3 Checking for Understanding

How to Verify That English Learners Are Learning

EDI lessons are put together with design components, starting with a Learning Objective and ending with Closure, followed by Independent Practice. The design components are related to the content you are teaching. For example, Concept Development defines the concepts in the lesson.

What separates EDI from some other direct instruction models is the consistent use of a broad range of delivery strategies. The term *delivery strategies* refers to practices you use to teach the content, to deliver the lesson to your students. The *number one* delivery strategy in EDI is continuous Checking for Understanding. *Checking for Understanding* is a long phrase, so we often shorten it to CFU.

Checking for Understanding is the teacher continually verifying that students, including English Learners, are learning *what* is being taught *while* it is being taught. It's easy to do. You stop every few minutes and ask questions about what you just taught.

Students, how did I identify the simile in paragraph number one?

Notice we said "every few minutes." Don't wait until the end of the lesson to find out whether some students are confused. Intersperse your questions during the lesson while you are teaching. This makes the lesson more engaging and provides more student interaction. It also allows you to check that your students are with you throughout the lesson.

From John: In our last EDI book, we suggested that Checking for Understanding questions should be asked about every two minutes. This doesn't mean you use an egg timer and ask a question every two minutes. Instead, you follow the flow of the lesson, interspersing questions as you present meaningful chunks of information. I have had principals time my lessons and tally the number of questions. I might use 28 questions during a 50-minute lesson, in a combination of calling on individual students and having all students hold up whiteboards to show answers.

Checking for Understanding is the teacher continually verifying that students are learning *what* is being taught *while* it is being taught.

WHY IS CONTINUAL CHECKING FOR UNDERSTANDING SO BENEFICIAL FOR ENGLISH LEARNERS AND TEACHERS?

First, Checking for Understanding is your primary formative assessment, informing you in real time whether ELs are learning.

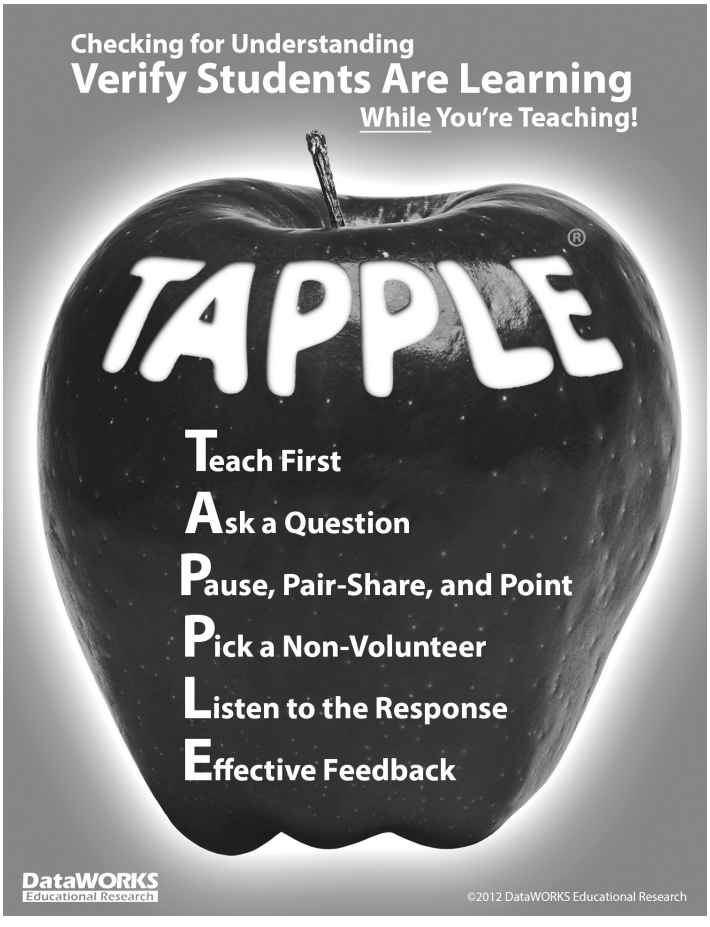
Second, Checking for Understanding allows you to make instructional decisions during the lesson. If you wait and look at Independent Practice, homework, quizzes, or state tests to find out whether ELs have learned, it's too late to modify your instruction. The lesson is already done.

