AMY BURKE: Is any group ready to move forward? Oh, great! What type of function do you think it's going to be? You're thinking cubic?

STUDENT: Isn't cubic the one that goes up, like that?

AMY BURKE: Is that what a cubic is?

STUDENT: Wait.

STUDENT: Yes. It goes like that way.

STUDENT: No, like it starts from the bottom. Then goes up, then it goes back up, right?

STUDENT: Yes.

STUDENT: Yeah. Okay. Cubic.

AMY BURKE: Do you think this data fits a cubic?

STUDENT: Yeah.

AMY BURKE: Well let's check it out.

STUDENT: Or a linear.

AMY BURKE: You guys are using one of the computers, right?

STUDENT: Yeah.

AMY BURKE: And you guys use the other? Okay. So, facilitator, I need you moving your group forward.

STUDENT: Come on, facilitators.

AMY BURKE: How are we doing here?

STUDENT: So one, use a regression feature to find a function to model the data. So, you can find the [inaudible] from yesterday from the cubic function and then the other function.

STUDENT: With the equation?

STUDENT: Huh?

STUDENT: With the equation.

STUDENT: Yeah. Can you find the [inaudible]

STUDENT: I have one.

STUDENT: You have one? Which one do you have?

STUDENT: Quadratic.

STUDENT: Quadratic, all right.

STUDENT: What is it? I'll put in for this one.

STUDENT: You have a quadratic for that one?

STUDENT: Yeah.

STUDENT: I have a quadratic for this one.

STUDENT: What is it?

STUDENT: It's Y1.

STUDENT: Y1.

STUDENT: Approximate.

AMY BURKE: Say words to Valentin. What did you do so they can do it too?

STUDENT: I opened up the, is it called the wrench?

AMY BURKE: They've been calling it the wrench, because it's for the tools.

STUDENT: So for my *x* axis I made the, what is it called?

STUDENT: The numbers?

STUDENT: Yeah, the numbers. I changed the numbers from 0 to 10 so it could capture the *x* axis because my, like, let the … the smallest number is 2, and the greatest number is 9, and then my *y* axis, I made it go from 50 to 800. And then my step for my *y* axis, I made it to 100, and the step for the *x* axis, I made it 1.

AMY BURKE: Are you getting all that, Devin?

STUDENT: Yep.

AMY BURKE: Did it make sense where she got all those numbers?

STUDENT: Yeah, I think.

AMY BURKE: Can you tell me why?

STUDENT: She was using the lowest point in the graph -- she's using the lowest and the highest point of the graph to then fix the way it looked.

AMY BURKE: Awesome, thank you. Great.

STUDENT: [inaudible] Wait, it changed, it should be …

AMY BURKE: So have you guys had a chance to talk about this question yet? What type of function could we use to model this data?

STUDENT: No, we haven't had a chance to.

AMY BURKE: Okay.

STUDENT: The equation for the …

STUDENT: It's *y* and then it's the tilde.

STUDENT: The tilde, *a*, *x*, cubed.

STUDENT: Make sure there's a *y*, 1, tilde, the *a*, *x*, 1, cubed.

STUDENT: [inaudible] You said not to, don't connect the dots.

STUDENT: Yeah plus *v*, *x*, 1, squared, plus *c*, *s*, 1, plus *d*.

STUDENT: [inaudible] 1 plus *d.*

AMY BURKE: What do you guys think the function might be?

STUDENT: I think that from when these, the cuts, I think it decreases every time just, like, a little bit and it gets a more dramatic cut every time you go down one number. Each cut size, the volume goes down.

AMY BURKE: So what type of function do you think might model this data then?

STUDENT: Decrease.

AMY BURKE: A decreasing function?

STUDENT: Yeah, something like subtraction or something.

AMY BURKE: So we've talked about a linear function, a quadratic, and a cubic. So which one of those do you think it might be?

STUDENT: Probably a quadratic then.

AMY BURKE: You think a quadratic, okay. Can I ask you guys to hit your wrench? Because I'm concerned about that you're not seeing the data as well as if you set your window differently. So I see you're hovering over the *x* values, right? What are the *x* values and how might we get a better picture of it?

STUDENT: So you put 0, right?

AMY BURKE: Why 0?

STUDENT: Because then it shows like the grid [inaudible].

AMY BURKE: Okay.

STUDENT: And this one is 100 isn't it? Or is it 10?

AMY BURKE: What are you looking at to determine what to put in there? 100 or 10?

STUDENT: [inaudible]

AMY BURKE: Sorry?

STUDENT: I think you could put in 11 because it starts at 2, so we're going back 2, so we could go up 2.

AMY BURKE: So you're going up 2 from what?

STUDENT: From 9.

AMY BURKE: From the 9, ah! What do you think of the graph that you had now? Do you think that's a better picture?

STUDENT: Yeah.

AMY BURKE: Right? Larisa, do you need to ask Carlos to say it again?

STUDENT: Yeah, you put 11, right?

AMY BURKE: Why did he put 11?

STUDENT: Because it's more -- 2 higher than the *x* values.

AMY BURKE: Um hmm, great, I might disconnect those just so you can see the data set and then I'm going to ask Alexander, that you move your group forward, on to this please.

STUDENT: Their computer won't give them a color for this. Yeah, I pressed this. So it shouldn't, but then it didn't, and it says, "I don't understand this" and then ...

STUDENT: Our parabola is missing.

AMY BURKE: Hm, isn't yours working?

STUDENT: Yeah, ours is working.

AMY BURKE: Can I ask you guys to say we are having a technical difficulty and the whole group work off of that one? So we can move forward, facilitator? I need you facilitating your group forward on this work.

STUDENT: So just log off.