AmbitiousScienceTeaching | Agree disagree t charts (Teaching Channel Argumentation Series)

[AUDIO LOGO]

KITTEN VAA: You're going to tell me whether you agree or disagree on the idea that the water went through the ground to the

town. I know this because, and you're going to tell me what evidence do you have to support that idea.

JESSICA When you're making an evidence-based argument you are rallying evidence from multiple sources. And this is an

THOMPSON: important skill for students to have not just in science, but in social studies, and literacy, and mathematics.

KITTEN VAA: So we've been investigating the town of Moncton. And we've been wondering and investigating the question,

what caused the town to flood?

JESSICA In this video, you'll see students weighing ideas and evaluating evidence. They're going to be looking at multiple

THOMPSON: forms of evidence across an entire unit.

KITTEN VAA: In our investigations we now know that this mountain is made out of?

AUDIENCE: Rocks and soil.

KITTEN VAA: Pebbles, sand, yeah, and soil. It's meaningful for students because they have these activities that are connected

to a phenomena using the activities, and readings, and texts in a variety of different pieces of evidence, even their own personal experiences in the natural world and trying to make sense of that phenomena. Students used

different color stickies to show the different types of evidence.

We started with drawing our initial models and talking about our own ideas and personal experiences about what

we think caused the town to flood. And we came up with three ideas, we have three claims. One where it filled up

behind, we have another one where the water went through the ground, and our third claim was that the water

made a new path.

And we've been using these to help us make some sense while we're collecting evidence on whether we agree or

disagree with these ideas. At the beginning, we really focused on students using their own personal experience as

a way to support or disprove the claims that were being created.

AUDIENCE: So me and Andrew were using those tools and we pushed the water off the concrete. And so then it soaked inside

the soil.

AUDIENCE: I'm thinking it should go right here.

KITTEN VAA: Can you explain why?

AUDIENCE: Well, because if one of them agree it went in a new path, it's not because it says on top of the ground, but

basically under the ground.

KITTEN VAA: So that's evidence to support that it didn't go on top of the ground, that it went under the ground. Then as

students built their knowledge, they started using other pieces of evidence in the experiments that they've done,

the videos that we were watching, the texts that we were reading.

AUDIENCE: That was best [INAUDIBLE].

KITTEN VAA: So you have some text evidence that said, can you summarize what it said for me? What does it say that?

AUDIENCE: This group of scientists thought that when the dam was being built next to a glacial moraine that it would cause

water to lead through small rocks and sand very easily, but it did really hard and easy so we didn't know where to

put it.

KITTEN VAA: So they have some text evidence that they're not sure if it proves or disproves the idea that water went through

the ground.

AUDIENCE: Who thinks it's in agree?

KITTEN VAA: That this proves that idea?

AUDIENCE: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.

KITTEN VAA: Students were able to go to other pieces of evidence to help support this text in what was meant by easily.

Students were going to the experiments that we had done to talk about the earth materials and whether the water flow easily went through or not. And so that was an opportunity for students to add on clarify with those

ideas.

AUDIENCE: We put rock sand and soil all in one cup and we timed that one.

KITTEN VAA: Yes.

AUDIENCE: So that could help you clarify the statement?

AUDIENCE: It didn't take as long as clay because clay took a pretty long time, but it still went pretty slow through the glacier

moraine.

AUDIENCE: I agree with that. I'm pretty sure this one does go in--

KITTEN VAA: As a science community if we're building our ideas and our arguments having sources from a variety of different

types of evidence would create a stronger claim. So you're going to go back to yesterday's work and be thinking

about some of the evidence that you collected. It's important that you have one color or lots of colors?

AUDIENCE: Lots of colors.

KITTEN VAA: Lots of colors to support that claim to make it stronger.

JESSICA The sources of evidence could just be kids naming this was in a personal experience, this was from an

THOMPSON: experiment. But rather than that we're diving into the particulars of, what did we learn from that personal

experience? And how does that sit up close? How do we juxtapose that to what we saw happen in an experiment?

So it's in the weighing of and evaluating of ideas evidence.

BEN: Evidence is ideas from other things that can help support your claim or it might be an experiment that you've

done and you figured out the answer to the question and to support word that claim.

KITTEN VAA: I want to thank you for sharing and taking a stand today. And we'll continue thinking more. Yes, and we'll

continue thinking more about what's causing this.