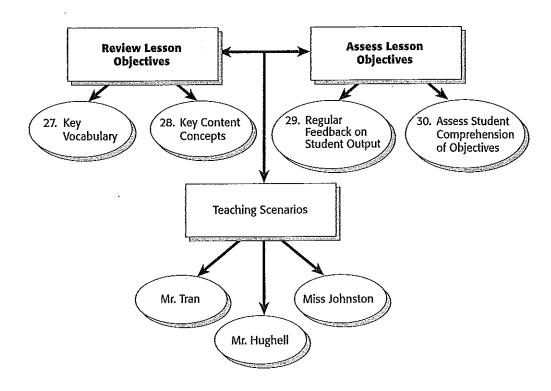
Review and Assessment



Objectives

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

Content Objectives

Select techniques for reviewing key content concepts

Incorporate a variety of assessment techniques into lessons

Describe the challenges in assessing the content learning of students with limited English proficiency

Language Objectives

Write a lesson plan that includes review of key vocabulary

Teach a lesson with group response techniques

Orally provide feedback to ELs that enhances language development

Use oral, written, and physical means to provide specific feedback to students on their performance

Over the years, teachers have asked us why Review and Assessment is the eighth component in the SIOP® Model. Usually the question is preceded by a comment such as "Shouldn't the assessment of students' strengths and needs precede any instruction?" Our response is always "Of course!" Clearly, assessment and instruction are inexorably linked (Vogt & Shearer, 2007). Effective teachers use assessment findings to plan their lessons according to student needs and strengths, and to evaluate how effectively their lessons have been delivered. Effective SIOP® teachers also realize the importance of ongoing and continuous assessment of a lesson's content and language objectives throughout the lesson. We've all experienced that feeling of frustration when we realize, sometimes too late, that students have not understood what it is we were trying to teach. That is precisely what we hope to avoid with the Review and Assessment component.

So why is Review and Assessment the eighth component? The simple answer is that other than the Preparation component, there is no particular hierarchy or order to the eight SIOP® components. For example, as you begin to write SIOP® lesson plans, you'll see that the features of Comprehensible Input are necessary from beginning to end of a lesson and that students must engage in Interaction throughout if they're going to learn to speak English proficiently. The components and features of the SIOP® Model are interrelated and integrated into each and every lesson. In fact, as you become more familiar with each of the components and features, you may find that you decide to implement them initially in an order other than the one presented in this book. That is just fine—as is beginning to implement them in the order presented in the SIOP® protocol. What is important is that you see that all eight components and thirty features eventually need to be present in your lessons for English learners.



Background

The component of Review and Assessment is not only about what teachers do at the end of a lesson to see if students have learned what was intended. Rather, reviewing and assessing occur throughout each lesson and then again as the lesson concludes. During each step of a lesson, throughout each meaningful activity, we have an opportunity to assess students' progress toward meeting the lesson's content and language objectives.

For English learners review is essential. During class, ELs receive forty minutes, fifty minutes, perhaps seventy-five minutes of input in new language. Unless the teacher takes the time to highlight and review key information and explicitly indicate what students should focus on and learn, English learners may not know what is important. Students, especially those at the early stages of English proficiency, devote considerable energy to figuring out what the teacher is saying or the text is telling them at a basic level. They are much less able to evaluate which pieces of information among all the input they receive are important to remember. That is why the teacher must take the time to review and summarize throughout a lesson and particularly as a wrap-up at the end.

In order to teach the students effectively, teachers need information about their learning from multiple indicators. One single assessment approach is insufficient for all students, but especially those who may have difficulty articulating their level of understanding through English, their new language. As teachers gather information about what students understand or do not understand, they can adjust their instructional plan accordingly. Scenarios for ESL Standards-Based Assessment (TESOL, 2001) is an excellent resource for classroom assessment ideas that are linked to standards and can measure student academic performance. Effective sheltered instruction involves reviewing important concepts, providing constructive feedback through clarification, and making instructional decisions based on student response. In the end, you must have enough information to evaluate the extent to which students have mastered your lesson's objectives. This teach, assess, review, and reteach process is cyclical and recursive (see Figure 9.1).



SIOP*

To see an example of the relationship between assessment and instruction, please view the corresponding video clip (Chapter 9, Module 1) on the accompanying CD.

SIOP® FEATURE 27:

Comprehensive Review of Key Vocabulary

In Chapter 2, we stated that effective teachers incorporate in their lesson plans techniques that support ELs' language development. In Chapter 3, we discussed the importance of building background through teaching academic language, key content vocabulary, language structure, and functional language. We suggested that language objectives should be identified in lesson plans, introduced to students at the beginning of a lesson, and reviewed throughout the lesson.

We can help develop academic language and key vocabulary by teaching and then reviewing terminology and concepts through *analogy*—the process of relating newly learned words to other words with the same structure or pattern. In Chapters 2 and 3 we gave the example of "photo" (meaning light) in a lesson on photosynthesis, and suggested referring students to other words with the same morpheme (e.g., photography). Reviewing key vocabulary also involves drawing students' attention to tense, parts of

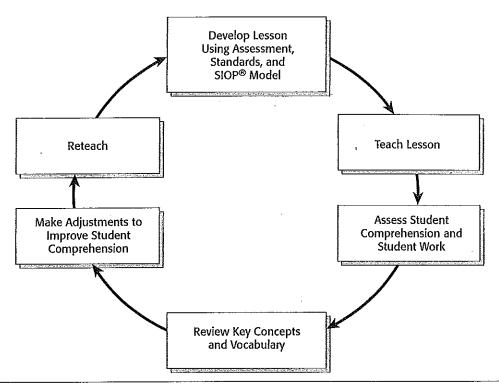


FIGURE 9.1 Effective Teaching Cycle for English Learners

speech, and sentence structure. Repeating and reinforcing language patterns helps students become familiar with English structures.