Third, Checking for Understanding generates a high success rate for ELs because you speed up, slow down, and re-teach in direct response to their ability to answer your CFU questions. The fact that you check every few minutes means that you teach—and re-teach, when necessary—in small chunks, bringing the students with you through the entire lesson.

Fourth, Checking for Understanding allows you to confirm that ELs know how to do the homework before being asked to do it. You don't want your students to reinforce any misconceptions or to internalize the wrong way of doing it. There is an old saying: "Practice makes perfect." Actually, this is not correct. Have you ever seen students do every problem wrong? Do these students need to be assigned more problems? Not until they know how to do them—because practice doesn't make perfect; *practice makes permanent.* Always Check for Understanding so students are not practicing their mistakes into permanence.

Fifth, Checking for Understanding improves classroom dynamics. Your questions break up lectures, making the classroom more interactive for students. When you present questions every few minutes, students are more engaged and pay more attention. As an added bonus, when students are engaged, discipline problems are reduced. In fact, the best discipline program of all is using practices that prevent problems from occurring!

CHECK FOR UNDERSTANDING USING TAPPLE



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Several years ago we created TAPPLE as an easy-to-remember acronym for the steps of Checking for Understanding. The TAPPLE poster shown above is taped to thousands of classroom walls across the United States. You can download a color version from our website (www.dataworks-ed.com).

Put it on a wall where you can see it. You don't need to be able to read it, but every time you see it out of the corner of your eye, it will remind you to Check for Understanding.

We're going to go over each of the TAPPLE steps in this chapter. In a broad sense, Checking for Understanding starts with teaching, questioning, and picking students. Checking for Understanding ends with diagnosing errors and providing corrective feedback.

TAPPLE: Teach First So All Students Are Prepared to Respond

The *T* in TAPPLE stands for *Teach First* so all students, including English Learners, are prepared to respond. *Teach First* means you explicitly present the content before asking any questions about it. Remember the Checking for Understanding definition: You are verifying that your students are learning *what* you are teaching *while* you are teaching. You're monitoring whether they are following you. When you don't Teach First, it's not possible to measure learning; you're assessing background knowledge instead. (We'll talk more about activating and *providing* background knowledge during the Activate Prior Knowledge component of an EDI lesson.)

From Silvia: Teach First. DataWORKS has found that students are often asked question after question about something that has not been taught yet. For example, a lesson on persuasive essays starts by questioning students on what a persuasive essay is. Invariably, the students cannot answer because they don't know what a persuasive essay is before they have been taught. This is more detrimental for ELs as they might know the concept of convincing someone, but they don't know the meaning of the word *persuasive*.

Remember: Always Teach First so all students, including English Learners, can answer successfully.

Teach First includes more than content. You also teach ELs the language required for the new lesson during the lesson itself. You teach them how to pronounce and read new words and their definitions. In addition, you also teach how to answer in complete sentences that incorporate the new vocabulary from the lesson. We'll describe in detail how to do this in Chapter 4, Vocabulary Development, and Chapter 5, Language Objectives.

Teaching First greatly increases learning opportunities for English Learners because you provide both the content and language they need to be successful in class.

TAPPLE: Ask a Specific Question About What You Just Taught

After you have taught something, you are ready to ask specific questions about what you just taught.

Here are some examples of specific questions to measure whether English Learners are following what you are teaching. They're also higher order questions.

- *Students, in your own words, what is alliteration?*
- *Why is sentence number two an example of hyperbole?*
- *What was the difference between the Virginia Plan and the New Jersey plan at the Constitutional Convention in 1787?*
- *Students, what is one difference between plant cells and animal cells?*
- *Students, I just solved this one-step linear equation. How did I solve it?*
- *Students, you just added two fractions on your whiteboards. How did you calculate the sum?*
- *Students, I just identified the setting in the first paragraph. Now, you read the second paragraph and be ready to tell me the setting and how you know it's the setting.*

Avoid opinion questions such as *Does everyone understand how to do this? Ready to go on? Do I need to work another problem?* Ask specific questions.

