Sheltered Instruction in the Content Areas

- Mrs. Nash presents a student-centered lesson, using grade-level curriculum with a lot of visuals and hands-on activities to make the lesson understandable for English language learners. What would such a lesson be called?
- Mr. Hightower, a tenth-grade science teacher, completed each step
 of his lesson plan. Should he be confident that students learned
 the material?
- Ms. Alvarez has three students in her sheltered math class who have been identified as learning disabled. What special adaptations should she make for those students?

heltered instruction is nothing more than good teaching—and I already do that." This statement is commonly heard from teachers who have English language learners in their classrooms. True, sheltered instruction shares many of the characteristics of effective instruction, but it is more than simply good teaching—much more.

This chapter begins by discussing what sheltered instruction is and then examines a social studies unit that illustrates the distinction between effective and sheltered instruction. The chapter ends with a discussion of the needs of students with learning difficulties.



Definition of Sheltered Instruction

Sheltered instruction is a means for making grade-level content, such as science, social studies, and math, more accessible for English language learners (ELLs) while also promoting English development. Sheltered instruction is said to be the most influential instructional innovation since the 1970s, particularly because it addresses the needs of secondary students (Faltis, 1993). The approach was first introduced in the early 1980s by Stephen Krashen as a way to use second-language acquisition strategies while teaching content-area instruction. The approach teaches academic subject matter and its associated vocabulary, concepts, and skills by using language and context to make the information comprehensible.

Faltis (1993) discusses the origins of sheltered instruction and the differences among its variations, such as content-based English language teaching (CELT). The term *sheltered* indicates that such instruction provides refuge from the linguistic demands of mainstream instruction, which is beyond the comprehension of ELLs. Sheltered instruction, called SDAIE (Specially Designed Academic Instruction in English) in some regions, provides assistance to learners in the form of visuals, modified texts and assignments, and attention to their linguistic needs. The term *sheltered* is used widely in schools across the United States to speak of content-area classes for English language learners, such as sheltered math, sheltered science, and sheltered social studies.

While sheltered instruction utilizes and compliments sound instructional methods and strategies recommended for both second-language and mainstream classes, a number of features make sheltered instruction more than good teaching. Some of those unique features, illustrated in Figure 3.1, include adapting academic content to the language proficiency level of the students; using supplementary materials to a high degree; emphasizing key vocabulary; and using speech that makes information comprehensible to students, including sufficient wait time. As you can see, nearly all students would benefit from the features of sheltered instruction but teaching for ELLs differs more in degree than in kind. For instance, some effective teachers may highlight key vocabulary but in sheltered classes, highlighting key vocabulary is a critical part of every lesson and is emphasized throughout the lesson.

For many years, sheltered instruction (or SDAIE) consisted of a set of these techniques and activities that make the content understandable for English learners. However, because there was not an agreed upon model, teachers tended to pick and choose among the techniques and activities. Also, there wasn't adequate focus on language development. As a result, implementation was uneven and some sheltered classes weren't as effective as they could have been.

The SIOP Model

In the mid-1990s, researchers set out to develop a model of sheltered instruction that would guide teachers in how to use effective practices systematically and to give teachers a tool for reflection and improving their teaching. The sheltered instruction observation protocol, or SIOP (Echevarria, Vogt, & Short, 2000, 2004), has been highly effective in improving prac-

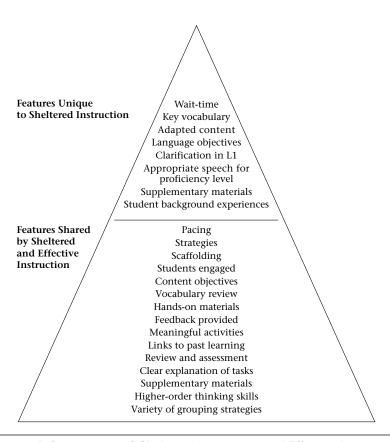


Figure 3.1 ● A Comparison of Sheltered Instruction and Effective Instruction: Unique and Shared Features

tice for teachers of ELLs and is currently used in schools in all 50 states and several countries (www.siopinstitute.net).

The SIOP is comprised of 30 features organized around the 8 components of preparation, building background, comprehensible input, strategies, interaction, practice/application, lesson delivery, and review/assessment (see Figure 3.2). In SIOP classes, language and content objectives are woven into the lessons in a particular subject area so that the teacher develops both subject matter competence and students' English language abilities. Teachers use the SIOP as both a lesson-planning guide and a way to reflect and improve upon the effectiveness of their teaching. In one study, professional development activities included using the SIOP to observe lessons, for coaching to enhance implementation of SIOP features, videotaping and analysis of SIOP lessons, and collaborative lesson planning (Short & Echevarria, 1999). Fidelity of implementation of the SIOP Model was assessed using the psychometrically reliable and valid SIOP observation protocol, which is useful in providing feedback to SIOP teachers (Guarino, et al., 2001). Further, research has shown that students

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Figure 3.2 The Sheltered Instruction Obs	servation Protocol (SIOP)
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Dat		Teacher: School: _						_	
Gra Cla		ESL level		. C:	1. 4	(-:1-		_	
		Lesson:		_	le-day				
	ections: Circle the number that best reflects what you ob							0–4	
Cite	e under "Comments" specific examples of the behaviors	observed.	Total Sco	re:	% Score	e:	Tape #:		
			Highly Evident		Somewhat Evident		Not Evident	N A	
Pre	eparation		4 3	3	2	1	0		
	Content objectives clearly defined for students								
2.	Language objectives clearly defined for students	[
3.	Content concepts appropriate for age and educational background level of students	[
4.	Supplementary materials used to a high degree, making the lesson clear and meaningful (graphs, models, visuals)	[
5.	Adaptation of content (e.g., text, assignment) to all levels of student proficiency	[
6.	Meaningful activities that integrate lesson concepts (e.g., inteviews, letter writing, simulations, models) with language practice opportunities for reading, writing, listening, and/or speaking Comments:								
	ilding Background Concepts explicitly linked to students' background experiences	[
8.	Links explicitly made between past learning and new concepts	[
9.	Key vocabulary emphasized (e.g., introduced, written repeated, and highlighted for students to see) <i>Comments:</i>	, [
~									
	mprehensible Speech appropriate for students' proficiency level (e.g. slower rate, enunciation, and simple sentence structure for beginners)	., -							
11.	Clear explanation of academic tasks clear								
12.	Variety of techniques used to make content concept clear (e.g., modeling, visuals, hands-on activities, demonstrations, gestures, body language) <i>Comments:</i>	s [
	ategies Ample opportunities for students to use learning strategies	[
14.	Scaffolding techniques consistently used, assisting and supporting student understanding (e.g., think-alouds)	d [

