



# Talk Move Tactics to Elevate Student Voice in Science

*Written by Ted Willard,  
contributing author of  
Discovery Education  
Science Techbook*

As science educators work to meet new expectations and shift from a traditional model of instruction to one in which students lead the learning, one area that proves to be particularly challenging is sparking student-driven scientific discourse.

In addition to building a positive classroom culture and establishing constructive classroom norms, students need the right guidance and encouragement to engage in meaningful scientific discussions. Using the right techniques, known as “talk moves,” teachers can remove themselves from the center of discussion and push students to be the primary voices in the classroom.

### Eliciting Student Ideas

Before students can discuss initial questions, models, and explanations for the phenomena they’re investigating, it’s crucial they have time to think. One way to make that happen is to ask them to write or draw their ideas. Another way to accomplish this is to have students

do Think-Pair-Share activities where they think for a bit, talk to their neighbor, and then the whole class shares their ideas. Once students have formed their initial ideas, they need to communicate those ideas so the entire class can consider them. This set of questions can be useful to make that happen:

- What did you notice?
- What ideas do you have?
- How might you solve this?
- What does this remind you of?
- What questions do you have?
- What is the system?
- What do we need to pay attention to?
- What don’t we need to pay attention to?
- How would you explain that?

## Clarifying Student Ideas

Once students have had time to gather more data and information about phenomena, it is time for them to further clarify their ideas. At this point, the goal is to push their thinking and have them build on their ideas as they work to refine their models and explanations. The following questions can be helpful as part of that process:

- Can you say more?
- What is your claim?
- What makes you think that?
- What evidence is there for that?
- What is an example of that?
- How does that support your claim?
- Do you mean \_\_\_\_\_?
- What does that explain?
- How could we test that idea?

## Saving for Later

Rather than focusing on drawing more comments from students, the goal of this talk move is to have students defer discussion of an idea until a later time. There are often strong instructional reasons for waiting. Sometimes one student raises a question that the rest of the class isn't ready to consider. Other times the discussion may be more fruitful if students have additional data to consider. In any case, it is important to recognize the validity of the question and then say that you want to save it for later. Some teachers have a place in the classroom where such questions can be kept and referred to later. Those with Discovery Education *Science* often add it to the Driving Questions Board for the unit.

The process of building classroom culture and getting students to engage in positive, relevant discourse takes time. Many students are not familiar with process and they may be resistant at first. But with enough practice, students start to look forward to their student-centered science class and opportunities to voice their opinions, while teachers find it easier to maintain meaningful participation and solidify critical skills that prepare their students for the real world.

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## Sources

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