Questions to Guide the Development of a Classroom Culture That Supports “Figuring Out”

Building a classroom culture of figuring out requires developing a learning community in which students are involved in science and engineering practices in a meaningful way. This requires a classroom in which students help manage the trajectory of their knowledge building. Classrooms should be places where students can say:

- We figure out the science ideas.
- We figure out where we are going at each step.
- We figure out how to put the ideas together over time.

Creating this classroom culture requires working on five questions, as we analyze a unit, develop a unit, or prepare to teach a unit:

1. How do we kick off investigations in a unit?
2. How do we work with students to motivate the next step in an investigation?
3. How do we help students use practices to figure out pieces of the science ideas?
4. How do we push students to go deeper and revise the science ideas we have built together so far?
5. How do we help students put together pieces of the disciplinary core ideas and crosscutting concepts?