Multiple exposures to new terminology also build familiarity, confidence, and English proficiency. Words and concepts may be reviewed through paraphrasing, such as "Remember to *share your ideas;* that is, if you have something you want to say, tell it to the others in your group." Another example of a paraphrase (and contextualized sentence) is "The townspeople were *pacifists*, those who would not fight in a war." Paraphrasing as review provides an effective scaffold for ELs, especially after words and phrases have been previously defined and discussed in context.

Key vocabulary also can be reviewed more systematically. It is important to remember that it is ineffective to teach vocabulary through the "dreaded word list" on which students must write (or copy) dictionary definitions (Ruddell, 2005). Research findings are very clear—as stated previously, isolated word lists and dictionary definitions alone do not promote vocabulary and language development. We also know that students do not learn vocabulary words when the teacher just orally introduces and defines them and then expects students to remember the definitions. The more exposures students have to new words, especially if the vocabulary is reinforced through multiple modalities, the more likely they are to remember and use them.

An effective way to incorporate ongoing vocabulary study and review is through the use of individual Word Study Books (Bear, Invernizzi, Templeton, & Johnston, 2004). A Word Study Book is a student-made personal notebook that includes frequently used words and concepts. Vocabulary in Word Study Books might be organized by English language structure, such as listing together words with similar plural endings (e.g., s, es, ies). We also believe Word Study Books can be used for content study where words are

grouped by topic (e.g., American Revolution words related to protest or government). Some students may benefit by creating semantic maps of the words, for example, linking events to related verbs, adjectives, adverbs, and so forth.

Helping students review and practice words in nonprint ways is beneficial as well. Students may draw a picture to depict a concept or to remember a word. They may demonstrate the meaning through physical gestures or act out several words within the context of a role-play. Pictionary and charade-like games at the end of a lesson can stimulate an engaging review of vocabulary.

Remember that we also need to help students become comfortable with academic language by introducing and modeling academic tasks throughout lessons and units. For example, if you are planning to have ELs engage in literature discussion circles, it is important to review what "discussion" means, what "turn-taking" is, what it means to "share ideas," how questions are asked and answered, and so forth. Reviewing this terminology provides the necessary scaffolding so that students understand the expectations for their participation in routine activities. This also includes language that is found in test directions or question prompts. Increasingly, our English learners need exposure, practice, and review of those types of terms and phrasings (e.g., "Which of the following is *not* an herbivore?") to help prepare them for the accountability measures they will be called upon to perform.

SIOP*

SIOP® FEATURE 28:

Comprehensive Review of Key Content Concepts

Just as it is important to review key vocabulary periodically throughout a lesson, and especially at its conclusion, it is also essential that English learners have key content concepts reviewed during and at the end of a lesson. Understandings are scaffolded when you stop and briefly summarize, along with students' help, the key content covered to that point. For example, in a lesson on Egyptian mummification, you might say something like the following: "Up to this point, we learned that little was known about Mummy No. 1770 until it was donated to the museum. After the scientists completed the autopsy, they discovered three important things. Who remembers what they were?" This type of review is usually informal but it must be planned carefully. It can lead into the next section of the text or to a discussion: "Let's read this next section to see what else the scientists learned." Or, if predictions about an upcoming section of a text have been made or hypotheses about an experiment developed, teachers should always refer to these afterward and assess their validity with the students.

One favorite wrap-up technique of several SIOP® teachers is Outcome Sentences. A teacher can post sentence starters on the board or transparency, such as:

I wonder...
I discovered...
I still want to know...
I learned...
I still don't understand...
I still have a question about...
I will ask a friend about...



To see an example of assessing students' understanding, please view the corresponding video clip (Chapter 9, Module 2) on the accompanying CD.

Students take turns selecting and completing an outcome sentence orally or in writing in a journal. The students can also confer with a partner.

A more structured review might involve students summarizing with partners, writing in a journal, or listing key points on the board. It is important to link the review to the content objectives so that you and the students stay focused on the essential content concepts. Toward the end of the lesson, a final review helps ELs assess their own understandings and clarify misconceptions. Students' responses to review should guide your decisions about what to do next, such as a summative evaluation or, if needed, additional reteaching and assessing.



SIOP® FEATURE 29:

Regular Feedback Provided to Students on Their Output

Periodic review of language, vocabulary, and content enables teachers to provide specific academic feedback to students that clarifies and corrects misconceptions and misunderstandings. Feedback also helps develop students' proficiency in English when it is supportive and validating. For example, teachers can model correct English usage when restating a student's response: "Yes, you're correct, the scientists were confused by what they thought was a baby's skull lying next to the mummy." Paraphrasing also supports students' understandings and validates answers if we add after the paraphrase, "Is this what you're thinking (or saying)?" If students are only able to respond to questions in one or two words, you can validate their answers in complete sentences: "You're right! Embalming is the process of preserving bodies."

Specific feedback is generally given orally or in writing, but teachers can also provide it through facial expressions and body language. A nod, smile of support, pat on the shoulder, or encouraging look can take away fear of speaking aloud, especially for students who are beginning to develop English proficiency. Additionally, students can provide feedback to each other. Partners or groups can discuss among themselves, giving feedback on both language production and content understanding, but then report to the whole class. The teacher can facilitate feedback by providing appropriate modeling.



