Thinking Like A Kid

In some activities, we ask you to participate in “student hat” — engaging in the activities by thinking as your students would think. This can feel strange, and you may be wondering why we don’t just describe how students do these activities and then examine classroom video and student work. Here’s why.

**A focus on the students’ perspective:** A key shift in NGSS storylines is that science work should be **coherent from the students’ perspective**. Students should always see the work they are doing as a way to make progress on the questions and problems that their class has identified. Too often in science classrooms, the curriculum authors and teacher know why the next activity is coming, but students are left to figure it out after the fact, if they ever figure it out at all.

In storylines, teachers work with students to figure out **together** what the class needs to work on, and how to go about it. **Together** they reflect on progress and figure out where to go next. Of course the teacher has a guiding idea of where to go — the storyline is a planned trajectory. But by involving students as partners in reflection and planning, students see how today’s data collection, analysis, or modeling will help the class make progress on the goals they have established.

**How will thinking like a kid help?** To do this joint navigation work, you need to work with students’ ideas. Anticipating your students’ ideas and questions will help you figure out what makes sense to them and how you can work with their ideas to help them develop the target science ideas. To plan your discussions, you need to put yourself in the mindset of your students.

- When your students experience a phenomenon, what ideas will they draw on to explain it? What will they wonder about?
- What kinds of experiences might they bring up to connect to the phenomena they are investigating?
- What kinds of prompts could you give to push them to dig deeper into the parts you want them to notice?
- What will they be able to figure out from investigating the phenomena in the unit so far? How would they model this?

If we jump ahead to our knowledge as adults, we might overlook steps that will be important to our students. What is a logical next step to us, since we **know** the end game already, may not seem logical to students. Put yourself in the heads of your students so you can anticipate what they will see as puzzling and what ideas they might have. Then you can orchestrate the conversations to help students develop questions and ideas that will be productive for the storyline goals.

So in these activities, we will ask you to channel your inner student. Don’t worry about getting the science right at first — your group will build these ideas over time as they engage with phenomena. Resist the urge to use your college-level knowledge to explain to others. Let the group struggle with the ideas as your students might. Resist the urge to label the phenomenon with the right science words — we are trying to develop step by step explanations, not just know that the process is called photosynthesis, sublimation, or endothermic reaction. Storylines require taking the learning step by step — let’s practice doing that.