Many teachers find it challenging to hold classroom discussions that are academically productive. All too often we find ourselves going back to the traditional form of teaching – recitation. The teacher asks a question, and students attempt to provide the right answer. There is no discussion, and not much talk about the reasoning that led to the answer.

Teachers who are able to orchestrate productive discussions consistently are usually skilled at getting 4 different things to happen:

First, they are able to help all the students to share, expand, and clarify their reasoning out loud to the whole group. If only a few students share their reasoning, you don’t have a discussion; you have a monologue or at best a dialogue.

Second, they are able to help students learn to listen carefully to one another. They support students’ efforts to really understand what their classmates are saying.

Third, these teachers are able to get students to dig deeper into their reasoning. They don’t let students stop with superficial answers. They keep the focus on deepening the thinking with data or evidence around core scientific concepts.

And fourth, these teachers are able to get students to think with others – to really work with the ideas of their classmates. Their students don’t stop with just giving their own ideas; they consider and take up the thoughts and ideas of others.

None of these four steps are easy. There can be many different challenges. Some students don’t feel comfortable sharing their thinking at first. They may not be used to listening carefully to what other students say. There is often a lack of clarity in what students say and think.

But these teachers have found ways to make it happen consistently, and their students benefit from this productive talk. Over time, by participating in discussions, their students become more powerful reasoners; they get better at explaining their ideas and they become better science learners. So how did these teachers manage to create productive discussions?

Researchers have found that teachers who are skillful at this draw on a toolkit of strategies. Collectively, we refer to these strategies as productive talk moves. They are simple questions and statements that help students to participate in the four steps we just described.
Some talk moves help students *share, expand, and clarify* their reasoning. These are moves such as

- the “Say More” move
- Revoicing ("So, let me see if I've got your thinking right. Are you saying that…?")
- and Wait Time

### Classroom Clip (Say More)

**Aadina (teacher):** Julia?

**Julia (student):** Things that belong to the earth, and like the nature around us.

**Aadina:** And what do you mean they belong to the earth? Can you kind of explain that a little bit more?

**Julia:** Well, they – when I said they belong to the earth, I –

### Classroom Clip (Verifying and Clarifying by Revoicing)

**Aadina (teacher):** Ok but what I heard Caila say was actually a little bit different than what I heard Alecia say. So, Caila, you’re saying that if I have three cups, I need to put the same volume in each cup? And Alecia, if I listened to you correctly, were you saying that you need to pour different amounts into the cups?

**Alecia (student):** No, like you have three different cups and then you put A in one cup, put B in a different cup, and then you put C in the cup and you see if they have the same amount of –

In the clip you just watched, the teacher didn’t simply repeat what Caila and Alecia had said; she checked back to see if she had fully understood. This revoicing move isn’t simple repetition because the teacher is asking if she heard right. This allows the students to clarify their ideas, so that everyone can build on their thoughts.

Other talk moves help students focus on listening to what others are saying, and to take responsibility for trying to understand.

- “Who can put that into their own words?”
- “Who understood and thinks they can repeat that idea?”

Other talk moves help the teacher make sure that the focus stays on digging deeper into student reasoning.

- “Why do you think that?”
- “Where do you see evidence in the data?”
And some talk moves actually encourage students to engage with one another’s thinking and reasoning.

- “Do you agree or disagree and why?”
- “Who can add on to the idea that Keisha is building?”
- “What do you think of her idea?”

This toolkit of talk moves helps you open up the conversation, so that students do the “heavy lifting.” The talk moves can help you support your students to clarify and formulate their own ideas, so that students get to hear lots of competing ideas, even ideas that may turn out in the end not to be correct. When students discuss an incorrect idea, it often leads to a deeper understanding of the science concept.

Teachers who use these moves effectively find that all students, even English Language Learners and those who have struggled in the past, make significant gains in learning and conceptual understanding – gains that show up in student writing as well as on standardized tests.

This introduction to talk moves is followed by four segments that contain video clips of teachers using these talk moves in action. Each segment in this Talking Point focuses on one goal of productive student talk, and illustrates several talk moves that support this goal. Using classroom examples, we provide tips and suggestions for using these talk moves effectively. There is also a print companion text, with a link in the breakout box on the left of this segment. In addition, you can print out a table of nine productive talk moves that you can use in reflecting on your own discussions and those of your collaborating colleagues.

In the context of a rich task where teachers understand the science concepts well, talk moves are tools that encourage students to share, expand, and clarify their own ideas, listen carefully to one another, dig deeper into their reasoning, and think with others.