Transcript for Video Clip 3.2

Teacher/video ID:	Kawamura, 3.2_stella_GEN_kawamura_L2.2_c6
Content area:	Genetics
STeLLA strategy:	Engage students in analyzing and interpreting data and observations (STL strategy 4). Engage students in constructing explanations and arguments (STL strategy 5).
Context:	In this lesson on trait inheritance, the teacher asks students to write about what they've learned from the previous two investigations and include evidence in their explanations. Then students share their explanations based on their evidence or data.

Video Clip 2a

Time Code	Speaker	Discussion
0:00:01.0	T	What our … well, they're not really questions, but I want you to respond to this.
0:00:04.3	T	"One important thing I learned today about how traits are passed from parents to offspring is …" And then put a sentence or two.
0:00:11.9	T	"One example of my evidence for this is …" So I want you to think about our experiments with the dachshunds and with the organisms.
0:00:20.4	T	And I know that you have some really good questions, so what I'm going to ask that you do is when you finish writing this, skip a couple lines and write down "Questions I have now."
0:00:30.5	T	And then we'll see if we can't get to those questions by the end of our lesson series.
0:00:34.6	SN	OK.
0:00:35.1	T	So …

Video Clip 2b

Time Code	Speaker	Discussion
0:00:38.9	T	But I want you to think about the two experiments we have done with these first-generation things, where we have the dachshunds specifically with the short hair and the long hair,
0:00:48.4	T	and also this organism activity.
0:00:51.4	S	And my claim, I had [inaudible] from one of the parents.
0:01:02.6	SN	Wait, that's what I said.
0:01:03.8	SN	And similar to those—
0:01:06.8	S	And then with the dachshunds, one parent had short hair, and the other parent had long hair.
0:01:12.3	S	And all of the offspring had short hair, so there were … Both of the experiments showed that the offspring inherited one gene from—
0:01:22.3	SN	Right. Yeah. And it wasn't like mixed or anything, 'cause that would be weird.
0:01:24.9	SN	Yeah.
0:01:25.9	SN	Yes.
0:01:27.9	T	All right. I'm going to stop you right now. I just heard Tessie's explanation, and I think that Tessie's explanation … Hey, Colin.

0:01:39.6	T	I think Tessie's explanation should be heard. So I want you to look at your written response. Where's your written response, bud?
0:01:48.2	T	And I want you to think about what she's saying and think to yourself, *Is there anything I could add to my response that's going to help me in the future*?
0:01:56.1	T	Because the next lesson and throughout all the lessons, to understand this idea is going to be very important.
0:02:04.3	T	So I'm really hoping we can clarify it, and some people, I think, are still a little bit confused.
0:02:11.0	T	So I want you to think about the experiments we just did yesterday and today. OK? Tessie, go for it.
0:02:17.8	SN	So my claim was that offspring inherit one trait from one of the parents, and my evidence is when I was observing the cow's horns, one of the cows had horns and one of the—
0:02:29.8	S	I mean, the parents, one of the parents had horns, and one of the parents didn't have horns. And when we looked at the offspring, none of them had horns.
0:02:37.3	S	So tho … the no-horns gene was probably dominant compared to the horns gene, and in the dachshund experiment, we noticed that while one parent had long hair and one parent had short hair,
0:02:52.3	S	all the offspring had short hair. So both of those experiments show me that, like, the offspring will have a trait from one parent, but there won't be a mix.
0:03:03.2	SN	Yeah.
0:03:03.7	T	What do you guys think?
0:03:04.4	SN	Mm-hm.
0:03:04.8	T	Did she do a really good job of incorporating evidence from the specific activities we have done?
0:03:11.1	SN	Yes.
0:03:11.6	T	OK. Do you want to add anything?
0:03:13.1	SN	I disa … well, I kind of disagree with Tessie a little bit. Because, like, me and Sienna were doing the guppies.
0:03:19.6	S	And, like, they … There were, like, the ones that looked just like one of the parents, but then there were the other ones that were a little mixed between the parents.
0:03:29.5	T	Well, now there is going to be … So that's the same thing Hannah and who … who were you working with the frogs?
0:03:33.4	SN	Olivia.
0:03:33.9	T	Hannah and Olivia were looking at the frogs. And on the frogs, one frog had a striped back, and one frog had big, huge spots on their back.
0:03:41.7	T	But the offspring had stripes on the back and big spots on the legs.
0:03:47.2	T	So are they getting one … Are they getting things from both parents? Yes, but their specific area to look at was the …
0:03:55.0	SN	Back.
0:03:55.4	T	back, and when you looked at the back, one parent had spots and one parent had stripes, and what did the backs of the [offspring] look like?

0:04:01.8	SN	They all were striped.
0:04:02.9	T	They were all striped. So it goes back to what we just wrote down together as a whole group.
0:04:09.5	T	All offspring have the same phenotype as one parent. If you didn't use the word *phenotype* in your answer, can you find a way to incorporate it?
0:04:21.3	T	You can even write this sentence down. I'm OK with that. "One offspring … or all offspring have the same phenotype as one parent."
0:04:29.5	T	But then your job is to do as Tessie did and incorporate evidence from the activities we have done to support that. Hannah?
0:04:37.5	SN	So I′m going to link mine to Rowan about, like, this … how he disagreed with Tessie, but I agree with Tessie, is that, like, if you, like, you don′t, you get maybe your mom′s eye color,
0:04:51.7	S	but then maybe you have your dad′s hair color, so it′s kind of like you get a few things from each parent. It′s not just one thing from every parent.
0:05:02.2	S	But if … even if I have, like, my mom′s eyes and my dad′s hair, it′s not, like, technically … it′s not a DNA mess-up because the eyes and the hair are different genes.
0:05:14.6	SN	Mm-hm.