Ask English Learners High-Level Questions

Sometimes, teachers drop the level of their questions for ELs, thinking ELs can't answer more sophisticated questions or don't have the language skills to answer. On the contrary, it's important for English Learners at all levels to be presented with questions that promote high levels of thinking, including questions they may not be able to answer orally. This means that ELs should be presented with higher-order questions (such as the ones above) so they have the opportunity to think and process information at a high level. ELs have the same capability to think and process information at high levels as native English speakers, even if they can't completely express their thoughts orally in English.

Generally, EDI lessons have only one low-level question: "What is our Learning Objective?" All other CFU questions are higher-order questions.

Support Language Acquisition During Questioning

Now we are going to add some powerful refinements to "Ask a Specific Question" that specifically support language acquisition for ELs.

Cue ELs to answer in complete sentences using the new Academic and Content Vocabulary words from the lesson.

ELs (and other students) typically respond to questions with a word or a short phrase. When told to answer in a complete sentence, they often use short sentences with pronouns. With EDI, you prompt and support ELs in answering in complete sentences, incorporating the new Academic and Content Vocabulary from the lesson.

Look at the responses in Table 2.1, ranging from phrases, to complete sentences, to complete sentences with vocabulary.

Table 2.1 Academic and Content Vocabulary

CFU Question	*Word or phrase response*	*Complete sentence*	*Complete sentence with new vocabulary*
Which sentence, A or B, uses alliteration?	B.	It's B. The answer is B. I wrote B on my whiteboard.	Sentence B uses *alliteration*.
What is the setting in the first paragraph?	The forest.	It is the forest.	The *setting* in the first paragraph is the forest.
What was the first step in solving the linear equation?	Subtracted two.	I subtracted two.	I used the *inverse operation* and subtracted two from each side of the *linear equation*.
What was the author's assertion in the passage?	Wear uniforms.	Students should wear uniforms to school.	The *author's assertion* in the passage is that students should wear uniforms to school.
What is one check and balance in the Constitution?	Veto.	An example is the veto.	One *check and balance* in the Constitution is the President's veto.

From John: Complete sentences can make any lesson better. However, I have found that teachers need to develop what I call "teacher discipline" to remember to require complete sentences every time. When students are consistently prompted to use complete sentences, they will do it automatically without prompting. Complete sentences should be a schoolwide norm. I saw a poster in a school the other day: "We always answer in complete sentences."

Sentence Frames

There is an easy way to support ELs to answer in complete sentences using academic English: you provide a sentence frame or a sentence stem showing them how to respond. Include it as part of your question and then have the students practice their complete sentences during a pair-share before you call on anyone to respond.

Students, get out your whiteboards. I want you to calculate the perimeter of the parallelogram in Example 4. In a moment, I'm going to call on some of you to read your answer. I want you to answer like this: The perimeter of the parallelogram is . . . I also want you to include the units. The units in Example 4 are meters. Your answer should include the word meters.

Students, turn to Figure 2 on page 349. Why is Figure 2 an example of the second Postulate of the Kinetic Molecular Theory? I want you to answer: Figure 2 is an example of the second Postulate of the Kinetic Molecular Theory because . . .

Let's read this sentence together. Ready? "After the rain stopped, Jennifer went outside to play." Students, why is this sentence a complex sentence? I want you to answer: It is a complex sentence because . . .

Besides using oral sentence frames, you can provide written sentence frames for students to use. This can be effective because students won't spend time trying to remember the sentence frame while they are composing their answer, and they will be practicing reading and recognizing new words contained in the sentence frame.

Cue English Learners to answer using language that is higher than their current English Language Development (ELD) level.

To advance ELs' language level, cue and support them in using new language that is higher than their current level. ELs need to learn and practice *new* words, not just the ones they know.

Students, I have a question. What are the two components, the two parts, of Lewis Dot Structures? I don't want you to say, "The two parts are . . ." I want you to say, "The two components of Lewis Dot Structures are . . ."

Students, I want you to tell me something that is the same about the two characters.