		Highly Evident		Somewha Evident	t	Not Evident	NA
	ategies (continued) A variety of questions or tasks that promote higher- order thinking skills (e.g., literal, analytical, and interpretive questions)	4	3	2 □	1	0	
16. 17. 18. 19.	eraction Frequent opportunities for interaction and discussion between teacher/student and among students, which encourage elaborated responses about lesson concepts Grouping configurations support language and content objectives of the lesson Sufficient wait time for student response consistently provided Ample opportunities for students to clarify key concepts in L1 as needed with aide, peer, or L1 text Comments:						
20.	Hands-on materials and/or manipulatives provided for students to practice using new content knowledge						
21.	Activities provided for students to apply content and language knowledge in the classroom						
22.	Activities integrate all language skills (i.e., reading, writing, listening, and speaking) Comments:						
	son Delivery Content objectives clearly supported by lesson delivery						
24.	Language objectives clearly supported by lesson delivery						
25.	Students engaged approximately 90–100% of the period						
26.	Pacing of the lesson appropriate to the students' ability level <i>Comments:</i>						
	view/Assessment Comprehensive review of key vocabulary						
28.	Comprehensive review of key content concepts						
29.	Regular feedback provided to students on their output (e.g., language, content, work)						
30.	Student comprehension and learning of all lesson objectives (e.g., spot checking, group response) assessed throughout the lesson <i>Comments:</i>						

Source: From Jana Echevarria, Maryellen Vogt, & Deborah Short, *Making content comprehensible for English language learners: The SIOP model.* Published by Allyn and Bacon, Boston, MA. Copyright © 2000 by Pearson Education Inc. Reprinted with permission of the publisher.

whose teachers implemented the SIOP made significant improvement in their academic literacy development (Echevarria, Short, & Powers, 2006).

In addition to language and content objectives, SIOP lessons are characterized by an abundance of supplementary materials, clear and meaningful lessons, and concrete examples. Information that is embedded in context allows ELLs to understand and complete more cognitively demanding tasks. Since lectures and pencil-and-paper tasks centered around a text are difficult for these students, use of supplementary materials and student-centered activities are necessary to bring meaning to the text, making lessons relevant and purposeful for the students. For example, the idea that products costing the same may vary in quality (last longer or work better) can take on more meaning when students have the products to examine and compare. A textbook discussion of the idea is more easily understood when students are actually looking at the items. Figure 3.2 shows the SIOP features that characterize effective sheltered instruction.

In Chapter 2 we discussed the need to contextualize instruction or provide "clues" for students. There are innumerable ways that challenging content can be made understandable for ELLs. The following examples are drawn from a variety of subject areas.

- 1. *Modeling*. The teacher models what is expected of the students. Before students begin solving word problems in math, the teacher takes the students through a word problem step by step, modeling useful strategies for solving such problems. Students with diverse levels of ability benefit from concrete, step-by-step procedures presented in a clear, explicit manner.
- **2.** *Hands-on manipulatives*. This approach can include learning aids from Cuisenaire rods in math to microscopes in science to globes in social studies.
- 3. *Realia*. For a unit on banking skills, students might practice filling out actual bank deposit slips, ATM forms, and check registers. When learning about geology, students might be given samples of rocks and minerals. For consumerism, students might read actual labels on products.
- **4.** *Commercially made pictures.* There are a variety of photographs and drawings available that depict nearly any object, process, or topic covered in the school curriculum. Many of these are part of curriculum programs or are options in the programs.
- **5.** *Teacher-made pictures*. As an alternative to buying pictures to enhance lessons, the teacher can draw pictures or cut them out of magazines.
- 6. Overhead projector. As material and information are introduced, the overhead projector can be used to give constant clues to students. Teachers jot down words or sketch out what they are presenting. The written representation of words gives students learning English a chance to copy the words correctly, since certain sounds may be difficult to understand when presented orally. Students with learning problems often have difficulty processing auditory information and are helped with the visual clues offered through use of an overhead projector. For example, rather than relying solely

on verbal presentation of the water cycle in a biology class, the teacher uses the overhead projector to write the basic terms as they are being discussed (see Figure 3.3). These additional visual clues help students understand the spoken words and the meaning of the word *cycle*. In the consumerism lessons, the sheltered teacher frequently used the overhead projector to visually reinforce the words and ideas presented orally. Transparencies may be filed and kept accessible for review or when a question about a topic is asked. Using the same transparency for clarification or review can be effective for retention of information.

- 7. Demonstration. In a middle-school class studying archeology, a student asked how artifacts get buried deep underground. Rather than relying on a verbal explanation, which would have been meaningless to many of the students learning English, the teacher demonstrated the process. First, he placed a quarter in a pie plate and proceeded to blow dirt on the quarter, covering it slightly. He then put dried leaves on top, followed by a sprinkling of "rain." Finally, he put some sand on top, and the quarter was then underneath an inch or so of natural products. Although the process was described in the text, most students did not have the reading skills or English proficiency to understand it. The demonstration made a much greater impression on the students and was referred to later when discussing the earth's layers and other related topics.
- 8. *Multimedia*. Technology offers a multitude of options ranging from something as simple as listening to a tape recording of Truman's announcement of the dropping of the atomic bomb to an interactive laser computer display. Videos, CD-ROM programs, tape recordings, and online websites are examples of multimedia that can enhance comprehension for English language learners.

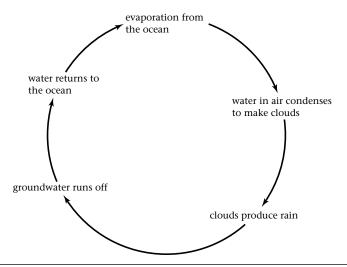


Figure 3.3 • Water Cycle as Displayed by Overhead Projector

Definition of Sheltered Instruction

- 9. *Timelines*. These are particularly useful in the social sciences. As one lesson progressed through Western civilization, a timeline was mounted along the length of a wall that visually represented each historical event as it related to other events and periods in history. As an event was studied, the teacher made some visual representation on the timeline and continued adding to it throughout the course of the year.
- 10. Graphs. Information represented visually often makes greater impact and is easier to remember. Graphing the students' weekly consumption of junk food, fruits and vegetables, and milk products is more interesting and meaningful than simply reading about the various food groups and recommended servings. The text becomes more understandable when the graphing activity is completed before reading the text. Many of the terms and concepts will then already be familiar to the students.
- 11. *Bulletin boards*. Visual representations of lesson information can be put on bulletin boards for reference, such as an example of a business letter, some friendly letter formats, or a three-dimensional paper model of stalactites and stalagmites with labels.
- 12. *Maps*. A map can be one of the most effective means of easily creating context, since many subjects relate to geography. When talking about the rainforest in science, its location can be shown on a map. History class lessons about wars can become more meaningful if the territories are shown on maps.

