former multilingual learners. The teachers have elementary or secondary content certification and may have an endorsement or certification in ELD/ESL or bilingual education.

In content-based language instruction, material from multiple subject areas is often presented through thematic or interdisciplinary units. For example, one theme might be "The Marketplace," and lessons could include objectives drawn from economics, science, geography, history, and mathematics. Students might create maps showing how goods move from farms and manufacturing plants to city markets;

[5] Federal guidance accentuates the need for effective programming and attention to academic language and literacy development. See, for example, U.S. Department of Education, Office of English Language Acquisition, 2017; and U.S. Department of Justice, Civil Rights Division, & U.S. Department of Education, Office of Civil Rights, 2015.

FIGURE 1.4 Courses That Integrate Content and Language Instruction

Type of Class	Content-based language instruction, also known as content-based ESL/ELD, or Designated ELD	Sheltered content instruction, also known as Integrated ELD, SDAIE, or structured/ sheltered English immersion (SEI)
Language Goals	Academic English proficiency (When used in a dual language program, proficiency in English and the target language is the goal.)	Academic English proficiency (When used in a dual language program, proficiency in English and the target language is the goal.)
Academic Content Goals	May emphasize English language arts in some states; introduces content topics from the other core areas (math, science, social studies) too; may help fill in gaps in educational backgrounds	Typically focuses on the curriculum and standards from a content area (e.g., sheltered Algebra); the language is modified and scaffolding techniques are used so the grade-level concepts can be addressed
Standards	English language proficiency and/or English language arts standards	Content standards (any or all subjects)
Language of Instruction	English, some native language for translanguaging	English, some native language for translanguaging
Student Characteristics	Variety of language/cultural backgrounds	Variety of language/cultural backgrounds
	All English proficiency levels, although some districts target the newcomer through intermediate levels	All English proficiency levels Some programs mix native English speakers and multilingual learners and former multilingual learners in certain courses, particularly as multilingual learners reach intermediate and advanced proficiency levels
Grades Served	All grades (until students exit language support program)	All grades (until students no longer need language support, usually decided on a case-by-case basis by content area)
Teachers	ESL/ELD/Designated ELD teachers; typically ELD- or bilingual-certified or endorsed, sometimes English language arts certified with specialized training	Content-certified teachers - some with ELD or bilingual certification or endorsement, some are content-certified with specialized training
Role of the SIOP Model	For lesson planning and delivery	For lesson planning and delivery
Additional Information	The number of hours of instruction per week may be reduced as proficiency levels rise.	These courses are often the bridge to general education content courses while students are developing academic English skills. May be used in any class where students need to develop academic literacy.

design a brochure or make a video ad to sell a good or service; use online reference materials to learn about the supply and demand of certain goods; or develop a business plan for a good or service they would like to sell. They might study comparative and persuasive language to advertise their good or service. Multilingual learners may contribute valuable insights to this topic because some have lived in places where their parents or neighbors moved goods to market. Some may have experienced the effects of adverse weather on the production of foodstuffs or the effects of poor infrastructure on the transportation of goods.

In general, content-based language 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 language instruction to occur, teachers need to provide practice in academic skills and tasks common to regular, grade-level classes.

In sheltered content classes, teachers deliver grade-level objectives for the different subject areas to multilingual learners through modified instruction that makes the information comprehensible to the students while promoting their academic English development. The goal is to teach content to students learning English through a developmental language approach.

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 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 online resources.

In the 1990s, there was a great deal of variability in the design of sheltered instruction courses and the delivery of sheltered lessons, even among trained teachers and within the same schools. There was no model for teachers to follow and few systematic and sustained forms of professional development. That situation, along with the underachievement of multilingual learners, was the impetus for our research: to develop a valid, reliable, and effective model of sheltered instruction that would improve the academic performance of these students.

Research and Development of the SIOP® Model

We therefore developed the SIOP Model, with the participation of many schools and teachers, as an approach to integrate content and language instruction for multilingual students. Teachers would employ techniques that make the content concepts accessible and also develop the students' skills in the new language. Details of the SIOP Model research studies can be found in Appendix E of this book and we present a brief overview here.