I want you to say, "One similarity is . . ."
(later during the lesson)
I want you to say, "Something they have in common is . . ."

Cue students to use a public voice.

Train students, especially ELs, to speak up when they respond so all students can hear. At DataWORKS we are using "Stand and Deliver." We direct elementary and middle school students to stand up and respond in a loud public voice. One of the advantages to the public voice and Stand and Deliver is that all the other students turn to listen to the response.

From John: Experiment with your students using Stand and Deliver and complete sentences to answer questions. It is very effective. Most schools who try it adopt it right away.

TAPPLE: Pause, Pair-Share, Point

The TAPPLE Pause means you provide some time between asking the question and selecting someone to respond. This is called wait time or think time.

When you ask a question, students need time to prepare an answer. Generally, it takes about 3 to 5 seconds to recall information and mentally put together an answer. English Learners may require additional time, as much as 8 to 10 seconds. Beginning English learners often translate the question from English to their native language, compose an answer, and then construct an approximation of the answer in English. This translation process takes time.

The wait time you provide after asking a question allows all students time to process an answer. You don't need to wait again when you select the second or third student to respond. The wait time is provided once for the entire class. However, be ready to wait for individual students to orally state their answer after you call on them.

Pair-Share

The first *P* in TAPPLE now includes *pair-share,* one of the most powerful strategies for you to take from this book, especially for ELs.

Pair-share means to direct your students to explain something to the person sitting next to them. For example, every time you ask a CFU question, you tell your students to discuss their answers with each other before

you select someone to respond. It is easy to do. Pair off your students and have them explain their answers to their pair-share partner.

Students, we just went over the Learning Objective together. I am going to ask one of you what we are going to do today. Before I select someone, I want you to read the Learning Objective to your partner so you are ready in case I call on you.

Students, identify and underline a supporting detail in the first paragraph. In a minute I am going to call on someone to tell me a supporting detail. Use a complete sentence like this: "One supporting detail is . . ." Tell your partner your supporting detail and why it is a supporting detail. Be ready to tell me if I call on you.

On your whiteboards, do Step 1: Simplify the expressions on both sides of the linear equation. Then explain to your partner how you did it. If you don't have the same answer, check each other for errors.

During pair-shares, students often teach each other the content you just taught. You turn the students into teachers.

Students, I just solved this problem. Explain to your partner how I solved it.

From Silvia: Pair-shares, during which ELs discuss academic content, should not be confused with ELs talking to each other using language they already know. During pair-shares, ELs should be practicing new language from the lesson.

Point and Explain: Students point to information on the page and explain it to their pair-share partner.

Pair-shares can be enhanced by asking students to point to specific textual information on the page and explain it to their partners. Point and Explain is an effective language strategy for ELs because they are connecting ideas to text, explaining ideas in text, and describing and explaining visuals to their partners.

The most engaging method of doing this is directing students to reach out and point to the information on their *partner's* paper. The kinesthetic aspect of this practice is amazing to watch: arms crossing throughout the classroom, fingers pointing to specific information directly related to the content you are teaching, animated discussions.

Students, where does the author use personification in the second paragraph? Partner A, point to a sentence in the second paragraph in your partner's textbook where the author uses personification. Explain to your partner why it is personification.

Pair-shares without questions.

Sometimes, if you have a series of items to cover, you can direct students to pair-share and explain individual items without asking CFU questions until you have covered several or all of the items. In other words, you can have students pair-share and explain information to each other even if you don't ask an immediate CFU question.

Pair-shares are especially important for ELs.

> Pair-shares are the primary method of implementing Language Objectives for English Learners.

Pair-shares are so beneficial for English Learners that they should be used for almost every question. In fact, pair-shares are the primary method of implementing Language Objectives for ELs because they are listening and speaking using the new language from your lesson. Pair-shares create engagement as ELs exchange information with each other. Pair-shares also allow ELs time to compose and practice their answers before being called upon to respond.

Appendices B and C provide additional information on how to manage the classroom for pair-shares and why pair-shares are so beneficial for ELs.

From John: I find that students have focused attention spans of less than five minutes. However, every time I direct students to pair-share, they become engaged. The interaction of the pair-share resets their "attention clock." Then they can concentrate for another few minutes. Constant use of strategies like pair-shares keeps students engaged for the entire lesson.