Another component of sheltered instruction that sets it apart from effective instruction is the extent to which the text is adapted to meet students' language and learning needs, while still reflecting high expectations. Most content-area teachers are required to use texts that tend to be difficult for English language learners to read with comprehension. (Chapter 6 details ways teachers can make subject-area curriculum, including textbooks, understandable for English language learners.)

Because sheltered instruction is student centered, students are assigned real-life activities (for example, surveys, letter writing, simulations, or constructing models) with lots of opportunities for listening, speaking, reading, and writing. In a lesson on values, for instance, students could get into small groups and be given scenarios to discuss and write about. One might be "You come across the answer key to the upcoming science test. Do you put it on the teacher's desk, keep it and study from it, or give it to friends so you'll all do well on the test?" Another might be "Your grandmother is ill and you agree to stay with her for the weekend while your parents work. Later you get an invitation to a party that the most popular kids will attend. What do you do?" The students spend time discussing the dilemma and then write down their solutions to the situation.

New key words are introduced, highlighted, and written for students to see. Vocabulary knowledge in English is one of the most important aspects of oral English proficiency for academic achievement. To be most effective, vocabulary development needs to be closely related to subject matter (Saville-Troike, 1984). Krashen and Terrell (1983) suggest that

comprehension of new vocabulary is acquired through context and calls for students to infer meaning from the text. On the other hand, there is a body of experimental research supporting the explicit teaching of vocabulary and the use of memory strategies to enhance recall of words and their meanings (Scruggs & Mastropieri, 1990).

Consider, for example, a class of tenth-grade students at the intermediate level of proficiency. One approach to vocabulary building would be to structure an interesting lesson around an issue that has meaning for the students, such as the influence of gangs in the inner city. The teacher would provide abundant comprehensible input and introduce vocabulary within the context of the lesson. Those on the side of direct teaching would agree that such a lesson would be effective but that vocabulary could be taught explicitly, outside the context of the lesson, as well. McLaughlin (1992) proposes an eclectic approach to vocabulary teaching, including both direct teaching and use of context, providing a more balanced approach. Vocabulary words can be brainstormed, mapped, and clustered, or visual associations can be generated for new words. Whatever approach is used, key vocabulary should be emphasized across all content areas. Review and practice is an important instructional "habit" to develop because repeated exposure to vocabulary increases retention. In selecting key vocabulary, focus on teaching words that students aren't likely to encounter through conversational experiences as well as those words they will encounter frequently in texts (August, Carlo, Dressler, & Snow, 2005).

In a sheltered lesson, the teacher selects several key academic terms that are critical to understanding the lesson, writes them on an overhead transparency or a wall chart, and discusses each one at the outset of the lesson. Perhaps a mnemonic strategy could be employed. Then, as students encounter these words throughout the lesson, they can recall the definition or can infer meaning from the context. In both cases, students are exposed to new vocabulary and see its application within the text.

The vocabulary words or terms can then be added to a word bank written on butcher paper and posted around the room. These word banks become reference points for students to remember definitions and relationships between terms and to model correct spelling. To increase the effectiveness of word banks, students may draw a picture with which they associate the word next to it, write a definition of the word or write a sample use of the word in a sentence.

Another unique component of sheltered instruction is reducing the linguistic load of teachers' speech. Natural but slower speech, clearly enunciated, can increase comprehensibility, particularly when effort is made to use shorter sentences with simpler syntax. Take, for example, the sentence "To add or subtract numbers with exponents, whether the base numbers are the same or different, you must simplify each number with an exponent first and then perform the indicated operation." A preferable delivery might be (pointing to examples on the board), "To add or subtract numbers with exponents, you must complete two steps: (1) simplify each number with exponents and (2) perform the operation. This is true whether the base numbers are the same or different."

The use of more pauses between phrases allows students time to process what has been said before the next utterance begins. Although many teachers of ELLs believe they are consciously making an effort to pause between phrases, audiotaping of lessons usually yields surprising results. One method for ensuring that pauses are long enough for students to process the information is to count two seconds between utterances—for example, "An equation is a mathematical sentence, a relationship between numbers or symbols. (The teacher counts silently: 1001, 1002.) Remember that an equation is like a balance scale, with the equal sign being the fulcrum, or center (1001, 1002)." Naturally, this technique will be more effective when the teacher employs other techniques simultaneously, such as showing a visual of a balance scale, pointing to the fulcrum when reference is made to it, and writing an equation and equals sign on the board or an overhead transparency.

Another way to increase the comprehensibility of the message is to use consistent vocabulary and appropriate repetition. Repetition, or natural redundancy, reinforces language. Songs, chants, raps, and patterned stories give students opportunities to practice using the language and can provide reinforcement of vocabulary, language structures, and intonation (Richard-Amato, 1996). During instruction, use consistent vocabulary as much as possible. To expand vocabulary, communicate the same idea repeatedly using different words. In the example above, the term *mathematical sentence* was elaborated upon and the synonym *center* was given for the term *fulcrum*. It may be useful to emphasize the original expression by repeating it, giving students the opportunity to hear the same idea expressed in more than one way.

The next component of sheltered instruction lessons is one of the most important: interaction between students. While an opportunity for student interaction is also a characteristic of effective instruction, it is especially important for ELLs to practice using the new language in meaningful ways. Elaborated utterances around substantial questions are greatly encouraged in sheltered lessons.

