

# Core Practices of Teaching: A Primer<sup>1,2</sup>

Getting students to talk to one another about their mathematical, literary, historical, or scientific ideas is one of the most rewarding things a teacher can do. There is nothing better than seeing students share their epiphanies, build on each others' insights, or debate theories, solutions, and interpretations. When talk flows, it looks effortless, but getting this kind of talk started is a challenge. The first step is easy -- you ask a rich question and a student throws an idea onto the table. This is an exciting moment for a teacher -- one that's full of promise... but then what? What do you do the moment *after* a student shares their idea? How do you turn that promising spark into meaningful discourse about content-rich ideas?

Developed out of educational research from some of the nation's top colleges of education including the University of Washington, the University of Michigan, and UCLA, the following **core practices of teaching** sit at the heart of orchestrating productive classroom talk.<sup>3</sup> Teachers developing their skill at facilitating meaningful talk can use these practices as a lens through which to prepare for and analyze their plans and their instruction.

- *Creating and maintaining a productive learning environment*
- *Eliciting and responding to student thinking*
- *Teaching towards an instructional goal*
- *Positioning students as competent sensemakers*
- *Orienting students to the content*
- *Orienting students to each other's ideas*
- *Teaching with your students in mind*
- *Teaching with society in mind*
- *Assessing students' understanding*

In the richest moments of classroom instruction, a teacher enacts all of these core practices in a seamless way, making them seem indistinguishable from one another -- one core practice morphing into the next, three practices suddenly happening simultaneously. In the hands of a skilled teacher, this dance can look effortless.

To understand the role of core practices in the work of teaching, it helps to compare teaching to playing music. Musicians begin by pulling out their sheet music -- just like a good lesson plan, the quality of the sheet music matters -- a poorly composed piece will never sound as good as Beethoven or Bach. But, the quality of a performance doesn't begin and end with the quality of

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<sup>2</sup> While there are many ways to use these core practices, this primer is designed for teachers who are using video to improve their practice as facilitators of classroom talk.

<sup>3</sup> These core practices are drawn from TEDD.org, the University of Washington's Teacher Education by Design project (McDonald, Kazemi, & Kavanagh, 2013). They were developed out of earlier work in mathematics education undertaken at the many colleges of education that engaged in the Learning in, from, and For Teaching Practice project (Kazemi, Franke, & Lampert, 2009).

the composition. Whether the music moves the audience or not depends on what the musician is able to do with the sheet music. To bring sheet music to life, a musician enacts an underlying set of practices:

- Manipulating the volume of sound
- Finding and maintaining an accurate pitch
- Manipulating a song's tempo or speed
- Articulating notes (make notes stop short or slur them together)
- Varying the length of notes and phrases
- Manipulating the timbre (the color or texture) of sound

To improve at these practices, musicians sometimes work on them in isolation (one way to do this is by playing scales). They also work on them by putting them together in a more authentic context (perhaps by practicing a particular song). Along with practicing, musicians listen to a lot of music. When listening, they get ideas about new ways to use tempo or volume to convey particular emotions. They learn from what they hear and they incorporate it into their own music. In the same way that a musician's ability to enact these practices shapes the way that he practices and analyzes his craft, the core practices of teaching can act as a primary lens through which you, as a teacher, prepare for and examine your work.

What follows is a short description of each of the core practices, how each can help you facilitate meaningful learning in your classroom, how you might work on that core practice through watching and discussing video of teaching, and challenges novice teachers often encounter when working on each core practice.

### **Creating and Maintaining a Productive Learning Environment**

The work of creating and maintaining a productive learning environment is the bedrock under everything you do as a teacher. It includes the countless invisible things you do every day to make it possible for students participate in meaningful activity. When you hold the read aloud book so that everyone can see the pictures, or when you pass out copies of the short story so that students can point to textual evidence in discussion, you're **making sure that students have the resources they need to participate**. When you say "*with a raised hand*, who can build on what Marcus just said," or "when I say the magic word, turn and talk to your partner – knees to knees, eyes to eyes – about patterns that you notice in the numbers," you're **ensuring that everyone knows how to share their ideas**. When you move the desks so that everyone can see each other (and, while you're at it, put Ben on the other side of the room from Dustin), you're **organizing your classroom and your students in ways that facilitate the kind of participation that you're seeking**. The core practice of creating and maintaining a productive learning environment also includes all of the ways that you **make sure your students know that you and their classmates will treat their ideas with respect** and all the ways you **hold students accountable to expectations**.