SIOP® FEATURE 30:

Assessment of Student Comprehension and Learning of All Lesson Objectives throughout the Lesson

Within the context of lesson delivery for English learners, we see review and assessment as an ongoing process, especially related to a lesson's language and content objectives. Historically, educators have blurred the line between assessment and evaluation, generally using the term "evaluation" for both formative and summative judgments. The teacher's role in evaluation was primarily as a judge, one who conveyed a value on the completion of a given task. This value was frequently determined from the results of periodic quizzes, reports, or tests that served as the basis for report card grades in elementary and secondary schools.

Today, however, many educators distinguish between assessment and evaluation, (Lipson & Wixson, 2008). *Assessment* is defined as "the gathering and synthesizing of

information concerning students' learning," while *evaluation* is defined as "making judgments about students' learning. The processes of assessment and evaluation can be viewed as progressive: first, assessment; then, evaluation" (McLaughlin & Vogt, 1996, pp. 104, 106).

Assessment occurs throughout a lesson, as evidenced in lesson plans and in periodic review to determine if students are understanding and applying content concepts. Assessment must be linked to the instruction, and it needs to target the lesson objectives. Just as students need to know what the objectives are, they need to be informed about how and what types of assessments they will have. Toward the end of the lesson, students' progress is assessed to see whether it is appropriate to move on or whether it is necessary to review and reteach. This type of assessment is *informal*, *authentic*, *multidimensional*, and includes *multiple indicators* that reflect student learning, achievement, and attitudes (McLaughlin & Vogt, 1996; O'Malley & Pierce, 1996; Lenski, Ehlers-Zavala, Daniel, & Sun-Irminger, 2006).

Informal assessment involves on-the-spot, ongoing opportunities for determining the extent to which student are learning content. These opportunities may include teacher observations, anecdotal reports, teacher-to-student and student-to-student conversations, quick-writes and brainstorming, or any number of tasks that occur within regular instruction and that are not intended to be graded or evaluated according to set criteria.

Authentic assessment is characterized by its application to real life, where students are engaged in meaningful tasks that take place in real-life contexts. Authentic assessment is usually multidimensional because teachers use different ways of determining student performance. These may include written pieces, audiotapes, student and parent interviews, videotapes, observations, creative work and art, discussion, performance, oral group responses, and so forth.

These multidimensional student performances usually involve *multiple indicators*, specific evidences related to the language and content objectives or standards. For example, a student may indicate proficiency with an objective through a piece of writing, through active participation in a group activity, and through insightful questions he asks during discussion. The teacher thus has more than one piece of evidence indicating he is progressing toward mastery of the particular content or language objective.

Periodic assessments before and during lessons can eventually lead to evaluation of a student's demonstrated performance for an objective or standard. This evaluation, while summative, also may be informal and take a variety of forms. Often, rubrics (such as the SIOP® protocol) are used to ascertain a developmental level of performance for a particular goal, objective, or standard. For example, on a developmental rubric student performance may be characterized as "emergent," "beginning," "developing," "competent," or "proficient." Other rubrics may communicate evaluative information, such as "inadequate," "adequate," "thorough," or "exceptional" (McLaughlin & Vogt, 1996). Whichever rubric is used, results of assessment and evaluation are often shared with other interested stakeholders, such as parents and administrators, and with the students themselves.

Assessments can be individual or group administered. Individual oral or written responses tell you how one student is performing, while group responses may quickly tell you how the entire group is progressing. Group response is especially sensitive to the needs of ELs, and there is a variety of methods for eliciting group responses, including some of our favorites:



Thumbs up/thumbs down: Generally, this is used for questions that elicit "agree/disagree" responses. (If students agree, they raise their thumbs.) It can also

be used for yes/no questions or true/false statements. Older students may be more comfortable responding with "pencils up/pencils down" (point of pencil up or down). Students can also indicate "I don't know" by making a fist, holding it in front of the chest, and wiggling it back and forth. The pencil used by older students can also be wiggled to indicate that the answer is unknown.

Number wheels: A number wheel is made from tag board strips (5" × 1") held together with a round-head brass paper fastener. Each strip has a number printed on it, with 0 to 5 or 0 to 10, or a-d, depending on your needs and students' ages. Students use their individual number wheels to indicate their answers to questions or statements that offer multiple-choice responses. Possible answers are displayed on the board, overhead, or pocket chart, and the teacher asks the questions or gives the statements orally.

For example, if you were teaching a lesson on possessives, you could write the following on the board:

- 1. boys
- 2. boy's
- 3. boys

Each child has a number wheel and you say, "Show me the correct use of the word 'boys' in the following sentences. Remember that you can show me a '0' if you don't know the answer. 'The little boy's dog was hungry and was barking.' Think. Get set. Show me."

Students then find the number 2 strip, and holding their number wheels in front of their chests, they display their answers. They repeat the process as you give the next sentence. Be sure to give the cues (Think, Get Set) before giving the direction, "Show me!"

You may think that number wheels are only appropriate for younger students, but middle school and high schools students enjoy working with them too, and they provide you with much needed information about students' understandings of language and content concepts.

Response boards: Either small chalkboards or dry-erase boards can be used for group responses. Each student has a board and writing instrument. You ask a question, students respond on their boards, and then turn them to face you when you say, "Show me!" Older students seem to prefer working with the dry-erase boards and will willingly use them in a classroom in which approximations are supported and errors are viewed as steps to effective learning. Dry-erase boards (12" × 12") can be inexpensively cut from "bathroom tile board," which is available at home and building supply stores.