The first version of the Sheltered Instruction Observation Protocol (the original name for 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, integrated 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.

Over four years, we piloted the model and assessed student learning. In 2000, we finalized SIOP with 30 features of instruction organized in eight components—Lesson Preparation, Building Background, Comprehensible Input, Strategies, Interaction, Practice & Application, Lesson Delivery, and Review & Assessment (Echevarria, Vogt & Short, 2000). The CREDE research showed that multilingual learners whose teachers were trained in implementing the SIOP Model performed statistically significantly better on an academic writing assessment than a comparison group of multilingual learners whose teachers had no exposure to the model (Echevarría, Short, & Powers, 2006). A subsequent study confirmed the SIOP (protocol) to be a valid and reliable measure of sheltered instruction (Guarino et al., 2001).

SIOP is the term for the empirically validated model of sheltered instruction designed to make grade-level academic content understandable for multilingual learners while at the same time developing their academic English language proficiency. It was formerly spelled out as the Sheltered Instruction Observation Protocol. SIOP refers to the observation instrument for rating the fidelity of lessons to the model (see Appendix A) and to the instructional model for lesson planning and delivery that we explain in detail in the following chapters. It is also used as an adjective (e.g., SIOP teachers, SIOP lessons, and SIOP classrooms), and as a verb (e.g., to *siopize* a lesson plan).

We continued to test and refine the SIOP Model. From 1999 to 2002, we field tested the SIOP professional development program, which includes professional development institutes, videotapes of exemplary SIOP teachers, facilitator's guides, and other materials. (See Appendix F.) From 2004–07, we replicated and scaled up the SIOP research in a quasi-experimental study in two districts at the middle and high school levels. Multilingual learners 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 proficient learners (Short, Fidelman, & Louguit, 2012).

From 2005–12, we participated in the Center for Research on the Educational Achievement and Teaching of English Language Learners (CREATE), looking at the SIOP Model first in middle school science classrooms (Himmel, Short, Richards, & Echevarría, 2009) and later as the professional development framework for a school-wide intervention (Echevarría & Short, 2011). In this set of studies, we used an experimental-control design; and multilingual learners, former multilingual learners, and native English speakers were part of the student population. The results showed that students with teachers who implemented the SIOP Model with greater fidelity performed better on criterion-referenced assessments than those whose teachers did not implement SIOP to a high degree (Echevarría, Richards–Tutor, Chinn, & Ratleff, 2011). So, the level of implementation mattered. Further, students in SIOP curriculum groups outperformed control students on criterion-referenced vocabulary, science, and social studies measures (Echevarría, Richards-Tutor, Canges, & Francis, 2011; Short & Himmel, 2013). These findings indicate that English-speaking students are not disadvantaged when they are in SIOP classes with multilingual learners and that they also benefit from SIOP practices.

FIGURE 1.5 Overview of the SIOP®'s Eight 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 that teachers present a lesson that meets the planned objectives and promotes student engagement.
- *Review & Assessment* reminds teachers to review the key language and content concepts, assess student learning, and provide specific academic feedback to students on their output.

A number of school districts have also conducted program evaluations on their implementation of the model. Several can be reviewed in *Implementing the SIOP® Model Through Effective Professional Development and Coaching* (Echevarría, Short, & Vogt, 2008). In addition, many other researchers have studied SIOP Model professional development programs and student achievement in the United States and other countries. (For a sampling, see Batt, 2010; Coppersmith, Slapac, & Song, 2019; Daniel & Pray, 2017; Ebedy, 2019; Koura & Zahan, 2017; Li et al., 2016; McIntyre et al., 2010; Piazza et al., 2020; and Song, 2016a).

Figure 1.5 provides brief descriptions of each component. You will read about each component and its features in subsequent chapters of this book. We are gratified that the original model has stood the test of time; no features have been added or removed. The model has been shown to be effective in numerous districts and schools across the United States and in other countries as well.