*An example of working on this core practice using video*

With colleagues, you could watch video of a productive learning environment in which the teacher is setting a particular expectation for participation. As a group, you could decide in advance to take notes on how the teacher sets up the expectation, gives students resources to meet that expectation, and reinforces that expectation throughout the lesson. For example, let's say you have a clip of an elementary classroom in which a teacher is explicitly teaching students to listen to each other's contributions. As you watch, you might take note that the teacher begins by asking students why it's important to listen to each other. Then you'd note that she provides students with a silent signal they can use to show that they can't hear another student as a way to make sure students are talking loudly enough to be heard. Next, you might note that she asks students to restate each other's thinking and connects the ability to restate to having listened carefully. At the end of the lesson, you might jot down that she asks students to self-assess how well they listened to each other and to share how it felt to know that their classmates were listening carefully to them. When the video is over, you and your colleagues might share with one another all of the ways that you saw the teacher create and maintain a productive learning environment and then strategize about how to take these moves into your own classroom.

#### Some challenges you may encounter when working on this practice

- You might realize that you don't actually know what your expectations for participation in a particular activity are.
- You may not be able to articulate the rationale for your expectations in ways that are meaningful to students.
- Once you know what your expectations are, you may not have strategies for engaging students in participation in this way.
- You may not know expectations to teach students first.
- You don't have an appropriate repertoire of consequences that are matched to particular behaviors.
- Your expectations are developmentally inappropriate (e.g., having high school students line up to walk down the hall).
- Your room isn't organized to support the learning and participation you expect (e.g., some kids cannot see the screen or kids who are asked to turn and talk to a neighbor have no clear neighbor).
- You don't give students appropriate time to complete tasks or your expectations are inappropriate for amount of time you have allotted for a task (e.g., being silent for the whole class).
- You may find it challenging to give students positive feedback, the result of which is that your feedback may dismantle relationships with students or inhibit instruction.
- You have created an overly teacher centered environment, so that although students are following directions, you aren't leaving any space for them to share their thinking.
- You have too many expectations in place for students to understand the expected actions or how these relate to their learning.

- You have conflicting expectations.
- Your expectations are out of alignment with school building expectations causing students to be confused about expectations when moving from one space to another in a given day.
- You may find that it hard to make students feel safe in the classroom. They may stay silent because they are afraid that you or their peers will make fun of or judge them. They may also feel unsafe because they feel physically disrespected (e.g., other students touch them when they don't want to be touched).

### **Eliciting and Responding to Student Thinking**

Meaningful learning cannot occur if you don't first elicit students' thinking. Without eliciting student thinking, you cannot learn about your students' prior experiences, current understandings, interests, needs, and language. Often when teachers begin to work on this core practice, they find that when they think they are eliciting student thinking, they are really just asking students to recall facts or to find a correct answer that is sitting somewhere right in front of them. Productive talk can only begin if you ask students to share what *they're* thinking -- not what *you're* thinking. This requires posing open-ended questions that ask students to make sense of a shared problem, artifact, text, or phenomenon. It also requires responding to the ideas that students share in ways that propel classroom talk instead of shutting it down. Responding productively to student thinking requires careful listening and the ability to recognize the meaning in students' contributions and how those contributions might productively be used (Ruiz Primo & Furtak, 2006; Van Es & Sherin, 2002; Sherin, Jacobs, & Philipp, 2011).

#### Some examples of working on this core practice using video:

- Eliciting: When watching your own video, examine how long it takes you to elicit student thinking. Productive conversations cannot occur until student thinking has been elicited, so examining your practice with this lens can be enormously helpful. When watching video with a group of colleagues, you might stop after every elicitation and discuss whether the question elicited student thinking or whether it asked students to recall or find a fact.
- Responding: You can also watch video paying attention to how a teacher responds to student ideas. Often teachers don't realize that by responding to students' ideas with evaluative feedback - "excellent!" "correct!" "yes, great!" they are shutting down conversation by signaling to the rest of the class that the "right" answer has already been achieved. Teachers can propel student talk with much more fluidity when they respond to students' ideas by pressing further "what in the text makes you think so?" or posting the idea for the rest of the class to engage with "who can add onto this idea?" You can watch video to compare the effect on student talk of evaluative and non-evaluative responses to student ideas.

#### Some challenges you may encounter when working on this practice

- You might notice that you rarely elicit students thinking.