Group response activities are very effective for assessing, reviewing, and providing feedback. By looking around the room, teachers quickly gauge how many students understand what is being assessed. If students are having difficulty with language and content concepts, and this is obvious from individual answers given during a group response activity, review and reteaching are necessary.

Number 1 to 3 for self-assessment: (Vogt & Echevarria, 2008): It's one thing for the teacher to assess student progress toward meeting objectives; it's something entirely different for students to assess their own progress and understandings. From our experience teaching students of all ages, when we ask English learners (and native speakers

as well) if they have met a particular objective, the usual response is generally a grunt, a nod, or a "Yeah," often in unison. This activity is a quick and easy way to have students self-assess the degree to which they think they have met a lesson's content and language objectives. At the end of the lesson as you review the objectives with the students, ask them to indicate with one, two, or three fingers how well they think they met them:

- 1 = I didn't (or can't) meet (or do) the objective.
- 2 = I didn't (or can't) meet (or do) the objective, but I made progress toward meeting it.
- 3 = I fully met (or can do) the objective.

Depending on how students indicate their understandings of a lesson's key concepts (the objectives), the teacher can reteach, provide additional modeling, group students for further instruction and practice, and so forth. We have found that self-assessments that are directly related to a lesson's content and language objectives are far more informative than the typical students' "yeah" or "no" or "sorta" comments that arise when teachers ask whether the lesson's objectives have been met.

As teachers plan for formal and informal assessments, they should keep in mind that because language and content are intertwined in SIOP® classes, separating one from the other in the assessment process is difficult. It is, however, necessary to do so. When students have difficulty, teachers need to determine if it is the content that has not been mastered, or if it is a lack of English proficiency that is interfering with their acquisition and application of information.

A general rule of thumb is to plan multiple assessments. Having the students perform a test on one day provides only limited information. Alternative assessment techniques balance the norm- and criterion-referenced tests teachers are required to give. These alternative techniques include performance-based tasks, portfolios, journals, and projects. All of these assessments allow students to demonstrate their knowledge more fully than would be possible on a multiple-choice test. Although all students benefit from a wide range of assessment procedures, variety is particularly important for ELs because they (1) may be unfamiliar with the type of tests usually required in U.S. schools and (2) may need to demonstrate their knowledge in ways other than using academic English.

Teachers who are learning to implement the SIOP® Model often express concern about having varied content assessments, in part because of the perceived amount of work it takes to create them, and because some believe it is unfair if students are not assessed equally. High school teachers' assessment policies, in particular, are further constrained by issuing grades that impact students' future opportunities for graduation and college admission. While acknowledging all this, we also believe that for English learners, adaptations must be made if teachers are to ascertain accurately the extent to which content objectives and standards are met. Often, English learners do know the information on which they are being assessed, but because of language proficiency issues, including vocabulary, reading, and writing, they are unable to demonstrate their knowledge.

The Center for Intercultural and Multilingual Advocacy (CIMA) at Kansas State University, based on recommendations made by Deschenes, Ebeling, & Sprague (1994), summarized nine types of assessment adaptations that permit teachers to

more accurately determine students' knowledge and understanding. We have modified them somewhat to enable teachers to more accurately assess, and give grades when necessary, to English learners. The following are possible assessment adaptations for English learners that are congruent with the SIOP® Model and that hold high academic expectations for ELs:

- Range: Adapt the number of items the English learner is expected to complete, such as
 even or odd numbers only (see Leveled Study Guides in Chapter 2 as another example).
 Determine percentages of correct responses based on the number of items assessed.
- Time: Adapt the amount of time the English learner has for completing a task, such as providing more processing time and/or breaking tasks into manageable chunks. Unless there is a requirement to have a timed test, allowing additional time should not impact a student's score or grade.
- Level of support: Adapt the amount of scaffolding provided to an English learner during assessments, by asking an aide, peer assistant, or parent volunteer to read and/or explain the task, or even read aloud (and translate, if necessary and possible) the items for the assessment. Remember the difference between assessing an EL's ability to read and follow written directions and his or her ability to complete a task or answer questions about a content topic. If you are looking for a student's content knowledge (not his or her ability to read directions), it is fine to have someone else help with reading or clarifying what the expectation for the task is.
- Difficulty: Adapt the skill level, type of problem or task, and the process for how an English learner can approach the task, such as allowing a calculator, dictionary, or simplified instructions. Once again, you are not reducing the expectation that the English learner should know the material—you're just making it easier for him or her to demonstrate understandings.
- Product: Adapt the type of response the English learner is allowed to provide, such as permitting drawings, a hands-on demonstration, a verbal, and, if necessary, a translated response. Whereas native speakers may be required to write a paragraph summary or essay, it may be reasonable for an English learner to submit an illustration, poster-board explanation, or other kind of product that doesn't rely so much on sophisticated English usage.
- Participation: Adapt the degree of active involvement of an English learner in assessment, such as encouraging individual self-assessment, assistance in creating rubrics, and cooperative group self-assessment. As you have read often in this book, content learning is enhanced for all students, but especially for English learners, through interaction and group work. English learners can certainly be involved in their own assessment progress, particularly in the upper grades.

Finally, to the extent possible, students should be assessed on their personal progress to determine if learning has taken place. In sheltered classes in particular, where students may have different levels of language proficiency, the value of this approach becomes apparent. If teachers gather baseline data on what their students know and can do with the content information before instruction occurs and then what they know and can do afterward, teachers can identify student growth.