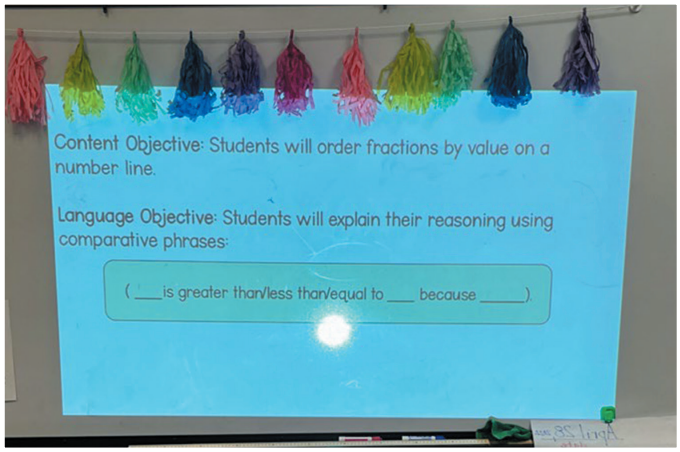
Effective SIOP® Model Instruction

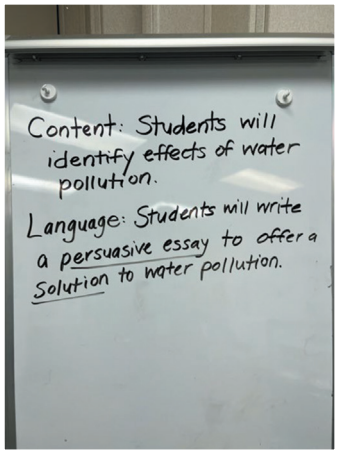
In this book, *Making Content Comprehensible for Multilingual Learners: The SIOP® Model*, we introduce you to the research-based model for sheltered instruction and content-based language instruction. We provide teaching ideas for each of the model's eight components, suggest ways to differentiate instruction in multi-level classrooms, and demonstrate through lesson scenarios how the model can be implemented across grades and subject areas. The model will guide you to the best practices for multilingual learners. It has been used successfully in both language and content classrooms, and in programs that use primarily English and those that use English and another language. With this approach, you will help your multilingual learners attain the skills and knowledge associated with success in school and beyond.

In effective SIOP lessons, language and content objectives are systematically woven into the curriculum of one particular subject area, such as kindergarten math, fourth-grade language arts, or high school biology, or in one ELP level, such as beginner, intermediate, or advanced. Teachers develop the students' academic language proficiency consistently and regularly as part of the lessons and units they plan and deliver.

ARTIFACT 1.1 Content and Language Objectives

Posting and reviewing content and language objectives for each lesson is a hallmark of the SIOP Model. Here are objectives from classrooms in Portland, Oregon.





> When teachers implement the SIOP Model, multilingual learners in both language and general education classes are more engaged and participate more fully. The SIOP Model gives them the tools to engage in rigorous academic content that would otherwise be out of their linguistic reach.
>
> Helene Becker, retired District EL Director, Connecticut

In subsequent chapters, 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 collaborative discussion groups, 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. The final two chapters demonstrate how SIOP is effective with struggling students and serves as the basis for co-teaching.

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

- Classroom teachers provide rigorous, grade-level instruction aligned with state content standards through specialized techniques, although some targeted curricula may be designed for children who have significant gaps in their educational backgrounds or very low literacy skills.
- Classroom teachers identify how academic language is used in the different subjects and give students explicit instruction and practice with it.
- Language teachers advance students' English language skills with curricula addressing language proficiency standards, but also by incorporating the types of texts, vocabulary, and tasks used in core subjects to prepare the students for success in the regular, English-medium classroom.
- SIOP teachers incorporate technology for remote learning and in-class lessons. Students have access to various apps and Internet tools for many purposes, ranging from online simulations and virtual field trips, to speaking practice through audio recordings, to self-paced research, and writing and editing tools.

