

Fraction Task Debrief With Thought Bubbles Video Transcript

Line #	Speaker	Transcript	Thought Bubble
1	Teacher 1	It is funny how adamant some of the students were on, that it did not matter	<i>none</i>
2	Teacher 1	about the shape, it did not matter about the size and they could divide it in any	<i>none</i>
3	Teacher 1	way they wanted.	<i>none</i>
4	Teacher 2	I found that with my group. It was the same. They didn't spend as much time	<i>none</i>
5	Teacher 2	with the equal. We got into that discussion after, that they have to be equal	<i>none</i>
6	Teacher 2	but that didn't happen as they were doing their work independently and in	<i>none</i>
7 to 10	Teacher 2	groups. They were just doing shapes and dividing them whatever way. And it only came up afterwards when someone said, "I like yours but the shapes aren't equal." And the other guy said, "Yours aren't either." And then they got into an argument and we talked about it.	Students are just counting the regions without considering equal areas. This could indicate whole number thinking. Encourage the teachers to observe for this the next time we are doing a task with students.
11	Teacher 3	How important is it that it actually. I mean, yes, when you're in a textbook and	<i>none</i>
12	Teacher 3	you've got a computer generated picture it's really easy to do, to make it even.	<i>none</i>
13	Teacher 3	But when we've got it, when kids are representing it and we know what they	<i>none</i>
14	Teacher 3	mean, we know that they really mean two out of these five are coloured and,	<i>none</i>
15 to 19	Teacher 3	you know, like a reasonably close, you know, making an effort to make it even. I don't know, I think maybe if we want kids to represent, we have to kind of cut them some slack. Like, it is not measurement, it is not about being completely precise, it is about understanding of fractions. I don't know. {cross discussion}	This is an important point in the discussion about equi-partitioning – how precisely does a student need to partition their representation for it to be accurate? I need to come back to the importance of precision when students are comparing fractions. (And I need to bring number lines into the discussion as a model that might help students with precision.)

Line #	Speaker	Transcript	Thought Bubble
20	Teacher 4	Like, half, (drawing a circle and partitioning vertically in half) and then there's a	<i>none</i>
21	Teacher 4	little one (gesturing from the top left down to the centre), a little one (gesturing	<i>none</i>
22	Teacher 4	from the centre up to the right), and another little one (gesturing from the	<i>none</i>
23	Teacher 4	centre up further to the right) and they are obviously not equal.	<i>none</i>
24	Teacher 3	Yes.	<i>none</i>
25	Teacher 1	But when, in grade five, they get closer to having to compare two fractions, if	<i>none</i>
26 to 30	Teacher 1	they're not almost exact then they are unable to compare them. That's where they struggled, if they weren't exact. But then I wonder, is drawing their own representations the best way to compare it or are we better off to go to manipulatives at that point. To go to fractions circles or fraction bars. Maybe that's our...	The degree of precision required is influenced by the purpose and/or context. Comparison of close fractional quantities, for example, require increased precision. Students could make strategic selection of model based on required precision.
31	Facilitator	Mmm. I think there might be two different things going on. One is the	<i>none</i>
32	Facilitator	representation that the student makes, which is an approximation and always	<i>none</i>
33	Facilitator	will be, or any of us makes. It just is. And the other one is knowing, what you	<i>none</i>
34	Facilitator	were talking about earlier (looking at Teacher 1), knowing that they should be equal	<i>none</i>

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35	Facilitator	amounts, the partitions should be equal. So, I think what you are saying	<i>none</i>
36	Facilitator	is that if they do understand that the partitions need to be equal then	<i>none</i>
37	Facilitator	approximations aren't that big of a deal. But if they don't, or if the	<i>none</i>
38	Facilitator	representations that they see all the time are kind of off, then that might be	<i>none</i>
39	Facilitator	leading them down a path.	<i>none</i>
40	Teacher 2	Well, when we looked at that, one of the kids actually mentioned that up here	<i>none</i>
41	Teacher 2	when they've got the fourths, quarters, and then one of those they divided into	<i>none</i>
42	Teacher 2	two which a lot of, they didn't know how to divide the shape. But he said, "Well,	<i>none</i>
43	Teacher 2	what if those were my two pieces of pizza (gesturing to larger pieces) and	<i>none</i>
44	Teacher 2	then you got those two pieces of pizza. That's not fair or that's not equal. And that is where they got into that discussion. Where they realized that those aren't, that's not the same as over here, where it is divided into, or here, where it's divided into equal pieces. But that is what they got into and I thought, well, that was very clear for them to see.	Students bring varying degrees of formal and informal understanding to their representations. Students can direct the conversation to focus on key considerations, in this case the importance of fairly sharing. As a transition to comparing fractions, remember to come back to the discussion about precision in representations and the value of linear representations in these situations.

Two different things going on:

1. A representation that a student or any of us make is an approximation and always will be.
2. Knowing that they should be equal amounts equal partitions