The Lesson

UNIT: Egyptian Mummies (Eighth Grade)

The classrooms described in the teaching vignettes in this chapter are all in a large urban middle school with a heterogeneously mixed student population. English learners represent approximately 45 percent of the students who are in the teachers' eighth-grade classes; the majority are native Spanish speakers, most of whom are at an intermediate level of English proficiency.

The three eighth-grade language arts/social studies core teachers, Mr. Tran, Mr. Hughell, and Miss Johnston, are teaching an extended unit on Egypt. The lessons illustrated here are on the topic of Egyptian mummies. Each of the teachers has planned a three-day lesson using the chapter titled "Mummy No.1770:

A Teenager" (Cooper et al., 2003). This chapter tells of a mummy that was in the possession of the Manchester Museum in England. Because very little was known about this mummy, the museum made it available to a group of scientists who wanted to use modern techniques for determining its age, its mummification process, and how the person had lived. The chapter describes what the scientists learned, including when the thirteen year-old lived (A.D. 260), what she had eaten, what her life was like, how she died, and how her body was preserved.

The following teaching vignettes represent the second day of the lessons taught by Mr.Tran, Mr. Hughell, and Miss Johnston.

Teaching Scenarios

The following vignettes illustrate how Mr. Tran, Mr. Hughell, and Miss Johnston reviewed the language and content objectives of their second day's lesson on the chapter "Mummy No. 1770: A Teenager" and assessed student learning. As you read, think about the SIOP® features for Review/Assessment: Review of Key Vocabulary, Review of Key Concepts, Feedback on Student Output, and Assessment of Student Understanding of Lesson Objectives.

Mr. Tran

In Mr. Tran's lesson plan, he listed the following language and content objectives for English learners: "The learner will be able to (1) describe how scientists learned about Mummy No. 1770, (2) identify major discoveries scientists made during the autopsy of the mummy, and (3) define and correctly use the following vocabulary words: mummy, autopsy, evidence, embalming, amputation, and tissue." Mr. Tran's lesson plan for the first day included the following activities:

- 1. Brainstorming words about mummies that students already knew
- 2. Creating a word wall with the brainstormed words
- 3. Group reading of the first five pages of the chapter
- 4. Adding of new words to the word wall, selected by students from the reading (Vocabulary Self-Collection Strategy—VSS)
- 5. Completing the first section of a sequence chain (graphic organizer) listing initial steps used by the scientists
- 6. Including on the sequence chain words from the word wall (mummy, evidence, and autopsy)

On the second day of the lesson (the one observed for the SIOP® rating), Mr. Tran began by referring back to the word wall. First, the whole class read the words aloud in sequence and again in random order. To assess student comprehension, Mr. Tran asked for volunteers to give informal definitions for a few of the words, focusing on the key vocabulary he had selected to emphasize (mummy, evidence, autopsy) while reminding them of the reading from the day before. When needed, he clarified definitions, assisted students with pronunciations, and gently corrected errors.

Mr. Tran then asked students to review the sequence chains they had begun the previous day with their partners. Feedback was provided by peers as they shared their graphic organizers with each other in order to make corrections or additions about the steps scientists took in analyzing Mummy No. 1770. Students were prompted to include words from the word wall, especially the key vocabulary (mummy, evidence, autopsy). Mr. Tran circulated and listened to the discussions of several pairs. After the partner sharing, the entire class discussed the information on their sequence chains and Mr. Tran informally assessed the students' knowledge.

Next, students reviewed the major discoveries of the scientists described to this point in the reading, and two were listed on the board. The teacher referred to illustrations on pages five through seven of the chapter and asked students to predict what they think happened to the teenage girl and how scientists might have reached conclusions about her death. He wrote on the board, "What evidence did the scientists discover during the autopsy of the mummy?" as a focal question for the rest of the lesson.

Students were directed to look for additional scientific discoveries as they read the next four pages with partners. They were told to complete a T-chart with the following column headings: "Evidence scientists discovered about No. 1770's life" and "Evidence scientists discovered about No. 1770's death." As a matter of practice, Mr. Tran walked around the room while students were working. He frequently smiled, voiced encouragement, answered questions, and provided support for his students' efforts. When this task was completed, Mr. Tran asked students to share their ideas as a class so he could determine what they had learned and make sure all students could complete their charts.

The lesson continued as students reviewed their papers and the text to find additional words for the word wall. Among the words added were "embalming," "amputation," and "tissue." (See Figure 9.2.) Mr. Tran wrote "embalm," "embalmer," and "embalming" on the board and discussed the differences in meaning. He also asked a volunteer to differentiate between the meaning of "tissue" in the text and the more common meaning—something one uses to blow one's nose.

Students then completed the second section of their sequence chains, indicating the subsequent steps the scientists had taken to gather evidence from the mummy. Mr. Tran encouraged students to include the new key vocabulary (embalming, amputation, and tissue) on the graphic organizer. He concluded the lesson by asking students to review with their partners the steps taken by the scientists and to determine two more major discoveries detailed in the text. These were then discussed and added to those on the board from the previous day. Finally, Mr. Tran highlighted in yellow on the word wall the six key vocabulary words, and these were reviewed one last time before the bell rang.

On the SIOP® form in Figure 9.3, rate Mr. Tran's lesson for each of the Review/Assessment features.