Accomplished SIOP teachers determine students' baseline understandings in their subject area 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 their vocabulary base.
- SIOP teachers modulate the level of English they use and carefully select the texts and other materials used by students.
- SIOP teachers make the content comprehensible through techniques such as the use of visual aids, multimedia and online resources and text features, modeling, demonstrations, graphic organizers, vocabulary previews, cooperative learning, peer tutoring, and home language support.
- Besides increasing students' factual knowledge, SIOP teachers highlight and model procedural knowledge (e.g., how to accomplish an academic task) along with study skills and learning strategies (e.g., note-taking and self-monitoring comprehension when reading).

> "SIOP helps students understand how language works so they can take ownership of their learning whether they are using L1 or L2 to access the content. When students begin to understand how language objectives show them, in a more tangible way, how language development increases through content knowledge, ownership becomes evident."
>
> Dr. Francheska Figueroa, Postdoctoral Research Scholar, Arizona

In effective SIOP lessons, students have agency. They interact with each other and the teacher and engage with the texts and tasks, which leads to elaborated discourse and critical thinking.

- SIOP teachers promote language learning through social interaction and contextualized communication, guiding students to construct meaning and understand complex concepts from texts and classroom discourse (Vygotsky, 1978).
- Multilingual learners are explicitly taught functional language skills, such as how to negotiate meaning, confirm information, describe, compare, and persuade. SIOP teachers help them articulate their content knowledge both orally and in writing, often with sentence starters and language frame scaffolds.
- SIOP teachers introduce students to the classroom discourse community and demonstrate skills such as taking turns in a conversation and interrupting politely to ask for clarification.
- SIOP teachers encourage students to use their full linguistic repertoires, such as their home language, and other assets to learn, discuss, and apply their knowledge.

Not all teaching is about the techniques in a lesson. SIOP teachers also consider their students' affective needs, cultural backgrounds, and learning preferences. 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, interacting, and using language.
- They socialize multilingual learners to the implicit classroom culture, including appropriate behaviors and communication patterns.
- SIOP teachers connect with the families of multilingual learners. They partner on ways to support the students at home and at school. For example, they may

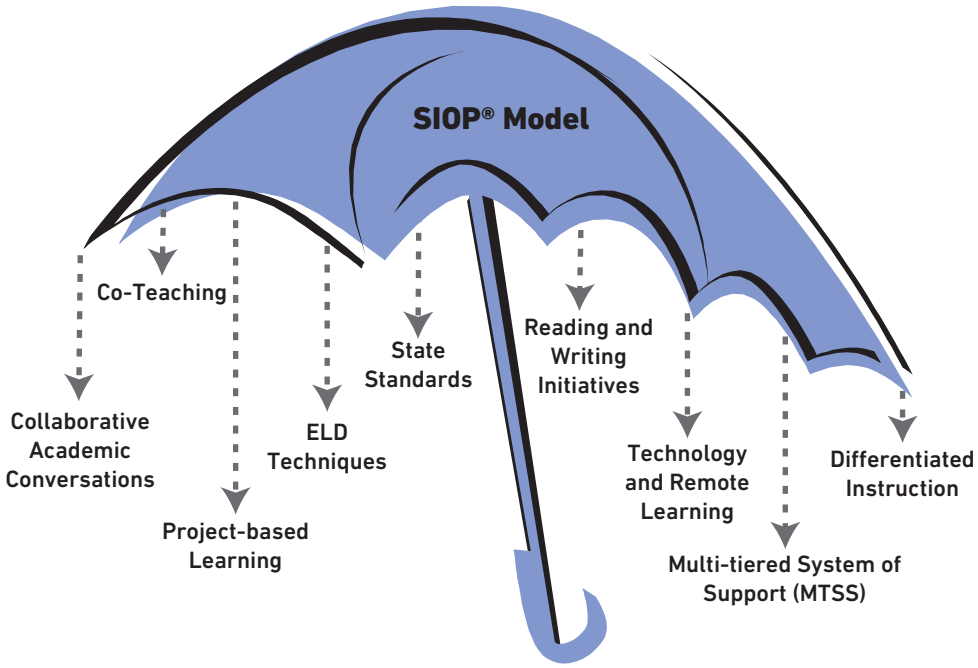
seek to determine the funds of knowledge in the children's households and orient parents and guardians to the expectations of schooling in the United States.