TAPPLE: Pick a Non-Volunteer

We've talked about pair-shares. Let's get to the next step of TAPPLE. You Taught First. You Asked a specific question about what you just taught. You then Paused and Pair-shared using a sentence frame. You had students Point and Explain relevant information, if applicable. Now you're ready to Pick a Non-Volunteer to answer your question to verify that everyone—including ELs—is learning.

In EDI, a randomizing system is used to select non-volunteer students during the lesson. The most widely used method is to write the student names on Popsicle sticks and place them in a cup. Each time you ask a

question, you pull a stick from the cup to select a student to answer. In fact, the general phrase "pull a stick" now means to select a non-volunteer no matter what system is actually used.

Any method can be used, but keep in mind, Checking for Understanding is valid only when you call on random non-volunteers. Also, randomizing ensures that ELs are always included among the selected students.

From Silvia: Many teachers express serious concerns about having to ask ELs to respond to questions during a lesson. They state that ELs should not be forced to talk in class. However, students need a moderate level of concern to stimulate their efforts to learn. One way of raising student level of concern is by calling on non-volunteers. Everyone needs to be ready to respond. In addition, ELs need ample opportunities to express their ideas in English (oral language development). ELs answering questions also gives opportunities for teachers to monitor students' English Language Development proficiency.

Unfortunately, with multiple opportunities for students to use English in the classroom, we often see the same volunteers answering questions. Under the volunteer system, ELs are not given equal opportunity to participate in class.

DataWORKS has found that ELs are very successful in answering questions during EDI lessons. Of course, that's because they are well-prepared to answer. Using TAPPLE, the teacher Teaches First, and the students Pair-share to practice their answers before being asked to respond.

The responses shown below are from a survey of ELs who participated in a DataWORKS StepUP Academy summer school program designed to accelerate English Learners by pre-teaching the next year's standards during the summer. The Academy teachers taught EDI lessons every day and consistently called on non-volunteers to answer CFU questions. You can see from the responses that calling on non-volunteers also motivates students to pay attention.

Fifth-grade survey: *Write a sentence telling how you felt when the teacher asked questions.*

- I was hoping to get picked.
- I felt okay because I pay attention.
- I felt prepared.
- I was hoping my teacher would pick me.
- I was thinking I was going to get picked.
- I felt like I needed to pay attention to get it right.

How Many Students Should Be Called on for Each CFU Question?

We used to have a rule of thumb: Call on three non-volunteers students for each question. Our latest action research during the past year working with hundreds of teachers—and teaching kindergarten to 12th-grade lessons ourselves—has caused us to fine tune our thinking: Depending on the question asked, adjust the number of students you call on to respond.

1. Call on fewer students for questions that have a single answer.
2. Call on more students for higher order and divergent questions that do not have one answer.
3. Call on more students when answers have linguistic demands.
4. Call on more students when students need to remember the answer.

We're halfway through Checking for Understanding. We focused on asking questions and preparing ELs to respond. Now we'll continue, describing how to provide effective feedback for correct and incorrect student answers. Then we'll complete this chapter by discussing how to use whiteboards to Check for Understanding of the entire class at once.

HOW TO PROVIDE EFFECTIVE FEEDBACK FOR ENGLISH LEARNERS

You've Taught first, Asked a specific CFU question, had students Pair-share using a sentence frame, and Picked a non-volunteer. Now you're ready to shift gears from asking questions to *listening* to the responses to decide what to do next. Do you need to re-teach the content to the whole class? Do some individual students need support? Are ELs having trouble with the language of the lesson?

TAPPLE: Listen to the Response

The *L* in TAPPLE stands for *Listen to the Response.* When delivering an EDI lesson, you listen carefully to each student's response because what you do next depends on your analysis of the student's answer. Your initial diagnosis is to determine (1) Is the student's answer correct? (2) Is it partially correct? or (3) Is it wrong?

Note: With whiteboards, Listen to the Response also means look at the student answers, and then listen to non-volunteers read and explain their whiteboard answers.