- You might notice that you elicit very brief contributions from students - e.g., one-word answers.
- You might notice that students are unaccustomed to sharing their thinking in class and need to be supported to share and to share clearly and concisely.
- You may find it challenging to elicit students' thinking because students don't feel safe to share their thinking publicly in front of you and/or their peers. Until you are able to create a learning community in which they feel safe, you may need to find anonymous ways for them to contribute.
- You might notice that once student thinking is shared, you don't have a varied repertoire for how to use a student's idea productively to push everyone's thinking forward.
- You might notice that your instruction is falling into a typical interactional pattern, Initiation - Response - Evaluation (IRE), in which (1) you pose a question, (2) a student responds, and (3) you evaluate their response as either correct or incorrect and then the cycle begins again. This pattern is ineffective in producing critical thinking, language development and meaningful talk (Cazden, 2001).
- You might not know how to respond to students who talk for a really long time and, in particular, how to validate their thinking while not allowing them to dominate conversation.
- You might struggle to respond to unclear or emergent student contributions.

### **Teaching Towards an Instructional Goal**

Your instructional goal is like the north star. As you and your students launch into discussion, you will wander through a variety of ideas -- some you can anticipate in advance, and some you cannot. As the teacher, your job throughout that wandering is to always have your eye on the north star of your instructional goal. Your goal will help you decide what you're listening for in your students' talk, which ideas you want everyone to delve into together, and which ideas you're okay with leaving for another day. (Kazemi & Hintz, 2014; Smith & Stein, 2011)

#### An example of working on this core practice using video:

Before watching video of teaching (your own or someone else's), you might go over the instructional goal of the lesson you are about to watch. At strategic moments in the video, you might stop and say to your colleagues: *"At this point in the video there are a lot of student ideas on the table, let's recap those ideas and then remind ourselves of this teachers' instructional goal. Then let's discuss the various options that the teacher has at this moment in the lesson for teaching towards her instructional goal."*

#### Some challenges you may encounter when working on this practice

- If you can't think of any way to teach towards your instructional goal, it might be because your goal is not worthy or developmentally appropriate in the first place.
- You might struggle to see the pathway between a student's emergent thought and your instructional goal or how to move students along that pathway.

- When trying to teach towards your instructional goal, you might veer too far to one extreme or another:
  - You may begin pushing too hard towards an instructional goal and take over, telling students the “right answer” instead of working with student ideas to help them develop a deeper conceptual understanding.
  - In the interest of honoring student thinking, you may abandon your instructional goal all together.

### **Positioning Students as Competent Sensemakers**

Getting students to risk putting their ideas on the table requires you to express curiosity about *all* of their ideas, not just the “right” ones. Teachers express curiosity about students’ ideas both through how they ask questions to elicit student thinking and how they respond to students’ ideas. In order to position students as competent participants in discussion, you have to ask questions that students *can* answer. In addition, if students are expected to have accurate and sophisticated ideas every time they share, they will learn quickly to keep their mouths shut until they’re 100% sure about what it is you want to hear. The way that you react to students’ unfinished, emergent, or inaccurate ideas is like a neon sign to your students indicating whether your classroom is a safe place to take intellectual risks (Kazemi & Hintz, 2014). In addition, notice that it’s impossible to position students as *competent sensemakers* if you aren’t positioning them as *sensemakers*, which requires that we design tasks and ask questions that engage students in reasoning and disciplinary practices.

#### Some examples of working on this core practice using video:

You can use this core practice as a lens through which to analyze how a teacher asks questions *and* how a teacher responds to student ideas.

**Teacher Elicitations:** When watching video of teaching (your own or someone else’s), stop after the teacher asks a question and discuss whether or not you think the question positions students as competent sensemakers. Some questions you might ask include:

- Does the question ask students to make sense of something, or does it ask students to spit back an idea from a book, a handout, or a lecture?
- Is the question phrased in a way that communicates authentic curiosity about student thinking and allows students to share their ideas (“What do you know about the causes of earthquakes?”). Or, does the question set students up for either success or failure because it aims to elicit a particular answer - e.g., the answer that the teacher is hoping to hear. (“What is an earthquake?” or “How are earthquakes related to plate tectonics?”) The first example asks students to share their own ideas; the second example is much more about their ability to recall factual information or to guess what the teacher is looking for, which may or may not be successful depending on the resources to which they have access. If the question is more closed, like the second question above (“How are earthquakes related to plate tectonics?”), it only positions students as competent if they have sufficient resources (knowledge, time, language, prior experiences, etc.) to answer it.

