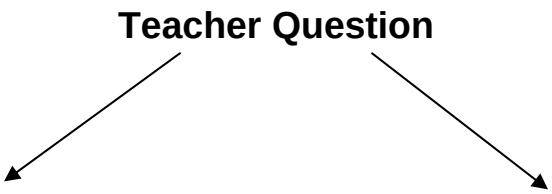
E-3: Check for academic understanding

Respond instructively

After you check student understanding, it is time to respond - through feedback and follow-up questions. Doing this allows you to gauge how much students actually comprehend and push them to further their understanding. Responding effectively is essential.

How do I respond instructively to student answers?



Respond to an Incorrect Answer

- Give feedback – explain why (and what part of) the response is not correct
  - Peer feedback
  - Student reflection
- Question to see where student understanding breaks down
- Support student in reaching understanding
- Return to student to see if understanding has improved
- Classroom example

Respond to a Correct Answer

- Give feedback - explain why the response is correct
  - Peer feedback
  - Student reflection
- Question to validate understanding
- Question to extend learning

Respond to an Incorrect Answer

Give feedback

Hold high expectations for student responses. If student responses are not accurate, clearly tell them why their response is not right. Don't accept partially right answers from students – tell them what parts are accurate, what parts need to be improved, and why. You can also use peer feedback and student reflection (see below for more on each of these approaches) to help students understand their performance.

Question to see where student understanding breaks down

- *Ask students to explain their answer* – this may reveal that they misunderstood the question, or where they are getting confused
- *Break your question down into more basic, component parts (scaffolding)* – Use scaffolded questions to see what students understand and where their knowledge begins to break down. This will also clarify the question and help support the student in reaching a correct understanding.

E-3: Check for academic understanding

- *Avoid the urge to move quickly to another student* – stick with the student to see what's confusing them and to help them reach the correct understanding

Support the student in reaching understanding

- Use follow-up questions - once you break your questions down to find student misunderstanding, build on these lower-level questions to lead student understanding back to the objective's level.
- If asking follow up questions doesn't correct the student's misunderstanding, you can:
  - Call on other students to offer a correct response and explanation.
  - Re-explain the concept using different methods or examples (E-1)

Return to student to see if understanding has improved

- After you offer this support, return to the original student and check their understanding again – did the explanations address their confusion and help them reach understanding?
- If the student is still confused, you may try another alternative explanation or decide to revisit the student misunderstanding later in class, perhaps one-on-one during a different part of the lesson

Classroom Example

Teacher: "Let's try using an analogy to try to understand terrorism's relationship to Islam. What if I said, 'Terrorism is to Islam what the KKK is to Christianity.' Any thoughts about that?"

Student: "How can you say that? I'm Christian and I don't support the KKK. But Muslims, they support terrorism. No, I definitely don't agree with that analogy you gave. "

Teacher: "Okay, let's think about this. Do SOME Muslims support terrorism in the name of their religion?"

Student: "Yes, they do."

Teacher: "Did SOME Christians support the KKK in the name of their religion?"

Student: "Well, yeah.."

Teacher: "Do ALL Muslims support terrorism in the name of their religion?"

Student: "I suppose not."

Teacher: "Did ALL Christians support the KKK in the name of their religion?"

Student: "No. I get it. I see what you're saying."

Teacher: "So what would you say both religions have in common?" [waits, even after a long pause...]

Student: "Um...That they both have groups within them that do evil things and use the religion to get away with it. But they're just making their own religion look bad."

Teacher: "Very well said. Would anyone like to add anything to that?"

Notice how:

E-3: Check for academic understanding

- The teacher stuck with the student and continued her questioning until his understanding of her analogy was complete.
- She followed up her questions and required the student to defend and explain his response.
- Both the degree to which she was able to assess his comprehension and the actual degree of his comprehension were improved by her commitment to rephrasing questions to identify the source of his confusion.

