Transcript for Video Clip 8.4

Teacher/video ID:	Scott Knight, 8.4_stella_et_knight_L5_c4
Content area:	Energy transfer
STeLLA strategy:	Make explicit links between science ideas and activities (SCSL strategy F). Link science ideas to other science ideas (SCSL strategy G). Highlight key science ideas and focus question throughout (SCSL strategy H).
Context:	The teacher returns to the lesson focus questions and asks students to relate those questions to their most recent activity. As students struggle to explain their thinking about energy transfer and transformations, the teacher highlights key science ideas.

Video Clip 4

Time Code	Speaker	Discussion
0:00:01.2	T	What I was hoping is you'd add something here, and I was hoping you'd get at least two coming out of here for any item that you chose.
0:00:11.7	T	Let's see here. Who do I get to pick on? I mean choose.
0:00:17.8	T	Sierra's still finishing hers up. Let's go … Hey, guys, we're not quite done here yet.
0:00:22.0	T	Anybody?
0:00:24.5	T	Justin?
0:00:25.9	SN	Well, I was doing the flashlight, and I found out on the top there was light energy, and when you'd push the button, it was sound energy.
0:00:34.7	S	And then it was, like, heat energy and kinetic energy when your hand would push the button.
0:00:40.6	T	Oh. He was asking me about heat energy on something like this.
0:00:45.1	T	And even though he … he was thinking about the crash on the two boys, there was some heat energy.
0:00:51.6	T	He was saying, "Is there heat energy here?" And he was expecting there to be some. But we couldn't feel any.
0:00:57.4	T	Just because we can't feel it doesn't necessarily mean it's not there. Then we took … he took it a step further. He was, like,
0:01:09.1	T	the … the heat maybe wasn't necessarily here, but what about here?
0:01:12.3	SN	Yeah. 'Cause there's, like, [inaudible].
0:01:15.5	T	So, boy, that energy changed and changed, and our goal today was, where does energy come from?
0:01:23.2	T	Look at this. And then, Dylan, where does energy go? It's a tough question.
0:01:29.3	SN	[Inaudible]
0:01:30.3	T	Can you answer it now?
0:01:33.0	SN	[Inaudible]
0:01:35.4	T	Come on, participate. I know we've been working so hard. You can do this.
0:01:45.2	T	Look at your diagram. Where's the energy come from? Look.
0:01:48.4	T	I'm thinking about this motion energy. Here's what I did, Donovan. Watch. I'm

		going to help you out here quite a lot, I think.
0:01:55.3	T	Kinetic energy. But that kinetic energy came from the potential energy that's right in here … The energy that I have in my body.
0:02:02.0	T	Oh. I got that from eating food. Oh yeah. That food was prepared for me somewhere.
0:02:09.2	T	Had an apple earlier. That apple grew on a tree. Does a plant have energy?
0:02:13.5	SN	Yes.
0:02:13.9	SN	Mm-hm.
0:02:14.3	SN	Yeah. Some ener … sunlight.
0:02:16.0	T	Goes back to the sunlight. Does the Sun have energy?
0:02:18.1	SS	Yes.
0:02:19.2	SN	Heat energy. That is energy.
0:02:19.5	T	It's like … it's like if I keep going back far enough, it's like energy.
0:02:23.4	SN	Energy.
0:02:23.5	T	Energy. Energy.
0:02:24.9	S	Energy.
0:02:25.4	T	What happens when I go this direction? This is the question: Where does energy go?
0:02:30.1	SN	It transfers.
0:02:31.8	T	To wh … to where? I keep calling on some of the same kids. Connor, I know that you're thinking, right?
0:02:38.7	T	Tristan, what do you think?
0:02:40.4	SN	I think that energy goes through everything, because if we wouldn't have had energy, we won't be able to move or think.
0:02:49.5	T	It's true. Where does energy go? Where does this energy go? Does it just stop? Does it run out?
0:02:58.0	S	No.
0:03:00.2	SN	Yes.
0:03:01.8	T	It's a tough question.
0:03:05.9	T	All right, Connor, you're up.
0:03:07.3	SN	Doesn't it just pretty much go everywhere?
0:03:10.3	T	Tell me more.
0:03:12.7	S	Because the sound will keep on going till it hits something, and then it will bounce back toward where it came from.
0:03:19.2	T	Will it always stay sound energy?
0:03:22.6	T	Look. I started here with food; then it turned to motion; then it turned to light; then it turned to sound; and then it just kept changing and changing.
0:03:28.9	SN	It changed constantly.
0:03:30.2	T	What's the lesson there about where does energy go?
0:03:33.2	SN	It changes.
0:03:36.7	T	Rane.

0:03:37.7	SN	Some energy goes everywhere around you.
0:03:40.3	T	OK. Quick …