- Have you asked students a question that they understand? For example, if students don't understand the what the word *figurative* means, when you ask them, "what's the figurative meaning behind this story's ending?", you're not positioning them competently, because you're setting them up to be unsuccessful. However, if you were to ask those same students a question they understand, "What message do you think the author was trying to send when she chose to end the story this way?", you're setting them up to be successful and are much more likely to actually elicit their ideas about the figurative meaning of the story.

**Teacher Responses:** After discussing how *teacher questions* can position students as competent sensemakers (or not), you might investigate *teacher responses*. Stop the video after a student shares a partial understanding or an incorrect answer. Discuss various options that the teacher has for positioning this student as a competent sensemaker who used logic to arrive at a conclusion.

#### Some challenges you may encounter when working on this practice

- Many of the challenges of positioning students' competently are also challenges of *eliciting and responding to students' thinking*. For example, you may find it challenging to ask a question that elicits students' ideas or to organize your instruction so that by the time you ask a question, students have the resources to answer it. (*This is a challenge of eliciting students' thinking.*)
- You may find it hard to recognize the sense in and value of student ideas that are not clearly communicated or that are emergent in nature (partial understandings, alternative ideas from non-disciplinary contexts).
- You might find it challenging to respond to students' thinking in a constructive manner when you do not recognize students' ideas or when you recognize that a student's idea is inaccurate in your context.
- You may not have sufficient information about what your students understand and can do, and therefore may find it hard to structure tasks and ask questions that position them as competent sense-makers.

### **Orienting Students to the Content**

It's possible to make students feel like competent sensemakers, to get them engaged in productive talk, and even to steer them towards an instructional goal without orienting them towards the BIG IDEAS of the discipline or towards disciplinary practices - i.e., disciplinary ways of working, constructing knowledge, and communicating. The most basic way that you can orient students to the content, is to press your students to engage in disciplinary practices (e.g., supporting their claims with evidence). At a more nuanced level, when you orient students to the content, you turn comments like this: "that's an interesting insight, Destiny" into comments like this: "I want to point out what Destiny just did because it's central to the work of a historian: she looked for similar evidence across two primary source documents and she matched that evidence up -- we

call that corroboration.” When we orient students to the content, we shine a light on what is most important in what they’re discussing, name those things for them, and connect them to a larger purpose. Notice that it is impossible to do that work if we don’t ask a question or pose a task that engages students in disciplinary practice in the first place.

#### *An example of working on this core practice using video*

When watching video of teaching (your own or someone else’s) with a group of colleagues, you might decide before watching a clip that you are going to watch for opportunities (missed or taken) to orient students to the content. Before you begin watching, briefly review the goals and structure of the lesson and discuss the big ideas and/or disciplinary practices you hope to highlight in this lesson. In a 10th grade ELA class where students are discussing a piece of literature, these practices might be: asking interpretive questions of text, re-reading passages with interpretive questions in mind, looking for literary puzzles, making literary claims, warranting claims with textual evidence (Rainey & Moje, 2012). This will prime you to be able to think about how the teacher might orient students to the content during this lesson. Once you begin watching the video, whenever someone sees an opportunity for orienting students to the content, they can pause the video and the group can discuss various ways that the teacher could orient students to the content in that moment.

#### Some challenges you may encounter when working on this practice

- You might not know the big ideas of your discipline or disciplinary practices.
- You might find it challenging to identify when students are engaged in disciplinary practices or when student thinking connects to a big idea.
- You might find yourself doing this work up front, at the start of a lesson or activity, instead of highlighting when students are engaged in these activities or discussing these big ideas during a lesson.
- You may find it difficult to notice when students are engaged in disciplinary practices, or you may find that students never discuss a big idea. In these instances, it is probably because your lesson plan doesn’t support that work.

### **Orienting Students to Each Other’s Ideas**

Why do you want students to talk to one another instead of to you? For a million reasons! First, just like every teacher, you have handful of students whose hands are always in the air and if you’re not careful, these kids become the only ones whose ideas get heard. When you start getting students to turn and talk to one another, it’s much easier to get everyone engaged in generating and sharing ideas. Second, the more you push students to use one another’s ideas as resources, the easier it is generate discussion where one idea builds on the next, instead of talk that feels like a series of presentations of disconnected ideas. Third, many students in your room are nervous to share their ideas. When you “assign competence” to students ideas by raising up their contributions and naming them as useful to the class, you encourage students to take intellectual risks (Cohen et al, 1999).

