# Checking for Understanding

Finding out what students have learned and what to reteach requires more than asking students to nod or recite facts.

#### By Douglas Fisher and Nancy Frey

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#### **Watch the Video!**

Watch a teacher demonstrate strategies to check for understanding. http://youtu.be/8lL18hRrLSo

id everybody get that?" says Mr. Unger. Rafael, a student in Unger's class, thinks to himself, "No, I have no idea what you're talking about, but I'm not about to let everyone know that I'm confused." And so the game continues—the teacher thinks that he is checking for understanding and accepts the silence as an indicator that learning has occurred. In reality, despite quality instruction, Mr. Unger has no idea whether it has or has not.

How, then, could he check for understanding? What does quality checking for understanding look and sound like? Our analysis of classroom instruction and assessment suggests that teachers can check for understanding in several ways, including the use of oral language, questioning, writing, projects and performances, and tests (Fisher & Frey, 2007). When teachers use those procedures, they know which students understand the content and which students need additional instruction.

Checking for understanding is an important part of a formative assessment system. Looking at student responses or student work informs the teacher, and that information can be acted upon to create better understanding. Importantly, checking for understanding must occur throughout the lesson, at least every 5–10 minutes, if teachers want to maintain the rigor of the lesson and support student learning. As an observer to a classroom, you're on the lookout for the teacher's method and the frequency of checking for understanding.

#### **Oral Language**

One effective way to check for understanding is through oral language: speaking and listening. When students are doing the talking, the teacher has a chance to assess understanding. A number of classroom structures give students an opportunity to talk, including think-pair-share, reciprocal teaching, literacy circles, discussion prompts, and Socratic seminars. For example, as Ms. Ramirez listens to her students discussing a book they are reading as part of their book club, she notices that they are not justifying their responses with evidence from the text. They are skilled at summarizing, but the lack of evidence in their discussions indicates that she should devote additional instructional time to this practice.

In addition to listening as students interact, retellings are a valuable way to check for understanding. Retellings give the teacher a glimpse into student thinking. For example, Mr. Bradford asked Jasmine to retell a section of video clip about glacier formation and movement. As part of her retelling, Jasmine said, "The glaciers take a long time to develop. Well, really they grow like something alive even though they're not alive. They develop when it snows and the snow piles together. It changes to this special kind of ice, but before that, there is this in-between ice called firn." This retelling lets Mr. Bradford know that much of his teaching has stuck and that Jasmine is well on her way to understanding glaciers.

#### Questioning

Questioning, which can be done orally or in writing, is the most common way that teachers check for understanding. Unfortunately, not all questions are worthy of instructional time. To be useful, the initial questions teachers ask should be planned in advance. Of course, additional questions that probe

student understanding will come to mind during the interactions teachers have with students, but the initial questions form the expectations for student understanding. Less helpful questions are those we like to call "guess what's in the teacher's head." More formally known as Initiate-Respond-Evaluate (IRE) (Cazden, 2001), this cycle privileges students who are willing to play the game. For example, when the teacher asks, "When do we use the FOIL rule?" three or four students raise hands, and Tanya is selected to respond. Tanya says, "When you multiple binomials," to which the teacher replies, "Good." IRE is typically used to check students' recall and gives only a few students an opportunity to respond.

Instead, in high-quality checking for understanding, teachers ask questions that require more complex and critical thinking and require responses from lots of students. A number of instructional routines let students practice their questioning skills, such as ReQuest (Manzo, 1969) in which students read with a partner, taking turns asking and answering questions. As they practice, their teacher analyzes the types of questions being asked and the appropriateness of the answers. Over time (and with instruction and practice) students tire of literal and recall questions and move toward more interesting questions that require synthesis and evaluation.

