Classroom Transcript:
Building Understandings Discussion

Teacher: I had the chance to check out the couple other groups and we have probably two minutes now to share some initial results to see if they were similar among groups, and then the next class is when you're going to draw your diagrams. Show us what you think was happening. But I'm hearing other people than myself talk right now. So, the goal is how can we best block the energy coming into the water. Any group, did you find that you were able to do a better job of blocking the energy coming into the water? And what is your evidence? So did you block the energy coming in, and what evidence you have. Student 1?

Student 1: So, my team had ten minutes because we got started late.

Teacher: Can you tell us your situation? Tell us what were you testing. Aluminum, and control?

Student 1: We were testing a normal plastic cup to a plastic cup with tinfoil on it and by our calculations the one with foil did the best. The one with the foil did the best and for eight minutes and ten minutes it stayed at 15 degrees.

Teacher: How much of an increase was that?

Student 1: Two degrees increase.

Teacher: Okay.

Student 1: And for the one with no foil it went 15, 16, 16, 17, 18, 19. So the final temperature for that was 19.

Teacher: And so what was the total increase?

Student 1: Total increase? Four degrees.

Teacher: So, your control cup went up four degrees?

Student 1: Yeah.

Teacher: This one went up two degrees?

Student 1: Uh huh.

Student 2: (gasp) Half!

Teacher: About half? You're right. So what claim could you make?

Student 1: That the one with foil is better than the one without.

Teacher: What if you were to put that into a whole phrase to answer our question. Which one did better? Make a claim about what foil can do.

Student 2: Foil can help to reflect heat and light to keep drinks cold.

Teacher: Foil can help reflect heat and light to keep drinks cold. Does any other team have evidence to support that? Student 3?