		**
	Word Wall: Mummies	
archaeologists amputation artifacts autopay	jewels	sarcophagus spirits
	linen	
coffin	mummification mummy	tissue tombs Tutankhamen
drying-out-process	oils	X-ray
embalming evidence gold	perfumes pharoahs preservation pyramids	wrappings
goiu		

FIGURE 9.2 Use of Word Wall

Mr. Hughell

Mr. Hughell's lesson plan noted the following objectives: "(1) Write a paragraph on what mummies teach scientists about how Egyptians lived; (2) Explain how mummies were preserved; and (3) Match twenty vocabulary words with their definitions."

The plan for the first day of the lesson included the following activities:

- Distributing a list of twenty words and definitions related to mummies along with page numbers on which the words could be found in the chapter text
- 2. Reading aloud one-half of the chapter while students follow along
- 3. Having students find the first group of ten vocabulary words in the chapter
- 4. Having students work with a partner to write an original sentence related to the topic of mummies for each word

Mr. Hughell began the second day of the lesson by asking volunteers to read several of their vocabulary sentences written the previous day. As students read, Mr. Hughell corrected language errors when needed. He clarified content misconceptions, modeled appropriate pronunciation, and reminded students of the correct definitions for the vocabulary. Mr. Hughell then gave students five minutes to review what had been read the previous day. He asked volunteers to summarize what they had learned about Mummy No. 1770 and how mummies were prepared. Several students responded briefly, and

27.	4 Comprehensive review of key vocabulary	3	Uneven review of key vocabulary	1	0 No review of key vocabulary
28.	4 Comprehensive review of key content concepts	3	2 Uneven review of key content concepts	1	, 0 No review of key content concepts
29.	4 Regular feedback provided to students on their output (e.g., language, content, work)	3	2 Inconsistent feedback provided to students on their output.	1	0 No feedback provided to students on their output
30.	4 Assessment of student comprehension and learning of all lesson objectives (e.g., spot checking, group response) throughout the lesson	3	2 Assessment of student comprehension and learning of some lesson objectives	1	0 No assessment of student comprehension and learning o lesson objectives

Mr. Hughell prompted others to elaborate. He highlighted key points by writing them on the board and made additions to the students' summaries.

He then asked for volunteers to read the next set of ten words and definitions from the vocabulary list. He informed students that they would have a vocabulary matching quiz on these words the following day. Students were then directed to read the rest of the chapter silently and encouraged by Mr. Hughell to ask for help if they found words they did not understand. Following the reading, students worked with partners to write ten more sentences for the remaining words on the vocabulary list.

At the end of the period, Mr. Hughell called on a few volunteers to read their sentences aloud quickly and asked if anyone had questions. Because not everyone had finished writing the sentences, he assigned the remaining ones for homework and reminded students of the vocabulary quiz planned for the next day. He suggested that students review the entire chapter at home because in addition to the vocabulary quiz, they were going to be writing a paragraph in class on what scientists have learned from mummies. He would evaluate the students' comprehension of the chapter with the written paragraph and quiz the following day.

On the SIOP® form in Figure 9.4, rate Mr. Hughell's lesson for each of the Review/ Assessment features.

Miss Johnston

Miss Johnston's lesson plans revealed one objective for the three-day lesson on mummies: "The learner will understand how mummies were made." The plan included the following

27.	4 Comprehensive review of key vocabulary	3	Uneven review of key vocabulary	1	0 No review of key vocabulary.
28.	4 Comprehensive review of key content concepts	3	2 Uneven review of key content concepts	1	0 No review of key content concepts
	4 Regular feedback provided to students on their output (e.g., language, content, work)	3	2 Inconsistent feedback provided to students on their output	1	0 No feedback provided to students on their output
	4 Assessment of student comprehension and learning of all lesson objectives (e.g., spot checking, group response) throughout the lesson	3	Assessment of student comprehension and learning of some lesson objectives	* 1	0 No assessment of student comprehension and learning of lesson objectives

for all three days: "(1) Read chapter on Mummy No. 1770 and (2) complete the worksheet questions."

Miss Johnston began the second day of the lesson by calling on a student to summarize the chapter that had been read aloud the previous day. The student responded, "We took turns reading about how some guys in a museum unwrapped an old mummy." Another student added, "And scientists learned the mummy was a girl with no legs." Although the responses were brief and only related simple facts, Miss Johnston offered no further explanation or review.

Miss Johnston then distributed a worksheet to students that had multiple-choice and fill-in-the-blank questions covering information in the text chapter, along with two short essay questions. Students worked individually but were allowed to use their books while completing the worksheets. If they finished early, they were given a word search puzzle and asked to find ten words related to mummies. The teacher circulated through the room, answering questions and keeping students on task.

Toward the end of the period, to assess their learning, she asked students to exchange papers. She read the correct answers for the multiple-choice and fill-in-the-blank questions aloud, and students marked their peers' papers. When she asked how many students had only one or two wrong answers, no one raised a hand. She did not pursue the discussion to see if some questions were problematic for most of the class. The lesson concluded with students turning in their essays so Miss Johnston could grade them. She told them to bring in shoe

	4 -	3	2	-1	0
27.	Comprehensive review of key vocabulary		Uneven review of key vocabulary		No review of key vocabulary
28.	4 Comprehensive review of key content concepts	3	2 Uneven review of key content concepts	1	, 0 No review of key content concepts
29.	4 Regular feedback provided to students on their output (e.g., language, content, work)	3	2 Inconsistent feedback provided to students on their output	1	0 No feedback provided to students on their output
30.	4 Assessment of student comprehension and learning of all lesson objectives (e.g., spot checking, group response) throughout the lesson	3	Assessment of student comprehension and learning of some lesson objectives	1.	No assessment of student comprehension and learning of lesson objectives

boxes and craft materials for dioramas that each student would make on the following day as a culminating activity.

