Science Seminar Tips
1. Allow for Awkward Silence

“So, long silent stretches are common when I’ve done a science seminar for the first time with students, and it’s important to let that silence be there, I think, because if I jump in and try to push the seminar one way or the other, then already I’m taking it away from the students.”

- Elizabeth Shafer, Teacher, Lawrence Hall of Science
2. Let Students Lead the Discussion

“The teacher's role in the seminar is really to step back and allow students a place and a time where they can share their ideas with each other. It's been my experience that the most powerful science seminars are when I've been able to step behind the semicircles and just allow the seminar to come from the students.” - Elizabeth Shafer, Teacher, Lawrence Hall of Science
3. Chime in at the Right Moment

“If the seminar stalls, there are a couple of things that I might do. First, I might make sure that we get through discussing all the evidence and really digging into the evidence and seeing if that can bring kids to a different understanding about a claim. Another thing I might do is, depending on the timing, I might let them know that it's almost time to switch semicircles, and I've also found that that can really motivate students who might have been holding back to share their ideas and get the conversation moving a little more quickly.” - Elizabeth Shafer, Teacher, Lawrence Hall of Science
4. Make a Safe Space

“Knowing that the social environment is a welcoming one where they can feel safe is often a first step to get a lot of kids on board with being comfortable in discussions in your classroom.” - Dr. Megan Goss, Teacher, Lawrence Hall of Science
5. Prep Students the Day Before

“Sometimes between preparation and lowering the stakes - this is not a quiz, this is not a test - [the Science Seminar] is a chance for us to come to a better understanding of this. Kids get a chance to take some risks.” - Cole Entress, Teacher, Lawrence Hall of Science
“Have...sentence starters and norms that you offer to the kids of how to speak with each other. And so, if you have those, then you can always respond to the kids who are talking aggressively... You can say, “Hey, say that again, but say it in a way that's respectful.” And if the kids know that that's going to be the response, then even the more reluctant talkers will feel a lot more comfortable and confident that they can speak up in class.” - Dr. Megan Goss, Teacher, Lawrence Hall of Science
7. Set Up Chairs in Concentric “U-shapes”
8. Include Mixed Ability Levels in Circles

“And it's okay if their contribution is not spot-on at the beginning, because that's the whole point. No one interprets everything right at first.”
- Cole Entress, Teacher, Lawrence Hall of Science
I have a couple of little tricks that I use to keep myself from [interrupting] too much. One is to give myself the job of being in charge of the visuals listening to what a student says and making sure that an appropriate visual is projected so they can refer to [it]. - Jonathan Curley, Teacher, Lawrence Hall of Science
10. Establish a Hot Seat

“Sometimes people in the outer circle...have a burning desire to say something so we’re going to put one empty seat here--you may make one trip when you’re in the outer circle to the hot seat if you want to add a quick thought and then you return back.” - Cole Entress, Teacher, Lawrence Hall of Science
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