Another way to question in an inclusive way is through audience response systems. These can be as basic as index cards with answers on them that all students hold up to answer a question or as complex as handheld devices that allow each student to key in a response. As an example of the former, students in a biology class used

green and red cards, with Yes written on the green card and No written on the red card. As the teacher read each statement about the ecosystem, students held up one of their cards to indicate if they agreed or disagreed. A question about the impact of cleaning agents entering the water system through storm drains split the class, which provided the teacher with information about where to focus the lesson.

An example of using complex response devices to check for understanding can be found in the video that accompanies this article. (See www .nassp.org/pl0911fisher.) In the video, algebra teacher Aimee Chen poses a question and tells students to submit their responses using the devices, then invites them to persuade one another about their choices before revealing the answer. She then engages them in reteaching. An online version of audience response systems that relies on text messages from cell phones can be found at www.polleverywhere.com.

#### Writing

When students are writing, they are thinking. In fact, it's nearly impossible to write and not think. That's why short writing-to-learn prompts are so effective when checking for understanding. It's important that the prompt be developed so that it provides teachers with information about student understanding. We are particularly taken with a writing prompt that requires that students consider the role, audience, format, and topic (RAFT) in their writing (Santa & Havens, 1995). It's flexible and teaches perspective. For example, after discussing sportsmanship in their physical education class, Mr. Davenport asked his students to respond to



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the following RAFT:

- Role: Bronze medal winner
- Audience: Gold medal winner
- Format: Greeting card
- Topic: Congratulations on your victory.

Similarly, in a history classroom, students learned about the Gettysburg Address and discussed the role that this speech had in shaping U.S. policy. To check their understanding about the address, Ms. Ly asks her students to respond to the following RAFT:

- Role: Person attending the dedication of the Soldiers' National Cemetery in Gettysburg
- Audience: Family member
- Format: Personal letter
- Topic: Lincoln's message.

## **Projects and Performances**

Teachers can also use projects and performances to check for understanding. Importantly, this is not done when a project has been completed, but rather as students work on the activities. A wide range of appropriate projects and performances let students engage in meaningful work that is aligned with content standards.

For example, Ms. Anderson's English class was focused on the essential question, What's worth fighting, or even dying, for? The students in this class wrote an essay in response to the question; read literature, such as *Romeo and Juliet*; and engaged in class debates.

As one project, each student created a Facebook page devoted to a worthy cause he or she would be willing to fight for. As students worked, Ms. Anderson viewed the pages in prog-

ress and met with individual students to check their understanding about the essential question. Micah created a page about a rare genetic condition that his sister has. When he met with Ms. Anderson, Micah said, "I would fight for money to figure out what causes it and how to prevent it. I really would." Their discussion gave Ms. Anderson evidence of Mi-

cah's developing understanding of worthy causes.

#### **Tests**

Although tests are typically considered a summative assessment tool that is used for grading, they can also be used to check for understanding. Incorrect answers on a test give teachers information about what students still need to learn. Tests can be developed in a number of different formats, including multiple-choice, dichotomous choice (e.g., true/false, yes/no, and agree/disagree), and essays. For example, if 60% of the students responded incorrectly to a true/false statement, the teacher will know that they are confused about some aspect of the statement.

# **Check Away**

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Checking for understanding is the link between teaching and learning and should be part of every lesson that teachers plan. As such, teachers

should know how and when they are going to do so. This ensures that teachers are basing their lessons on rigor and high expectations, rather than on random events that are focused on recall. And it allows teachers to plan subsequent instruction on the basis of student performance, so encourage teachers to check away! PL

#### REFERENCES

- Cazden, C. B. (2001). Classroom discourse: The language of teaching and learning. Portsmouth, NH: Heinemann.
- Fisher, D., & Frey, N. (2007). Checking for understanding: Formative assessments for your classroom. Alexandria, VA: ASCD.
- Manzo, A. (1969). The ReQuest procedure: A method for improving reading comprehension through reciprocal questioning. *Journal of Reading*, 13(2), 123–126.
- Santa, C. M., & Havens, L. T. (1995). Project CRISS: Creating independence through student-owned strategies. Dubuque, IA: Kendall/Hunt.

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