On the SIOP® form in Figure 9.5, rate Miss Johnston's lesson for each of the Review/Assessment features.

Discussion of Lessons

27. Comprehensive Review of Key Vocabulary

Mr. Tran: 4

Mr. Hughell: 1

Miss Johnston: 0

The emphasis on vocabulary and content instruction, practice, review, and assessment varied across the three classrooms.

Mr. Tran had clearly defined language and vocabulary objectives, and throughout the lesson his instruction and activities were congruent with these objectives. He built upon what students already knew about mummies, incorporated student selection of important terms, and ensured the key vocabulary words were included on the word wall. He pointed out similarities in word structure and differences in word meaning (e.g., embalm/embalming and tissue/tissue).

Mr. Tran's English learners were challenged to articulate orally and in writing the key vocabulary. However, even though many terms and phrases related to mummies were introduced, discussed in the text, and included on the Word Wall, sequence chain, and worksheet, Mr. Tran limited to six the number of words students were expected to master. It is important to note that he repeatedly reinforced these words, at the beginning, in the middle, and again at the end of the lesson. By using the vocabulary in context, repeating the words orally, and writing the question on the board ("What evidence did the scientists discover during the autopsy of the mummy?"), Mr. Tran reviewed the pronunciation, meanings, and usage of the words.

Finally, Mr. Tran expected students to use the new key vocabulary orally and in their writing during partner, small-group, and whole-class discussion. As he listened, he could readily determine who had met the vocabulary objectives and who had not.

Mr. Hughell reviewed the vocabulary sentences from the first day, provided definitions and page numbers, and allowed students to write their sentences with partners. However, it is unrealistic to expect English learners, as well as struggling readers, to master such a large number of vocabulary words (i.e., twenty words) using the approaches he selected. He did not assist students in learning the words through analogy, pictorial representations, or exploration of language structure, and provided very few exposures to the words. The sentences that the partners were writing were not expected to result in connected text; thus, the students only used the words in isolated instances. Moreover, many students did not complete the assignment in class so Mr. Hughell was unable to review or assess student understanding of the words.

Mr. Hughell ran out of time at the end of the period and expected students to conduct their own review of the chapter at home. Obviously, this did not provide the type of scaffolding that English learners need and did not represent effective review of language, vocabulary, and content.

Miss Johnston had no language objectives for the lesson plan and did not introduce, teach, or review any key vocabulary to assist students in completing the worksheet. There may have been words in the multiple choice questions that students were unfamiliar with, reflecting "test language," but she gave them no opportunity to ask about them, nor did she explain the words to the students in advance. Some students (those who finished the worksheets early) practiced finding vocabulary on the word search. However, English learners and struggling readers were least likely to complete the word search because it was intended only for those who completed the worksheet quickly. It is important to note that word searches, while engaging, do not constitute effective review of vocabulary because students are expected to simply match spellings without knowing pronunciations or meanings and they do not receive any teacher support.

28. Comprehensive Review of Key Content Concepts

Mr. Tran: 4

Mr. Hughell: 1

Miss Johnston: 1

Most teachers, if they review at the end of a lesson, focus on the content concepts. In these three scenarios, the teachers did so to varying degrees.

Throughout the lesson, Mr. Tran consciously and consistently reviewed content directly related to his objectives. Students reviewed the information they learned the previous day and the new information from this lesson as a class and with partners. Mr. Tran created

opportunities for students to correct errors or add information to the sequence chains and T-charts so that he could clarify misunderstandings. At the conclusion of the lesson, Mr. Tran had students review the major discoveries.

Mr. Hughell provided a basic review of the previous day's reading. He gave students time to focus on their previous learnings and had volunteers summarize what had been read. He asked others to elaborate and wrote the information on the board so all students could follow along. Most important, he clarified points and added information to their summaries. But these efforts were primarily directed to the Building Background component of the SIOP[®]. In terms of reviewing the day's key concepts, Mr. Hughell was less successful. He ran out of time at the end of the period and consequently failed to review content concepts adequately before the lesson concluded. It was inappropriate for him to require English learners to review at home an entire text chapter that had specialized terminology. The *teacher* is the one to provide this review or scaffold student efforts to review by themselves, prior to assessment and evaluation.

Miss Johnston took a different approach in reviewing content concepts with the students, but it yielded little success with English learners. Initially, she asked students to summarize the chapter they had read. Although two students made an attempt, each stated only one sentence, which recalled a fact but did not summarize the information. Miss Johnston's major effort at concept review was through an individualized paper-and-pencil assignment. This was, however, an assessment of student knowledge and reading comprehension, but not a true review of content concepts for her students. Students could peruse the textbook to find information, but neither the class as a whole nor students in groups had an opportunity to discuss and clarify understandings about the content material. Moreover, Miss Johnston's only objective was vague ("Students will understand how mummies were made") and did not provide clearly defined content concepts for the students.

29. Regular Feedback Provided to Students on Their Output

Mr. Tran: 4

Mr. Hughell: 2

Miss Johnston: 1

Mr. Tran, Mr. Hughell, and Miss Johnston had some similar and different techniques for providing feedback to the students during their lessons.

Mr. Tran scaffolded students' learning by clarifying, discussing, and correcting responses. He encouraged peer support and feedback when the graphic organizers were shared, and he used explanation and discussion to help students understand how to evaluate the importance of the scientists' discoveries. He moved around the classroom during the lesson, offering support and encouragement. Mr. Tran clearly used review, assessment, and feedback to develop his students' language proficiency and content knowledge.