Typically, teachers dominate linguistic interactions in the classroom. Studies have revealed the extraordinary paucity of opportunities for students to participate in meaningful discussions and question-and-answer sessions. (For more discussion of interaction, see Chapter 6.) Sheltered lessons give ample opportunity for discussing and questioning between teacher and students and among students in a variety of group configurations. Grouping becomes more critical when working with students with a variety of language and learning abilities. Heterogeneous grouping is encouraged, both with respect to language proficiency and academic skill level. Group activities offer students with diverse abilities an advantage by utilizing one student's strengths to compensate for a classmate's weaknesses. Grouping gives students the opportunity to clarify key concepts in their primary languages as needed, by consulting an aide, peer, or primary-language text. One of the benefits of sheltered instruction is that students are exposed to good models of English language as well as the opportunity to practice using English in academic settings. However, English language learners are in the process of acquiring a new language and will benefit from clarifying concepts in their native languages when needed.

Sheltered Instruction and Effective Instruction

There is a well-established body of literature on effective teaching, the instruction to which many people are referring when they speak of good teaching. The effective teaching literature offers findings associated with gains in student achievement in basic skills. These findings emerged from studies conducted from the 1970s through the early 1980s. They dispell the notion of teaching as an art rather than an applied science. The characteristics of effective teaching fall into two broad categories: (1) teaching behaviors and (2) organization of instruction (Bickel & Bickel, 1986). Teaching behaviors include emphases on direct instruction, demonstration, recitation, drill, and practice. Teachers conduct their classrooms in a task-oriented, businesslike manner, with a brisk instructional pace and material presented in small, sequential steps. Students are given many examples and the teacher uses frequent recall-level questions. Feedback and correction are provided, particularly in the initial stages of learning new material, and students are given ample opportunity to practice the skills they are learning.

Effective classroom management has been shown to promote positive achievement in students (Brophy & Everston, 1976). Characteristics of effective teachers include "with-it-ness" (the ability to monitor the entire class continuously); the ability to do two or more things simultaneously without having to break the flow of classroom events; a talent for moving along at a good pace without confusion or loss of focus; the ability to offer a variety of seatwork at the proper difficulty level that maintains the students' interest and attention; and the ability to look around the classroom, select randomly, lead students in choral response, and call on everyone frequently when questioning students. In terms of organization of instruction, effective instruction is characterized by well-planned lessons and high levels of academic engaged time. Sheltered instruction shares these characteristics (Gersten, Taylor, & Graves, 1999).

A Well-Planned Lesson

The amount of time a teacher spends preparing is often reflected in the effectiveness of the lesson. A well-planned lesson includes a brief review of previous learning to orient the students, including reteaching if necessary. It also includes presenting new content and skills in a way that is understandable, as well as offering an opportunity to students to practice using the new skills or material. For example, in a sheltered science class where middle school students were studying the function of arteries and veins, the lesson began with a display of the following review questions on an overhead transparency.

- 1. Why do you think we need both arteries and veins in order to live?
- 2. Why do you think arteries need to be thicker and heavier than veins?

Students were given 5 minutes to answer the questions. After the students gave their answers aloud, the teacher told the class to form work groups so they could do an activity

that involved creating a model of arteries and veins in the body. Although the students complied, they did so slowly, taking 5 minutes to form groups. The teacher then gave each of the five groups a large sheet of butcher paper and told them to trace one group member's body on the paper. A couple of the groups began the assignment, but 9 minutes passed before one group began tracing, according to observational notes. The students' next step was to go to the front of the class, where there were drawings of the heart and spools of red and blue yarn. Students were told to cut out the paper drawings of the heart and cut several lengths of yarn to represent veins and arteries. However, there were no instructions as to which group member was to do which job. The result was that one person from the group went up and waited in line to get the items while the other group members sat around talking. It took 15 minutes to get the items needed to complete the project. Students then worked together to glue yarn from the heart to various places in the body. When students had questions, such as which color should be used for which veins, they asked the teacher. After approximately 50 minutes, students cleaned up. Finally, the teacher concluded the period by asking the students what they had done. They replied that they had traced the body and glued yarn. At the end of the period, only one group was near completion of the project. The teacher told them that they would complete their work the following day.

This was a creative, interesting lesson, but it lacked sufficient planning. How could it have been improved with more preparation? The teacher should have planned specific tasks for each member of the groups by having two students trace, one get the heart paper, and another get the yarn. What took 15 minutes could have taken 2 to 3 minutes. Also, the teacher should have precut the yarn so that students would not have to stand in line for 5 to 10 minutes waiting for the spools. The teacher could have instructed students to bring their notebooks with them to the group and use their notes to answer questions that arose before asking the teacher questions. Finally, the lesson wrap-up should have been planned to reinforce the concepts and vocabulary of the lesson. The goal of every lesson needs to be student learning, not simply the completion of activities. Unfortunately, lack of focus and poor planning resulted in a lesson that included little more than having middle school students tracing and gluing, as the students mentioned at the conclusion of the lesson.

Academic Engaged Time

There is a high correlation between student achievement and the amount of time students are actively engaged in learning tasks. Too often, important academic time is wasted on non-instructional events, such as taking attendance and passing out papers. In some sheltered classes, there are practices that maximize instructional time with positive results. These practices include beginning the lesson immediately after the bell rings. The lesson usually begins with a review of past learning and then moves into the objectives for the current lesson, making a connection between the two. Presentation of lesson content begins, maximizing student interest and involvement through either a direct instruction approach, inquiry, or interactive format. The key issue is keeping students actively engaged in learning, regardless of the for-

mat. The lesson ends by refocusing students on the lesson's objectives and reviewing what was learned.

Academic engaged time and lesson preparation are interrelated because it takes planning to keep students engaged throughout the period. Students, particularly English language learners, cannot afford lost academic time. In some classes, like the science class described above, the last 10 minutes of the period are used for clean up, which means 60 seconds of gathering books and papers, followed by 9 minutes of sitting around. In two classes that use every minute of class time wisely, the same students can be seen on task and performing to a high degree. The science lesson could easily have been completed in one class period, yet the teacher devoted two full class sessions to it, wasting valuable academic time.

Regardless of the type of student—mainstream, English language learner, or special education—meaningful, effective lessons must be well planned and engage students to a high degree.

A Comparative Case Study

Effective instruction and sheltered lessons share many characteristics. A series of middle school social studies lessons can demonstrate the similarities and differences. These lessons were part of a pilot study (Echevarria, Greene, & Goldenberg, 1996) in which three teachers taught the same content to English language learners, two using a sheltered approach and one using effective instruction.

