Science Discussion Planning Tool

Purpose

This tool is designed to assist teachers with planning for and reflecting upon sensemaking discussions in the science classroom. It should be used when planning with high-quality instructional materials and can be used in conjunction with the Planning Guide for Science Instruction and the Science Talk Moves document.

Before the Discussion

Consider the following questions as you annotate a lesson in which you will facilitate discussions.

Analyzing the lesson in the teacher guide where the sensemaking discussion occurs:

- What is the question students are trying to answer through the discussion?
- What is the intended outcome of the discussion? (i.e. coming to a consensus on something we just experienced? Designing an investigation? Getting students to realize and develop questions to move their science thinking forward?)
- What are the key elements of the model or explanation you want the students to grapple with? It may be helpful to create an explanatory model for this phenomenon for yourself or to annotate a sample model provided in the curriculum.
- What other ideas might students have? What questions might they ask? What connections might they make?

Considering talk moves and strategies to use when leading the discussion:

- What will you say to launch the discussion? What prompts are within the teacher's guide and what additional questions do you need to develop?
- What are some questions or ways you can encourage students to build on or challenge others' ideas?
- If students seem to think they have explained the phenomenon but you know they need to go deeper, what questions could you ask to help students see the need to extend or revise their explanation?
- What will you say to synthesize student thinking and close the discussions based on a consensus agreement? How will you prompt students to determine next steps in their learning?

During the Discussion

Consider the following during the discussion.

- Be mindful of teacher talk time vs. student talk time.
- Encourage voices you have not heard from yet.
- Capture the discussion in a format of your preference to be used during after-discussion reflection.

After the Discussion

Consider the following questions to help you determine the next steps for instruction and add annotations to support your planning for the next time you facilitate discussions.

- What ideas and reasoning did you hear? How would you describe the group's understanding of the key ideas gained through the discussion?
- How might you leverage any competing ideas in future discussions?
- What went well in the discussion? What was challenging?
- Think about a moment when you weren't sure what to say or do. What did you do and why? What was the result?
- What might you do differently next time?