Respond to a correct answer

Give feedback

- If a student gives a correct response, explain why this answer is correct (you can also have the student him/herself explain why this is correct or have other students evaluate the response and offer an explanation) Read more about peer feedback below.
- Avoid saying "That's right. Good job!" This doesn't help the student or the rest of the class understand the reason why the answer meets expectations.
- You can also encourage self-reflection for students to assess their own performance (see below).

Question to validate understanding

- Ask student to explain his/her answer – having students defend their response will confirm that they actually understand and did not simply guess correctly

Question to extend learning

- Ask higher-order follow-up questions that push students further. Doing this allows you to see how much students know and challenges them to expand their thinking, which can result in deeper understanding.

Peer Feedback

By providing students with the structure they need, they will be able to offer more valuable feedback to their peers, and will also begin to internalize the process they need to go through when evaluating their own work.

Guiding Principles	Examples
Generates commentary for students about their own work and helps the student providing the input to clarify his or her own thought process and speaking skills.	Invite class members to direct questions to the student, asking him or her to explain or justify how he or she approached the problem.
Teach your students how to give quality feedback. Students learn to communicate and debate their ideas in a productive way.	Invite other students in the class to share their thoughts on a peer's thought processes or end result. Encourage the evaluated student to share his or her reasoning.
Sends a valuable message: You care what students in your classroom think.	Take the role of facilitator, asking questions to help guide the students' feedback. For example: "Does this approach make sense to you? Why or why not?" "How would you have approached the problem?" "Would you have done it differently? Why or why not?"

E-3: Check for academic understanding

Encourage them to offer feedback in a constructive manner by depersonalizing the process so that it is focused on the ideas and not the person.	Have the student join his or her peers in evaluating the work. Rather than focusing on just one student's work, call upon students to evaluate all the different solutions that have been presented, compare and contrast them, and select the ones they think make the most sense.
Distribute checklists, questionnaires or instructions detailing what students should look for in their peers' work.	If students are editing one another's essays, you might hand out a form with the following questions on it: • Does the essay have an introduction? Circle the entire introduction. • Does the essay have a conclusion? Put a rectangle around the entire conclusion. • Does the essay provide sufficient evidence to make its argument? • Underline each piece of evidence with one line. • If there is not enough evidence, or if the evidence is unconvincing, make suggestions at the bottom of the page for further evidence that might be used. • Are transition sentences used? Underline each transition sentence with two lines. • If transition sentences are not used, indicate where they are needed with arrows. • What do you like most about this essay? • What do you think could make this essay better?

Student Reflection

The ultimate goal of assessment and checking for understanding should be for students themselves to competently judge where they are against their goals and what they need to do to improve. Students must self-assess their performance so that they become active participants in their own learning.

Guiding Principles	Examples
By asking themselves certain questions, students will begin to analyze the quality of their own work.	A third grader can learn to ask herself whether a story she writes has a beginning, middle and end (and serve as her own editor). A tenth grader can learn to ask himself whether he has provided adequate evidence to support his point—be it on a history report, a geometry proof, or a science lab.
For students to be able to accurately self-assess, they must have a clear vision of what constitutes quality work. Unless they know what they are working towards, they will be unable	By presenting them with a detailed model of a successful book report, project, essay, or presentation of any type, students are more likely to hit that target and internalize your

E-3: Check for academic understanding

to measure how close they are to achieving that goal.	high standards.
Teachers can actively support self-assessment by assigning formal or informal writing prompts that ask students to reflect upon their performance or progress to date.	You might inquire about the following: • What did you learn today? • What were the most important parts of today's lesson? • Are you still confused about anything? • What was the most enjoyable part of the lesson/unit? • What was the least enjoyable part of the lesson/unit? • What did you find the most difficult part of the lesson/unit? • What do you think you did that was the most impressive? • What did you do that could still use improvement? • What did I do that might have made things easier for you? • What did I do that might have made things harder for you? • What might have made the lesson more interesting for you?
Have students review and edit their own work before turning it in to you. Give them a checklist (or rubric) detailing everything they need to assess.	Pair up the entire class so that each student has a partner to edit his or her class assignment. Both students, the student who is assessing and the student who is receiving peer feedback, will benefit from the reviewing process.