The lessons were part of a four-day unit on consumerism. The first day's lesson introduced key vocabulary: *brand name, ingredient, consumer, false advertising, effective*, and *myths*. The content objectives of the unit were:

- 1. What health values to look for in products and services consumers buy or use
- 2. How product labels can help consumers
- 3. How advertising can help consumers

The language objective was to use key vocabulary in context. Students read the text-book definition of *consumers*: "those who buy and use products." In the effective instruction group, each student looked up vocabulary words individually in the glossary and wrote his or her definitions. In the sheltered group, each word was assigned to a group of five students to look up in the glossary, and each group then reported its definition to the class and paraphrased the definition of the word.

The objective of the second day was to learn how consumers can make informed decisions. The lesson began with all groups reviewing the definition of consumer and other vocabulary words. Students then began reading a section in the text titled "You Can Make Good Decisions." The effective instruction students read the section silently to themselves;

the sheltered students read as a group, with the teachers providing paraphrasing and clarification as needed. After reading, both groups discussed the need for consumers to examine the quality of the item as well as the price. Teachers in both groups mentioned that cheap prices sometimes indicate poor quality, but some brand name prices are based on the name, not the quality. In the sheltered group, teachers showed a sample of cheap shoes and wellmade shoes, writing the cost of each pair on the board. Then the shoes were passed around for students to compare. They discussed cost and quality.

The effective instruction group was given a worksheet containing these four questions:

- 1. You want a new jacket. The Lakers jacket is almost twice the price of a similar jacket sold by Sears. Do you buy the expensive Lakers jacket or the Sears brand? Why?
- 2. Two cameras are the same price, but one comes with a zoom lens. Which would you buy? Why?
- **3.** An 8-ounce tube of toothpaste costs \$3.00, and a 4-ounce tube of the same type costs \$2.00. Which would you buy? Why?
- **4.** Shasta Cola costs \$2.50 for a six-pack, and Coke costs \$3.25 for a six-pack. Which do you buy? Why?

The sheltered instruction group participated in a hands-on activity in which items were arranged in stations around the room. At each station, students compared two items and decided if the quality was the same and if the difference in price was worth it. Students completed worksheets at each station (see Figure 3.4), rotating from one station to the next. All groups had the same closure at the end of the lesson: "Today you learned that consumers should make informed decisions. What are some things you should consider before buying something? Tomorrow we'll find out how we can be more informed to make better decisions."

The third day of the unit followed a similar format: The sheltered instruction lessons were more student centered, providing more context and hands-on activities, while the effective instruction lessons were paper-and-pencil oriented, relying on the teacher and textbook as sources for learning. Again, both groups reviewed what a consumer is and why consumers should make informed decisions. Review of vocabulary was oral for the effective instruction group; the sheltered group benefited from having the words on an overhead projector. All teachers opened the lesson by saying, "Today we're going to learn about how product labels help consumers."

Both groups began by reading a section in the textbook about reading labels and the important information they give consumers. In both groups, students were asked, "Can consumers believe the information they read on health product labels?" Students were assigned either to a group that argued yes or a group that argued no. Each group was required to defend its answer using information from the textbook.

After the brief debate, the effective instruction group answered questions posed in the textbook about labels, while the sheltered instruction group participated in a hands-on activ-

Figure 3.4 ■ Contrasting Sheltered and Effective Instruction Lessons: Chronology of 4-Day Unit

Effective Instruction

- 1. individual, independent vocabulary work
- 2. Wrote definitions
- **3.** Read silently to themselves
- 4. Class Discussion
- 5. Completed worksheet about purchases
- 6. Review and closure
- 7. Reviewed vocabulary orally
- 8. Teacher-centered: text and paper-and-pencil tasks
- 9. Review and closure
- 10. Introduction of lesson with Review
- 11. Teacher-led discussion
- 12. Read text, using independent, silent reading
- 13. Completed worksheets individually, then compared scores with partners

Sheltered Instruction

- 1. Vocabulary work done in small groups
- 2. Reported definitions aloud, paraphrasing
- 3. Read aloud in groups with support
- 4. Class discussion with visuals (realia, writing on board)
- 5. Hands-on activity
- 6. Review and closure
- 7. Reviewed vocabulary orally with words written for reference
- 8. Student-centered, hands-on activity
- 9. Review and closure
- 10. Introduction of lesson with Review
- 11. Discussion in pairs, teacher writes conclusions on overhead transparency
- 12. Read text using a variety of reading options and checked for understanding
- 13. Completed worksheets as a game, compared scores across groups

ity to further their understanding of the concepts presented in the textbook. The teacher brought in a variety of food containers, medicine containers, and clothing with labels, and the students formed groups. Each group was given one food container, one medicine container, and one clothing item. As a group, they completed a worksheet about reading labels (see Figure 3.6).

All the teachers closed the lesson by saying, "Today you learned how a consumer can learn about products and make good decisions. Why would you not buy a sweater that has to be dry cleaned, even if the price is good? Why would you not buy vitamins where the first ingredient labeled is sugar? Tomorrow we're going to see how advertising affects our choices."

On the final day of the unit, both groups reviewed the definition of *consumer* and the things they had learned about being more informed consumers, such as considering cost and quality and reading labels. The objective of the final day was to show how advertising can help consumers and how it can trick consumers.

1. Are these two items of the same quality?

NO

2. What is the cost of each?

Item Cost

Crayons \$.99

Crayola Crayons \$1.99

3. Which would you buy? \$1.99 crayola crayons

4. Why? Because they would last longer and, their better kinds

Figure 3.5 • Activity Worksheet

Students in both groups were directed to look at a shampoo ad in the textbook depicting an attractive couple riding bikes. The teachers asked if the ad had useful health information about the shampoo. The effective instruction teacher led students in a question-and-answer session about the ad and what it communicated. The sheltered students formed pairs and were given 2 minutes to write down words that described the people in the ad (*happy, healthy, fun, pretty, handsome*). Students were asked to share some of their words. The sheltered teachers wrote the words on the overhead transparency as students said them. Teachers in both groups pointed out that ads give consumers the impression that using the product will make them resemble the people in the ad. Teachers further asked students, "If the people in the ad were smoking, would you think that the brand being smoked was healthful?"

Both groups then turned to the textbook to read and discuss. The sheltered teachers used a variety of reading options, such as having students read with a partner, read aloud, or read in groups, with the teacher paraphrasing, clarifying, discussing, and checking for understanding frequently. The effective instruction group relied more on independent silent reading. Checks for understanding consisted of brief teacher-student interactions with fewer opportunities for elaboration and discussion than the sheltered format. In the textbook passage, students were directed to the term *brand name* and asked to give examples based on their experiences. The sheltered teachers wrote students' responses on overhead transparencies. Students were asked questions such as whether consumers have any protection from false health information in advertising.