### An example of working on this core practice using video

When watching video of teaching (your own or someone else's), you can watch for evidence that students are oriented towards one another's ideas. Are they speaking to one another? Are they referring to each other's ideas when they speak? After a segment of student talk in which there is little or no evidence that students are oriented to one another's ideas, you might stop the video and discuss how that segment would have been different if students were using one another's ideas as resources. Keep watching and stop the video whenever you see opportunities for the teacher to orient students to one another. When could she post a student's comment to the rest of the class ("who can build on Anthony's idea?" "can someone find some text evidence to support Rikki's argument")? When would be a good moment for the teacher to get students talking to one another ("Turn and talk to the person next to you -- use evidence from the text to describe whether you agree or disagree with the claim that Angel just made")? When could she help students know what to listen for within each other's contributions ("As Jayden shares, listen for how he broke the numbers apart").

### Some challenges you may encounter when working on this practice

- You might find that students are trained to view the teacher as authority and don't see their classmates as people from whom they can learn. They might expect, for example, and that every contribution is evaluated as correct or incorrect by the teacher, and they might not listen carefully to or respect their classmates' explanations. (In this case it can be helpful to norm explicitly for student-to-student talk.)
- Students need to be able to hear each other in order to be able to build on each others' ideas, so you may need to teach students to speak loudly enough to be heard across the room.
- You might notice that you are scared to orient students to each other's ideas when those ideas are inaccurate, partially accurate, or unclear.
- You have a limited repertoire of moves to get students to build on each other's ideas. For example, you overuse the 'add on' and 'restate' moves.
- When you first start working on this practice, you might spend too much time asking students to restate each other's ideas which slows the pace of discussion and causes student disengagement.
- You may find it challenging to make students' written work visible to the rest of the class; you will need to plan how that written work will be shared.

### **Teaching With Your Students in Mind**

To have a meaningful conversation with anyone, you have to pay attention to who that person is. It's the same when you're teaching students. Who your students are, what they care about, what they know and understand, how they express what they know, and how they feel comfortable participating should shape the choices that you make as you plan for and lead discussions in your classroom. For example, if your students are speakers of African American Vernacular English, you might use texts written in that

vernacular to teach them about particular literary devices (Lee, 2007). If in their science classroom your students are studying sustainability, in your math class you might you might construct a problem about tracking food waste over time to teach linear regression. Knowing that a handful of your EL students are working on learning to express ideas using the passive voice should inform the construction of sentence stems to support their writing. If there is a selectively mute student in your classroom, you'll want to include opportunities for non-verbal contributions so that student can participate in the discussion. Who your students are matters to how you engage them.

#### *An example of working on this core practice using video*

You might precede watching a video by asking the teacher whose video it is to describe a student who appears reluctant to participate. Watch the video with that student in mind. In the discussion, press on how the teacher is making sense of the child's participation and offer alternative explanations. For example, if a child has her eyes closed, is that child disengaged or is that child trying to limit her sensory input in order to focus on what is being said? In the discussion, consider how the teacher's instructional decisions may be shaping the child's participation, which may include how the teacher is setting classroom norms of participation and respect.

Alternately, you might precede watching a video by asking the teacher whose video it is to describe a particular child's learning needs and then watch the video to identify how the teacher is or is not adapting instruction in ways that will facilitate that child's participation and learning.

#### Some challenges you may encounter when working on this practice

- You may not have the information you need about your students. eg. ELL or SPED information.
- You may find that you have difficulty in identifying your own biases or assumptions about students, which might cause you to misinterpret student participation or misattribute their success or failure.
- You may know something about your kids' needs but may not have a sufficient instructional repertoire to meet those needs.
- You may try a new practice without enough expertise to make that practice successful initially, and may attribute your challenges to the practice instead of your enactment of the practice.
- You may lower your expectations for some students.