Mr. Hughell frequently clarified misconceptions and gave clear corrections for students' errors. However, his feedback would have been more effective had it better scaffolded students' developing language proficiency and content knowledge. That is, Mr. Hughell's feedback was primarily corrective rather than supportive. He essentially told students their answers were incorrect and then gave them the correct ones, rather than assisting them in formulating the correct responses themselves. Mr. Hughell also directed students to read the text independently and ask for help if needed. Many students, English learners especially, may be reluctant to ask for help for fear of appearing incapable or because they don't know how to formulate the questions they need to ask.

Because Mr. Hughell's classroom was quite teacher centered (he delivered instruction mostly by standing at the front of the room), students had little opportunity to work together to provide each other with helpful feedback. His teaching would be more effective for English learners if he created a more supportive classroom environment. He could begin by providing more sensitive feedback to his students' responses.

Miss Johnston attempted to help students by answering questions while they were completing their worksheets. She also corrected the papers in class, providing the answers for the questions. However, the amount of feedback she provided students was very limited, and not particularly supportive. When she gave the correct responses to the worksheet questions, she provided little or no explanation, and she did not consider student output on an individualized basis during the lesson. In all, English learners received very little supportive feedback during the observed lesson.

30. Assessment of Student Comprehension and Learning of All Lesson Objectives

Mr. Tran: 4

Mr. Hughell: 2

Miss Johnston: 1

Assessing student learning is a critical step in the teaching and learning cycle. The three teachers in these vignettes all conducted some assessment but in different ways.

As his lesson unfolded, Mr. Tran's assessment opportunities included group response, partner, and whole-class reporting, as well as individual written work. His assessments occurred throughout the lesson and were authentic, multidimensional, and included multiple indicators. Most important, his assessment was directly linked to his content and language objectives.

Mr. Hughell did not assess student understanding well in the observed lesson. He called upon a few students to read their vocabulary sentences aloud, so for those students he was able to assess their sense of the words' meanings, but he had no way of knowing whether the rest of the students, particularly the English learners, understood the vocabulary terms. When students read the chapter silently, he did not assess their reading comprehension of the content. He planned some summative assessments, namely the vocabulary matching test and the written paragraph, and tried to match assessment to his objectives ("Write a paragraph on what mummies teach scientists about how Egyptians lived; Explain how mummies were preserved; Match twenty vocabulary words with their definitions"). However, these assessments were scheduled for the following day, too late to guide review, feedback, and reteaching during instruction. By the time he discovered who had met the language and content objectives and who had not, the three-day lesson would be completed.

Miss Johnston was less successful on this SIOP® feature. The factual recall sentences elicited from the two students at the start of the lesson yielded no information about the understanding of the rest of the students. Although the worksheet constituted summative evaluation, there was no ongoing assessment throughout the lesson. Students responded to the worksheet individually, and only after she collected the papers, looked at the scores, and graded their essays—after the class had ended—would she have a sense of what students had learned. As with Mr. Hughell, this information would arrive too late to guide review and reteaching. There was no learning objective related to the creation of the dioramas, and students were not provided with a rubric or criteria upon which their projects would be assessed. It is doubtful the dioramas would

tell Miss Johnston much about her students' understanding of key vocabulary and content concepts. Finally, her one objective ("The students will understand how mummies were made") was too general and not directly measurable.

Summary

Review and assessment are integrated processes, essential for all students, but they are critical to the success of English learners. Effective SIOP® teachers carefully plan for periodic review and informal assessment throughout lessons. This informal assessment is authentic, multidimensional, and includes multiple indicators of students' performance. Effective SIOP® teachers also design appropriate evaluation of key vocabulary and content concept objectives at the conclusion of the lesson. Most important, review and assessment guide teaching and reteaching, inform decision making, lead to supportive feedback, and provide for fair and comprehensive judgments about student performance.

Discussion Questions

- 1. Many teachers introduce key vocabulary at the beginning of the lesson but often neglect to revisit the new terms systematically throughout the lesson and review them at its conclusion. How can you ensure that an SIOP® lesson's key academic vocabulary is reviewed at the end of each lesson? Describe a variety of ways you would review the terms, as well as the techniques you could put in place to build a vocabulary review into each lesson. Which of the activities introduced in this chapter would you select? Why?
- 2. Research has shown that gratuitous compliments to students (e.g., "Good job" or "Keep up the good work") do little to motivate them or assist with their learning. Instead, teachers should give regular, substantive feedback to students on their verbal contributions and on their academic work. What are some ways to provide constructive, specific academic feedback to students? Consider class size and English proficiency levels as you answer this question.
- 3. Reflect on the ideas presented in this chapter, as well as all the other activities you have used to assess student learning of specific lesson objectives. How much time do you think you should allocate for review and assessment during each lesson? What if you discover (as is often the case) that some students are ready to move on, while others need more review and/or reteaching? Using the SIOP® lesson you have been creating, provide specific provisions for students at varying levels. Plan multiple indicators throughout the lesson that will enable you to assess on-the-spot progress toward meeting the lesson's content objectives. Then determine what you will do for 1) independent or partner work for students who are ready to move on and 2) a reteaching or review minilesson for those who need additional assistance from you. This is probably the most challenging aspect of providing differentiated instruction, not only for English learners, but for all students. How will you assess who is ready to move on? How will you assess the students in the reteaching/review group to determine if and when they're ready to move on? What will you do if a few students are still struggling? These are the big questions to ask (and answer) when planning for a lesson's review and assessment.