Next, a variety of laminated magazine and newspaper advertisements were distributed to students. Effective instruction students individually completed the worksheets and then compared their scores with those of their partners. Teachers modeled how students were to

Medicine

1. What are the **directions** for using this product?

The directions are that you only have to use a small amount, spreading and rubbing in well.

2. What can you learn from the warning?

that we have to keep out of reach of children.

Food

- 1. What is the major ingredient of this product? ingredient
- Sugar is a major
- 2. What other health information is on the label?

Nutrition information. Calories & vitamins

Clothing

1. What material is the clothing made from?

It is 55% Ramie 45% cotton

2. According to the label, how should it be cleaned?

Hand wash cold water

Figure 3.6 • Label-reading Activity

score each ad. Sheltered instruction students, preassigned by the teacher in groups of three, rated each ad (see Figure 3.7). A timer was then set for 4 minutes. When the timer went off, the group had to have the ad scored and go on to the next ad. When the timer went off again, groups exchanged ads with another group for scoring. After 8 minutes (4 minutes per ad), the groups compared their scores. Sheltered teachers directed this portion of the lesson by asking questions such as "How did group 1 score this ad? and group 2? Group 1, why did you give it a score of 9? Group 3, how did you score this ad? Compare your score with group 4." The class discussed how some people like certain things while others like others. The teacher pointed out that this distinction is what advertising is about: targeting certain groups (young mothers, teenagers, senior citizens) and trying to put together an ad to which a certain group will respond.

Score each ad in this way: 0 = No useful information5 = A lot of useful information Circle the score you give to each ad. Ad #1 1 2 3 4 (5) why? Becous It has how your hear will loke and the vitamins will make your hear beter and its beter for your hear Ad #2 1 2 3 4 5 Why? _ Circle the score you give to the other group's ads. Ad #1 (1) 2 3 4 5 why? I think that is not good becous it doesn't say If your lips will be dry. Ad #2 1 2 3 4 5 Why? _____ Your group members: Francisco Eric Joel

Figure 3.7 • Advertisement Activity

All teachers ended the lesson with this statement: "Today we have seen how advertising can help consumers and how consumers can use ads to get important information. We've also seen how advertising is used to influence consumers. How does advertising differ from the information you get on labels?"

On the final day, students in both groups were also given a test that included multiplechoice items, definitions of vocabulary items, and short-answer questions.

This social studies unit gives an idea of what might occur during a sheltered lesson. Sheltered lessons unfold as the result of thoughtful planning done at the beginning of the year. Teachers who work with ELLs must first develop a vision for the students of where they want to take them and develop lessons around that vision (see Chapter 1). Gonzales (1994) suggests developing an annual plan, whereby teachers review the textbooks, content standards, state framework guides, curriculum guides, and teachers' manuals for purposes of determining the essential content for a specific grade level or course. Planning involves weaving critical concepts and ideas related to each topic into meaningful, connected units that build upon each other. Once the most important concepts have been determined, the nonessential details can be eliminated and the broad range of students' academic needs can be addressed by using a planning pyramid (Schumm, Vaughn, & Leavell, 1994). Such a process is guided by these questions: What do I want all students to learn? What do I want most students to learn? and What do I want some students to learn? This final question acknowledges that while all students can learn, not all students can be realistically expected to learn everything in content-area textbooks, given the variety of levels of literacy and English proficiency.

This type of big-picture planning assists teachers in formulating a vision for the students that translates into cohesive lessons that build on one another, providing English language learners with continuity and reinforcement of major concepts and vocabulary. It also lends itself to thematic teaching.

In the social studies class just described, the theme was an individual's power to make choices. With thematic teaching, the teacher selects a concept or theme and weaves it across the curriculum. The teacher analyzes the content for the entire course and determines the relevant information to be covered throughout the year, formulating ways to weave the theme into the information. When presenting the key concepts from the unit, the teacher emphasizes an individual's ability to choose between products and make wise decisions. Students could be asked about products available in their home countries and whether they were able to choose from among several brands. In the discussion on advertising, students learned that they can choose to buy or not. Using recurrent themes when introducing new learning provides linkages that render the material more understandable.

The extent to which teachers use sheltered elements is difficult to capture in a written description because the high level of student interaction, the student-centered focus of the instruction, and the many ways the teacher uses visuals and other means to create a context for information and discussions are not evident. Further, many features are unique to sheltered instruction, not so much in their essence but in the degree to which they are used. For example, tapping into students' background knowledge is useful in most instructional situations, but when working with culturally diverse students learning English, it is essential to make the connection between students' knowledge and experience and the lesson at hand. In sheltered lessons, the connection needs to be made much more explicitly than in other situations. This is one of the characteristics that makes sheltered instruction unique.

Finally, not every component of sheltered instruction is present in each lesson, but most should be implemented throughout a series of lessons. In other words, one day's lesson may be a hands-on cooperative activity designed as a follow-up to the previous day's lesson that involved reading from the text. In this case, modifying the text wouldn't be applicable, but many of the other components would be evident.

Discussion of the Case Study

In the unit on consumerism, the content level of the sheltered instruction and effective instruction lessons were the same, both based on the core curriculum. Since lesson objectives must always reflect grade-level content (although it is permissible to cover background information that the student needs for understanding), it would be inappropriate to teach ELLs a curriculum intended for younger students simply because they are in the process of acquiring English. In both the sheltered and effective instruction lessons, the objectives were clearly supported by lesson delivery. Each lesson had a focus that was easily identified as the lesson unfolded. In addition, major concepts were explicitly identified. In the sheltered and effective lessons, the teacher wrote the major concepts on the board or overhead transparency, discussed each one, and referred back to each as it was covered during the lesson. Both teachers in the consumerism lessons told students they were going to learn about how product labels help consumers and tied information back to this concept throughout the reading and discussion.

Concepts are also reinforced by linking them to students' backgrounds. This process is twofold: It taps the students' previous knowledge on the topic being studied and ties it to the lesson, and it validates students' cultural background and experiences by providing opportunities for students to talk about their lives and relating them to the topic. The first step can be accomplished in a number of ways, such as through a pretest or discussion. Secondary students in particular may have a wealth of knowledge acquired through exposure to a variety of experiences typical of most immigrant students. The known information is used to link previous learning to new learning.