### **Teaching with Society in Mind**

All talk, even classroom talk, reflects larger societal assumptions, and some of these assumptions are damaging to our students and their communities. Becoming aware of the ways that marginalizing social assumptions slip into our daily conversations with students is an important part of breaking down social narratives that can be marginalizing and oppressive. When you teach with society in mind, you notice the many small ways that certain people and groups get left out, put down, or erased and

you push back against these tendencies. You're aware of ways that racial and gendered dynamics in your school and larger community influence the ways that your students talk to one another and work together. In addition, you take explicit and intentional action to interrupt social dynamics that are harmful. For example, when you teach with society in mind you're aware of how often you call on boys and how often you call on girls, and you work towards equitable participation. When discussing texts that touch on love and relationships, you work hard not to talk in ways that assume that your students and their families are heterosexual. This might mean turning this comment about *The Hunger Games*, "I don't know girls, would you go for Peeta or Gale and why?" into "If you were Katniss, would you go for Peeta or Gale and why?" By making these changes, you don't make assumptions about your students' sexuality. When you teach with society in mind, you become aware of how you use "us" and "them" language. For example you might turn this comment, "what does this document tell you about how we thought about Native Americans in 1768?" into this comment, "what does this document tell you about the colonists' perspective on Native Americans in 1768?" By making these changes, you don't unintentionally align your students with the colonial perspective. As you begin to pay attention to this core practice, you may be surprised at all of the small ways you can start to challenge inequity.

#### *An example of working on this core practice using video*

There are many different ways to work on this core practice when watching video. For example, one way is to watch a video of instruction and track how often and in which ways students of different gender, race, language ability, or other social categorizations participate. If you notice problematic differences, you might discuss why these differences might exist and brainstorm steps for creating a classroom where equitable participation occurs.

#### Some challenges you may encounter when working on this practice

- You may find that in your thinking or discussions with peers, you essentialize social groups, eg. "since girls are..." or "all my EL students like..."
- You may not notice when you're making marginalizing assumptions about social groups
- You may not know how to frame things in ways that don't rely on marginalizing assumptions
- You may be fearful of engaging in discussions about societal power differences as you do not have appropriate language or are worried about being perceived in a particular way.
- You may be trying to struggle with your own assumptions and biases that appear in your language and practice but you sometimes say things or do things you wish you hadn't.
- You don't have an instructional repertoire to remedy an issue you identify.
- You are only one influence among many to which your students are exposed.
- You may not feel you are in a position to challenge an issue due to power dynamics in your group of peers.

## Assessing Student Understanding<sup>4</sup>

Productive discussions are powerful sites for learning about your students. One reason you want students sharing their ideas is so you can learn about how they're thinking about the content under study, which in turn will inform your instructional next steps. Meaningful instruction always builds on students' current understanding (Bransford, Brown, & Cocking, 2000). Without knowing what and how our students are thinking, we cannot ask productive questions or press them in meaningful ways. Teachers assess their students outside of whole-class discussions using written work or through strategies such as conferencing, but assessment also happens during and through classroom talk as teachers ask productive questions to elicit students' ideas, ask follow-up questions to make sure they understand how the student is thinking, and respond in ways that provide the student with feedback either from the teacher or from other students as their thinking is opened up to other people for discussion. Teachers assess both individual students and to get a more general sense of patterns of thinking in the class, and they assess intentionally in order to provide feedback to students and to inform instructional next steps. For example, here are some questions you might ask yourself during a discussion that might drive your assessment in the moment:

- Do my students have sufficient understanding of this task or concept in order to be released to independent work?
- Have my students demonstrated sufficient understanding that I feel comfortable moving on to the next stage of the activity?
- Do my students require additional challenge?
- Do my students have the language they will need in order to communicate their thinking about this concept to each other during the next stage of the lesson?
- Is there a big misconception in the room that we need to address?

### *Some examples of working on this core practice using video*

You might watch a video (your own or of another teacher) with a focus on student thinking about a particular concept. Before watching the video, pose the task or a key question, anticipate how students might respond, and discuss what evidence of understanding might look like or sound like in a student's response. Then watch the video, pausing after students' contributions to figure out what they demonstrates about the students' understandings. You might discuss what potential follow-up questions or tasks might uncover even more evidence of the student's thinking or verify your assessment of their understanding. You might also pair this analysis with some student work analysis, comparing what you saw or heard from specific students in a video and what you see in their written work.

### Some challenges you may encounter when working on this practice

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<sup>4</sup> [Assessment Primer by Deb Morrison](#)

- You may find the limitations of assessment in whole-group discussion frustrating and struggle to determine what you can and should assess during discussions and what you can and should assess at other times, in other ways.
- You may interpret a student's response in a way different than was intended by the student.
- You may have difficulty in varying your questioning to get at student thinking.
- You may find that you are taking a few students' responses as representative of the entire class' understanding.
- You may find that you are only getting evidence of a few students' thinking because of the nature of the questions you are asking or how you are structuring the discussion.

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