Checking for Understanding Using Gestures

Great teachers know how much each of their students is learning "in the moment." Common prompts like "Any questions?" or "Does everybody understand?" represent ineffective attempts to formatively assess students’ knowledge and skills. When teachers effectively check for understanding (CFU), they gather real-time data about what students know and are able to do and use that data to adjust the lesson immediately.

**Key Method**

Gestures are a CFU method in which the teacher asks a question and students signal their answers using some sort of visual sign (for instance, holding up a number of fingers, sign language, colored index cards). Unlike many other CFU methods in which teachers make inferences about student learning from a sample of students, with Gestures, the teacher visually records answers from the entire class. Generally, Gestures are most effective when the question is posed in a selected-response format (e.g., multiple choice, agree or disagree, or yes/no).

**Method Components**

**Universal characteristics of effective CFUs**

- **What and when to CFU:** The check for understanding comes at a critical moment in the lesson; the teacher is intentionally finding out about the "right stuff" at the "right time."
- **Unbiased inference:** The method allows the teacher to make an unbiased (or less biased) inference about objective mastery for the class, through either individual assessment or representative sampling.
- **Instructional adjustment:** The teacher leverages the CFU data in the moment to determine the next instructional move (e.g., continue with the lesson, pinpoint a particular misunderstanding, reteach the concept).

**Demonstrating universal characteristics for gestures**

- Teachers use Gestures to check for understanding of important content.
  - For example, teachers intentionally check for understanding at key moments in the lesson that are revelatory to students’ progress toward mastering the lesson objective.
  - NOTE: This is different from asking students if they understand (e.g., "Using a fist to five, signal how well you feel about Concept X.") Student meta-cognition is incredibly important, but it is not the focus of this micro-credential.
- Teachers use Gestures to make less biased inferences about what students know and can do.
  - Teachers use gestures that are clear and visually distinct.
    - For example: "One finger for agree, two fingers for disagree." Or "One finger for A, two for B, and three for C." The key is to have just a few answer options that are simple to remember and visually distinct. (For instance, it is often hard to tell if a thumb is up or down, making that a less effective gesture.)
  - Teachers use strategies to maximize the likelihood that each student’s gesture is his or her own.
    - Teachers can give a crisp in-cue that signals to students when they should make their gesture: "Show me your answer cards when I say ‘three’. . . One, two, three.”
- The physical placement of the gesture can also be used to minimize opportunities for copying. “Show me your answers in front of your heart. Go.”
- Teachers use follow-up questions to probe the students’ gestured responses.
- Strategic questions asked of intentionally selected students can help teachers better understand why students answered they way they did: “Most of the class answered A. Let me hear from someone who gestured B. Why did you answer B? . . . <wait time> . . . Jamal?”

Teachers make appropriate instructional adjustments in response to the formative CFU data.
- For example, the teacher’s next instructional move will be different if the class is evenly split between two answer choices than if only one or two students have the wrong answers.

### Supporting Research


### Resources


### Submission Guidelines & Evaluation Criteria

Following are the items you must submit to earn this micro-credential and the criteria by which they will be evaluated. To earn the micro-credential, you must receive a passing score for Part 1 and a “Proficient” or “Exemplary” for each element of the rubric in Part 2.

#### Part 1. Overview questions

(200-word limit for each response)

- **Activity Goals**: List your objectives for the lesson in which you used Gestures to check for understanding.
  - **Passing**: The teacher lists the lesson objectives from a single class period. To pass, the lesson objectives must be specific, measurable, student-centered, and aligned to rigorous content and should be associated with a single day of instruction.

- **Activity Description**: Describe the lesson generally and the specific activity or activities in which you demonstrate checks for understanding using Gestures.
  - **Passing**: The teacher describes in fewer than 200 words the general arc of the lesson and the specific activity or activities in which the checks for understanding will be carried out. A
passing description will enable a viewer to have a clear sense of the learning sequences on the video.

- **Optional Context:** Please describe any other important context that an external observer would need to understand this lesson or your particular teaching context.
- **Passing:** The teacher provides any additional information that will help the observer better understand the teacher’s context. This is an optional question and the teacher may elect to leave it unanswered.