The second step, bringing in students' cultural backgrounds, is especially effective with English language learners. The teacher explicitly draws parallels between the topic and the students' experiences. The teacher might ask, "How many of you have bought something and had it break right away? How many of you have wanted something because you saw a commercial, but when you got it, it wasn't as good as you thought?" Using their own experiences to introduce new learning is a good way to engage students in a topic. Also, when discussing myths associated with products, such as the myths that mouthwash prevents colds or that protein shampoo feeds hair, students are encouraged to share cultural beliefs about certain products. In preparation for the lesson on advertising, immigrant students may be asked to bring in newspapers or magazines in their native languages to compare their ads to American advertising styles.

Content material is organized so it relates to previous lessons. English language learners need relationships between new learning and past lessons explicitly stated to clarify the connection between lessons. Timelines and word banks facilitate this process, since events, previous vocabulary, and terms are posted for students to see and remember. For example, prior to the unit on consumerism, students had studied about pollution and about household items that contain dangerous chemicals. That information could be revisited when students study the value of reading labels. The presence of chemicals in products may affect consumer decisions. The unit following consumerism should be a topic that logically follows. Using state curriculum frameworks and curriculum guides facilitates connected lessons that build on one another.

Another feature that is common to both sheltered and effective instruction is that the teacher consistently varies delivery modes. A recitation or lecture mode is possibly the least effective way of teaching students learning English (Tharp & Gallimore, 1988). It relies heavily on comprehending verbal input and provides limited contextual clues for the learner. Effective instruction offers a variety of learning opportunities for students, including explanation, modeling, demonstration, and visual representation. Sheltered instruction does the same, perhaps to a higher degree. When students are acquiring a new language, varying delivery modes assists in comprehension and helps keep students engaged in learning throughout the lesson. What they may not understand presented one way may become clearer when presented in a different fashion. The importance of academic engaged time was discussed previously and cannot be overstated. Teaching is not going on unless students are learning. In order to learn, the student must attend to and be cognitively engaged in the task.

Frequent checks for understanding characterize both effective instruction and sheltered instruction. These checks can be done individually or by asking group questions, such as "Everyone who thinks a consumer is only a person who buys goods and services, raise one finger; everyone who thinks a consumer is someone who buys and uses goods and services, raise two fingers."

Ample variation in reading options is a feature of both approaches, with sheltered lessons using variation more frequently. Options include teacher read-aloud, buddy reading, and silent reading. Listening to reading on tape is effective for English language learners and is used more commonly in a sheltered class. Reading for meaning is one of the more challenging activities for students learning English. Students' reading fluency is limited, since many do not have the vocabulary necessary to read with ease, while others lack the advantage of a strong academic background on which to draw. Students with learning problems often have comprehension difficulties, as well. Varying the reading format allows students to have reading experiences that are assisted or scaffolded by others. Scaffolding is the process of providing support as needed, with less support required as students move toward independent functioning. As the teacher reads aloud, he or she can pause at natural breaks. During sheltered lessons, paraphrasing and clarification are a routine part of the reading process.

With both approaches, lessons are designed to provide opportunities for students to use higher-level skills, including problem solving, hypothesizing, organizing, synthesizing, categorizing, evaluating, and self-monitoring. In a lesson on economics, a teacher showed the covers of several weekly news magazines with headlines about massive layoffs. She then asked, "How do you think workers feel when they see these headlines? Why does it make them nervous?" Students were asked to work with partners and come up with three ways that massive layoffs affect everyone. Opportunities for higher-level thinking such as this should be presented throughout a lesson.

Scaffolding is used with both sheltered and effective instruction. However, the implementation differs in that effective instruction teachers typically use questioning techniques to guide students, prompting and prodding verbally to get students to the correct answer. In sheltered instruction, scaffolding is used frequently throughout the lesson, since the varying levels of English proficiency and academic background of students necessitates doing so. The teacher accepts the students' ideas without correcting their form but instead adds clarification and elaboration as needed. The teacher does not rely on verbal scaffolding alone but may use context clues to clarify meaning and promote understanding. When conducting whole-group lessons in sheltered or effective instruction classes, students participate by giving signals such as thumbs-up or thumbs-down to indicate their opinions or answers.

Specific Considerations for Students with Learning Disabilities

Students with language and learning disabilities need extra support in acquiring English. They most likely will not learn at the same rate as other students and often need more repetition and clarification of terms. Many of the features of the SIOP model of sheltered instruction are considered best practice for students with learning difficulties, as well as a way to provide students with explicit, high-quality feedback and modeling. In one study, ELLs identified as learning disabled were included in sheltered classes whose teachers implemented the SIOP model. Using pre- and posttest data, these students made significant overall improvement in writing and specifically in the areas of language production, support/elaboration, and mechanics (Echevarria, 2001).

A focus on specific objectives, written for students to see, along with selected vocabulary provides the kind of structure that many of these students need. Using supplementary materials to make lesson concepts clear and meaningful and adapting the content to the students' academic and linguistic levels are also important features of instruction for ELLs with learning difficulties.

Further, the use of extralinguistic clues, such as gestures and body language, help students understand the message and focus their attention. For example, in the consumerism lesson, the teacher pointed to the words *cheap* and *expensive* on the board as she said,

Figure 3.8 • Considerations for ELLs with Language and Learning Difficulties

- Provide abundant guided practice for acquisition of concepts.
- Adjust the pace of instruction according to students' needs.
- Allow extra time to complete assignments.
- Praise students' efforts and use positive reinforcement.
- Partner students with others sensitive to their learning needs.
- Provide alternative activities when a task may draw undue attention to students' disabilities (e.g., reading aloud, a task that requires fine motor skills or sustained periods of attention).
- Plan and use appropriate positive behavior support techniques.
- Employ learning strategies known to be effective with students with disabilities (see Chapter 5).

Source: Based on J. Echevarria (May 1995), Sheltered instruction for students with learning disabilities who have limited English proficiency, *Intervention in School and Clinic*, 30(5), 302–305.

"Would you rather buy the cheap pair of shoes (holding them up) or the expensive pair (holding them up)?"

An abundance of positive reinforcement encourages students' participation. Students who have experienced learning problems may be particularly reticent in using a new language. A positive affective environment can facilitate language use (Krashen, 1981).

