

Vignettes: Key Instructional Elements



As you work with teachers in this workshop, they may bring up concerns around many aspects of the Key Instructional Elements. Read the following scenarios. Identify what concerns the teachers have, and consider what you might do next as a facilitator to support the teachers.

Vignette #1: The kids have to come up with everything

During the Whole Group Introduction of Day 1, the teachers discussed their successes and challenges related to the Key Instructional Elements. You listen in on a group that is having a lively discussion.

Teacher 1: We talked about how it should be “driven by students’ questions and ideas”? I mean are students supposed to come up with everything on their own? I didn’t have time to wait for them to come up with the thing we are going to do so I ended up just telling them.

Teacher 2: For me it was kind of the opposite-I just sat back and let them decide what to do. The problem was that not everyone participated in figuring out what to do and it took a lot longer. I’m not sure they always knew what was going on and what we were trying to figure out.

Teacher 1: Yah, that’s the other thing, I didn’t think they could come up with the specific investigation we were going to do so it was easier to just give them the lab set-up.

Vignette #2: Validating misconceptions

It is the end of Day 1 of the Matter Cycling PD. You have just asked your teachers to compile a list of “candidates” for where plants might get their food, and one of your teachers seems concerned. After a few moments, that teacher raises their hand.

Teacher 1: So, I have to say, I'm really concerned about this idea of putting all of these misconceptions on a poster on the wall for multiple days. We know it's very common for students to think that plants get their nutrients from the soil, for example, and if I leave that up on my wall without correcting it, that means I will be validating that incorrect idea.

Teacher 2: I definitely agree that we don't want students to think something that's inaccurate, but they already have these misconceptions, so I think that it's really important that we make space to reveal them so that we know what we need to address in the unit.

Teacher 1: Oh yes, I totally agree, I want to know if my students think that plants get their nutrients from the soil, but my big problem is with not correcting that idea when they say it. I don't want them sitting for multiple days with that idea on the wall! What if my principal comes in and thinks that I'm teaching them incorrect science?

Teacher 3: I find it helpful to think about what students already understand as a starting point so that we can build on it together. You know, it's not about right or wrong just yet.

Teacher 1: Once again, I'm totally down with building on students' ideas, but when are we going to get to the right or wrong? Because we all know that some things are right and some things are wrong, and we don't want our students believing wrong things because we didn't correct them.

Vignette #3: What if the students' sensemaking does not follow the storyline?

It is Day 1 of the Forces at a Distance PD. The whole group is constructing the storyline together on the wall with stickies. One small group just shared for lesson 2. The next small group begins on lesson 3:

Teacher 1: Okay, so we had lesson 3. Our lesson question was: how does energy transfer between things that are not touching?

Teacher 2: And I did the phenomenon, but I have a question first. So the lesson guide said that the class would think the energy might be transferred through the air between the magnets, but I don't buy it. I think my students would be interested in what is happening in the space between the coil and magnet, but I doubt they would think it has to do with the air. They know a lot about magnets by 8th grade, so I feel like they would want to go straight to exploring the magnetic field. I don't want to force them to engage with ideas that they don't have.

Teacher 3: I have this concern also. It can be challenging and stressful to try to get students to follow the storyline when they have other ideas about where they want to go next.

Teacher 2: Yeah, like in lesson 3, I can imagine myself being like, "Yeah, I hear you about magnetic fields, but could it be something else? Anybody have any other ideas? Anybody? No? Well, how about air?" It would be like I am dismissing their ideas and inserting my own. But, if they come to consensus about what they want to investigate, then we should honor it and investigate, right?

Teacher 1: I think it depends. If we pursue every idea, then each lesson will take forever. I have other units to teach. I can't spend all my time following each question they have.

Teacher 3: I get that, but if we ignore class-wide consensus, then I think the lessons are not really driven by the students' ideas and questions any more.

Vignette #4: Phenomena Fatigue (or PHE-tigue)

During Day 1 of unit specific PD on Matter Cycling, the whole group completed the anchoring phenomenon and the storyline routine. A teacher poses a question sharing about their experience and concern about returning to the anchoring phenomenon.

Teacher 1: I was looking at the Matter Cycling storyline and noticed that after every lesson we edit our models. When I taught the last unit, I noticed that a lot of the kiddos got tired of talking about the same thing over and over. I feel like I'm going to hit the same issue here.

Teacher 2: I kind of agree, it seems like we're just talking about photosynthesis over and over and changing our models after every lesson. In the past I spent about 2 days talking about photosynthesis and they memorized the processes really well.

Teacher 1: I enjoy what we're doing, but it feels repetitive that we're talking about cell organelles and processes for weeks. Is there a different phenomenon or a way to re-engage kiddos during this unit?