SIOP teachers offer multiple pathways for multilingual learners to demonstrate their understanding of the content too, getting a more accurate picture of their knowledge and skills than is possible through one standardized test. Otherwise, some students may be perceived as lacking mastery of content when actually they are following the normal pace of the second language acquisition process.

- SIOP teachers plan pictorial, hands-on, or performance-based assessments for individual students; group tasks or projects; oral reports; written assignments; and portfolios, along with more traditional measures such as 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.

It is important to recognize that the SIOP Model does not require teachers to discard their favorite techniques or to add copious new elements to a lesson. Rather, this model of sheltered instruction brings together *what* to teach by providing a 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 1.6). 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 English language proficiency and for specific content areas.

FIGURE 1.6 **The SIOP® Model Framework for Organizing Best Practices**



Implementing the SIOP® Model

The goal of this book is to prepare teachers to teach content and academic language and literacy skills effectively to multilingual learners. The SIOP Model may be used as part of a program for preservice and inservice professional development, and used as a coaching tool, a planner for sheltered content and content-based language lessons, and a training resource for university faculty. Research shows that professional development approaches that improve teaching include the following: sustained, intensive development with modeling, coaching, reflection, and problem solving; collaborative endeavors for educators to share knowledge and give feedback; 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 (Darling-Hammond, Hyler, & Gardner, 2017; Short, 2013).

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, and coaching helps get them to that level (Short, Fidelman, & Louguit, 2012). McIntyre and colleagues (2010) suggest that teachers' proficiency in implementing the model may depend on their background teaching experiences and the design of their professional development.

Effective implementation of the SIOP Model is one key to improving the academic success of multilingual learners. Preservice teachers need to learn the model to develop a strong foundation in best practice for integrating language and content in classes with multilingual learners. Practicing teachers need the model to strengthen their lesson planning and delivery and to provide students with 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 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 ELD program (with pull-out or self-contained classes), a late-exit bilingual program, a dual language 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 children 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; and with learners at beginning levels of English proficiency and those at advanced levels. For students studying in language support programs, SIOP instruction provides the bridge to the general education program.

Final Points

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

- Students who are learning English as a new 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 underprepared to instruct these learners.
- When teachers use the SIOP Model, they build creative and supportive classroom environments that help students succeed. There is a high level of engagement, and student assets are valued and incorporated into lessons. Teachers use the SIOP Model to give multilingual learners access to the core curriculum, meet state standards, and prepare 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 multilingual learners.
- The SIOP Model does not mandate cookie-cutter instruction; instead, it provides a framework for well-prepared and well-delivered lessons in any subject area. As SIOP teachers design their lessons, they have flexibility. Nonetheless, critical instructional features must be attended to in order for teachers to respond appropriately to the unique academic and language development needs of multilingual 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 language and sheltered content classes that are part of a program of studies for multilingual learners. It is effective in general education classes, too. Altogether, these classes offer a promising pathway to help students progress through the grades and eventually graduate from high school.

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 multilingual learners that may influence their success in school?
   b. Distinguish between content-based language instruction and sheltered instruction?
   c. Explain the research supporting the SIOP Model?

d. Describe the assets your multilingual learners bring to your classroom?
e. Develop a lexicon related to the SIOP Model?
f. Compare your typical instruction with SIOP instruction?

2. Consider one class of multilingual learners. Identify the individual and sociocultural factors that might influence the educational success of these students. In what ways might instruction using the SIOP Model help them?
3. Are the multilingual learners in your school successful when they exit English language support programs and are placed in regular classrooms? Explain how you know and what contributes to their success or lack of success.
4. Many sheltered content teachers fail to take advantage of the language learning opportunities for students in their classes. Why do you think this is so? Offer two concrete suggestions for these teachers to enhance their students' academic language development.
5. The SIOP Model has been implemented by teachers since 2000. Why do you think it is still relevant today?
6. 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.