The type of instructional tasks that tend to engage English language learners with learning difficulties are those that draw on students' prior experiences and interests and that relate those experiences to new learning. In addition, these students benefit from tasks that foster intrinsic motivation and a sense of success and pride in accomplishment (Yates & Ortiz, 1991). Figure 3.8 provides some suggestions for adapting instruction to meet these students' needs.

Summary

Sheltered instruction is designed to teach English language learners content area material in a way that makes it understandable to them and also develops their English language proficiency. The SIOP is a scientifically tested model of sheltered instruction for English learners that offers a guide to teachers for improving instruction. It is not a step-by-step process, but certain features should be present in all lessons, such as having language and content objectives, emphasizing key vocabulary, scaffolding instruction, using comprehensible input, reviewing material, and assessing students' learning (see Figure 3.2).

Since not all students learn in precisely the same way, instruction should be tailored to the needs of individual students. Some may respond well to direct, explicit instruction, whereas others may have more success when given an opportunity to develop ideas in a cooperative group. The academic task itself often dictates the type of instructional approach to be used. Better-defined subjects, such as math computation and grammar, may call for a direct instruction approach, while exploring ideas presented in a social studies book lends itself to a more conversational approach (Goldenberg, 1992–93).

The SIOP model may be seen as a framework for instruction that supports good teaching practices. Sheltered lessons may include explicit teaching, group work, curricular adaptations, infusion of learning strategies, or an interactive approach. However, it is important for teachers to practice implementing the features of the SIOP model consistently and systematically because picking and choosing features takes us back to ineffective instruction for ELLs—the very thing SIOP research set out to improve.

While sheltered lessons clearly share some of the characteristics of effective instruction, they expand on others to meet the needs of ELLs and include some characteristics that are unique to these individuals. Many of the characteristics of a sheltered lesson will enhance the ability of students with learning difficulties to make sense of the content, such as the use of visuals, repetition, and active involvement. Therefore, sheltered instruction is good instruction, but it involves more. Teachers adapt effective lessons to make them understandable and more appropriate for students learning English.

Activities

- 1. Using a textbook from a given subject area, develop a lesson using the features of sheltered instruction outlined in Figure 3.2.
- 2. In small groups, brainstorm ways to make a sheltered lesson more comprehensible.
- **3.** Considering the features of effective sheltered instruction in Figure 3.2, indicate which features are not part of your teaching repertoire and which ones you use.
- 4. List at least five different ways a teacher can check for students' understanding.

References

- August, D., Carlo, M., Dressler, C., & Snow, C. (2005). The critical role of vocabulary development for English language learners. *Learning Disabilities Research & Practice*, 20(1), 50–57.
- Bickel, W. E., & Bickel, D. D. (1986). Effective schools, classrooms, and instruction. *Exceptional Children*, 52(6), 489–500.
- Brophy, J., & Everston, C. (1976). *Learning from teaching: A developmental perspective*.

 Boston: Allyn and Bacon.
- Cummins, J. (1989). Empowering minority students. Sacramento: California Association for Bilingual Education.
- Echevarria, J., Vogt, M.E., & Short, D. (2000).

 Making content comprehensible for English language learners: The SIOP model. Needham Heights, MA: Allyn and Bacon.
- Echevarria, J., Vogt, M.E., & Short, D. (2004).

 Making content comprehensible for English learners: The SIOP model. (2nd ed.). Boston: Pearson Allyn and Bacon.

- Echevarria, J. (2001). Improving content literacy for English language learners. Paper presented at the California Reading Association Conference, Ontario, CA.
- Echevarria, J., Greene, G., & Goldenberg, C. (1996). A comparison of sheltered content instruction and effective instruction. Unpublished pilot study.
- Echevarria, J., Short, D., & Powers, K. (2006). School reform and standards-based education: An instructional model for Englishlanguage learners. Journal of Educational Research, 99(4), 195–210.
- Echevarria, J., & Vogt, M. (1996). Measuring the effects of sheltered instruction on English language learners. Paper presented at the annual meeting of the American Educational Research Association, New York.
- Faltis, C. (1993). Critical issues in the use of sheltered content instruction in high school bilingual programs. *Peabody Journal of Education*, 69(1), 136–151.
- Gersten, R. M., Taylor, R., & Graves, A. W. (1999). Direct instruction and diversity. In R. Stevens (Ed.), Teaching in American schools: A tribute to Barak Rosenshine. Upper Saddle River, NJ: Merrill/Prentice Hall.
- Goldenberg, C. (1992–93). Instructional conversations: Promoting comprehension through discussion, *The Reading Teacher*, 46(4), 316–326.
- Gonzales, L. (1994). Sheltered instruction handbook. Carlsbad, CA: Gonzales & Gonzales.
- Guarino, A.J., Echevarria, J., Short, D., Schick, J.E., Forbes, S., & Rueda, R. (2001). The sheltered instruction observation protocol: Reliability and validity assessment. *Journal of Research Education*, 11(1), 138–140.
- Krashen, S. (1981). Second language acquisition and second language learning. London: Pergamon Press.

- Krashen, S., & Terrell, T. (1983). The natural approach: Language acquisition in the classroom. Englewood Cliffs, NJ: Alemany/Prentice-Hall.
- McLaughlin, B. (1992). *Babes and bath-waters:*How to teach vocabulary. Working papers of the Bilingual Research Group, University of California, Santa Cruz.
- Richard-Amato, P. (1996). *Making it happen* (2nd ed.). White Plains, NY: Longman.
- Saville-Troike, M. (1984). What really matters in second language learning for academic achievement? *TESOL Quarterly*, 18(2).
- Schumm, J., Vaughn, S., & Leavell, A. (1994). Planning pyramid: A framework of planning for diverse student needs during content area instruction. *The Reading Teacher*, 47(8), 608–615.
- Scruggs, T., & Mastropieri, M. (1990). Mnemonic instruction for students with learning disabilities: What it is and what is does. *Learning Disability Quarterly*, *13*(3), 271–283.
- Short, D., & Echevarria, J. (1999). The sheltered instruction observation protocol (SIOP): A tool for teacher-researcher collaboration and professional development (Educational Practice Report 3). Washington, DC: Center for Research on Education, Diversity and Excellence
- Tharp, R., & Gallimore, R. (1988). Rousing minds to life. New York: Cambridge University Press.
- Yates, J., & Ortiz, A. (1991). Professional development needs of teachers who serve exceptional language minorities in today's schools. Teacher Education and Special Education, 14(1), 11–18.

