

[VIDEO LOGO]

KAIA Anything else that you're seeing on Arnold's model, you can add on, maybe you have a new idea about something that you see.

STUDENT: I see [INAUDIBLE].

KAIA I think it's important to look at other students' work and have them critique their own work and their peers' work because it really lets them see that there are other ways of thinking. It's another way of having them listen to each other.

[MUSIC PLAYING]

JESSICA THOMPSON: It's really a fabulous way for kids to express their ideas and to focus on how ideas are revised, which revision is an important part of science. And so engaging kids in the revision process and thinking about, how do I change my ideas and how do I represent that in writing, in drawing, what I can see and what I can't see, these are important skills for kids to have.

[MUSIC PLAYING]

MICHELLE SALGADO: Sequencing how you share out student work is important too. It's not always about showing the ones that are the most creative or the most-- drawn the best. It's also about, wow, who really moved their thinking. And then students over time are seeing these different models. Different students are being represented. It's not just the students that come in with all this background knowledge. We can move our learning together over time.

FALLON KING: You guys did such an amazing job on your models. I want you to think to yourself, did you add a zoom out box? Give me a thumbs up if you added a zoom out box. We looked for students that incorporated that zoom out box that we did in the beginning of the lesson and used it in different ways. I see you added a zoom out box right here. Can you tell us about why you did that?

STUDENT: Let everyone knows-- to get a closer look.

FALLON KING: To get a closer look to something that's going on that we know is happening, but we can't see with our eyes. There were some kids that used it in the literal way of the way that we did in the lesson, and they zoomed out on the leaf and they put the things in there that the leaf needed for energy. But then they took it a step further. Can you talk about why you did two zoom out boxes and why they're important?

STUDENT: The leaf helps the tree grow and the apple helps the tree too.

FALLON KING: How does the apple help the tree?

STUDENT: By seeds.

FALLON KING: Did you put seeds in there? Look at that animal right there. Can you talk about what's happening inside this animal right here?

STUDENT: Inside of there is the poop and then the animal poop, sit down. And then a bee pollinates that. And then a new apple tree grows.

FALLON KING: Do you see his smart thinking? So he's showing how it happens over time and he's using that-- he's using those arrows to show that it's happening over time.

[MUSIC PLAYING]

KAIA
TOMOKIYO: So I saw lots of great modeling today and lots of different ways that you guys were showing your ideas. So one thing that I was looking at on some of your pictures was that you were showing that sometimes things come down and then other times things go up. And so I wanted to show you a couple models that I saw that had different ideas about things coming down and things going up.

I think it's important to look at other students' work and have them critique their own work and their peers work because it really lets them see that there are other ways of thinking. During our discussions, we use a discussion stoplight. And the discussion stoplight is a way for teachers and students to give words to how we're expressing our ideas. And so students can add on to another student's idea, students can have a new idea, and students can also repeat another student's idea.

For me, in my classroom, it gives me language to use, common language with my students, that it's OK to repeat someone else's idea if you think the same thing, and it's OK to have a new idea, and it's OK to add on to someone else's idea. So what are you noticing about the arrows in Faith's picture here? Raise your hand if you've got an idea. Arnold, what are you noticing about her picture?

STUDENT: Her rain.

KAIA
TOMOKIYO: So what direction does the rain go?

STUDENT: Down.

KAIA
TOMOKIYO: So she's showing rain by going down. Does anyone want to add on to that idea? Let's see. Aidan, do you want to add on to the idea that there's some rain going down? What else do you see?

STUDENT: I also see rain going up.

KAIA
TOMOKIYO: So something's going up. So that's a new idea. So we've got rain coming down and she's showing rain is going up. You were thinking that too? So Carter, what are you noticing? You can have the same idea, you can have a new idea.

STUDENT: I have same idea.

KAIA
TOMOKIYO: You have the same idea. So what are you noticing that's the same?

STUDENT: The rain is going up.

KAIA
TOMOKIYO: There's rain going up. That's interesting to me.

MICHELLE

We're supporting student thinking over time. We're allowing student knowledge to play a piece. We're allowing

SALGADO:

them to learn new information and learn from each other. It's this collective learning piece. I think that's really ambitious and important, and it's supporting that student thinking.

[MUSIC PLAYING]