Problem of the Month: “Party Time”

Anna Yates School

Grade 6, Anthony Rodgers

Teacher Interview

00:01 Anything about the mathematics that surprised you? In terms of what kids were able to understand, or ... misconceptions they may have had?

00:08 I think Level B. Level B, there were a lot of misconceptions around one fourth of the girls, at the party?

00:15 Because the students often refer to ¼ of the total people at the party. So a lot of them thought that there weren’t any people that could have short red hair.

00:24 So that ... was very interesting.

00:28 I think as the math was ramped up in level D, like the probability and statistical reasoning, for D and E.

00:37 I think that was sort of complicated.

00:40 I think just more, mathematic and theoretical probability work.

00:45 For example?

00:46 For example, just doing some more hands-on things, so using spinners to show probability, dies, and like bags.

00:56 There's an activity we used before, where they have, tiles in a bag, which is similar to the problem.

01:03 I think they need more hands-on experience with probability. Because it's very theoretical. They need to actually do things to see the probability a little more effectively.

01:16 I think the connection with art being a part of math, I think that's very successful with a lot of their charts this time.

01:25 The art's more colorful, they have more pictures, where the pictures are relevant to the work.

01:31 They're actually diagrams, not pictures. They have the specific information that they need.
01:36 So I think I see, there’s more success with students understanding that art is math, and you can use it, you can use diagrams to help you solve problems.

01:44 And the problems aren’t always solved with number sentences and word sentences.

01:48 So I think that’s the most successful thing that I’ve seen.

01:50 I think the engagement level is higher, when they have to work on the problem of the month. I think it has more entry points for all students.

01:59 And as the math is ramped up, like we’ll see in D, and C, and E there’s overall less involvement, because it’s nontraditional.

02:08 They don’t always have to use the basic algorithms that we’ve been teaching, they can use their own understanding, and it’s acceptable.

02:15 We’re not “dinging” for errors and mistakes, we’re just looking for their understandings.

02:19 So I think all students feel more confident when they’re working on the problems of the month.

02:24 The biggest challenges are refraining from using this as a teaching moment. You know? Allowing the students to work through their own process.

02:33 And, so that’s the biggest challenge for me.

02:37 Allowing them to struggle with ...

02:39 Allowing them to struggle with the math, and to work as a group, and for me not to teach during this time. So that’s the biggest struggle.

02:49 It’s also the biggest joy, so. Because they get to see their own thinking, a lot more.

02:55 I enjoy using the Problem of the Months, I think it allows the students to engage with each other.

03:01 And school-wide, it allows all of the students to sort of engage, and have a discourse around the math that everyone is doing.

03:07 And they get to see other students’ understanding and successes with the problems.