### Part 2. Evidence/artifacts

Please submit a link to a video that shows two distinct CFU sequences, along with text analyzing each clip according to the questions below (200-word limit for each clip).

- **Describe each CFU sequence.** In each description, please answer all of the following questions.
  - Why did you choose to CFU at that particular moment of the lesson (that is, given the objectives of the lesson, why CFU at this point)?
  - How did your use of Gestures allow you to make an unbiased inference about student understanding?
  - Following the check for understanding, what was your next instructional move? How did the CFU data inform your decision?

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<th>Attempting</th>
<th>Foundational</th>
<th>Proficient</th>
<th>Exemplary</th>
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<tbody>
<tr>
<td><strong>GESTURES 1:</strong></td>
<td>WHAT TO CFU: There is no alignment to the lesson objective in at least one of the CFUs, or the alignment is questionable</td>
<td>WHAT TO CFU: While the CFUs seem related to the objective, there is some question in at least one instance regarding how it directly relates to the lesson objective</td>
<td>WHAT TO CFU: All CFUs are related to the lesson objective</td>
<td>WHAT TO CFU: All CFUs are unambiguously related to the lesson objective and it is clear that they get at the nuances associated with mastering the objective</td>
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<td><strong>GESTURES 2:</strong></td>
<td>CLEAR GESTURES: The teacher ensures valid inferences about student understanding by using gestures that are clear and visually distinct</td>
<td>CLEAR GESTURES: The gestures are generally clear and visually distinct, but in one example the teacher cannot quickly make an inference about students’ understanding because the gestures lack clarity or visual distinction</td>
<td>CLEAR GESTURES: In both examples the gestures are clear and visually distinct so that the teacher can quickly make an inference about students’ understanding</td>
<td>CLEAR GESTURES: In both examples the gestures are not only clear and visually distinct so that the teacher can quickly make an inference about students’ understanding, but the teacher also shows two distinct gesture types, highlighting proficiency in this technique</td>
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<td><strong>GESTURES 3:</strong></td>
<td>OWN ANSWER: Across both examples, few students are gesturing in a way that helps to ensure that their answers are their own or many students are not gesturing at all</td>
<td>OWN ANSWER: Across both examples, most students are gesturing in a way that helps to ensure that their answers are their own, but some students are gesturing in a way that allows for others to copy their answers or some students are not gesturing at all</td>
<td>OWN ANSWER: In both examples nearly all students are gesturing in a way that helps to ensure that their answers are their own</td>
<td>OWN ANSWER: In both examples all students are gesturing in a way that helps to ensure that their answers are their own</td>
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## GESTURES 4: The teacher ensures valid inferences about student understanding by asking follow-up questions to probe gestured responses

**FOLLOW-UP QUESTIONS:** In at least one of the examples, the teacher does not ask probing questions following the Gestures to better understand students’ gestured responses.

**FOLLOW-UP QUESTIONS:** Although the teacher asks at least one question in both examples, it is unclear that the particular questions or student responses will help the teacher better understand students’ gestured responses.

**FOLLOW-UP QUESTIONS:** In both examples, the teacher asks at least one probing question following the Gestures to better understand students’ gestured responses.

**FOLLOW-UP QUESTIONS:** In both examples, the teacher asks a set of strategically selected probing questions following the use of Gestures to better understand the students’ gestured responses and deepen understanding.

## GESTURES 5: Based on CFU data, the teacher makes appropriate instructional decisions

**INSTRUCTIONAL ADJUSTMENT:** Taken as a whole, the teacher’s next instructional decisions seem largely inappropriate given the CFU data.

**INSTRUCTIONAL ADJUSTMENT:** Taken as a whole, the teacher’s next instructional decisions seem largely appropriate given the CFU data, but there are some questions about the appropriateness of at least one of the decisions.

**INSTRUCTIONAL ADJUSTMENT:** Following each of the CFUs, the teacher makes instructional decisions that seem appropriate.

**INSTRUCTIONAL ADJUSTMENT:** Following each of the CFUs, the teacher makes unambiguously appropriate instructional decisions grounded in the nuances of the CFU data.