Leaders in Mathematical Thinking
Ruth Beatty - Moving Forward

>> If we can, as a math community in Ontario, really come to grips with how we balance out computational understanding, computational fluency, some memorization of stuff with also these really deep opportunities to develop conceptual understanding, then I think -- and I see that happening all the time, right? But it's just, I guess, how we take all the good stuff that's happening and just extend it and expand it. One of the things that we've learned through this work is that assessment is very different in some indigenous communities, or some indigenous perspectives, in that when you achieve something, it's up to you, then, to present your knowledge. So rather than having like a timed unit test or something like that, it's up to the students to be able to show you, when they feel comfortable, that they have this knowledge and learning. And when I first heard about that or learned about that, I thought, that makes so much sense, you know, for a student to become responsible of their learning, and to indicate that they're ready to share that knowledge, rather than being in the process of constructing that understanding and then having someone arbitrarily test them on it when they're not ready to be tested. So that's one of the big things we've been looking at, how we can maybe incorporate that perspective of assessment into our work. I think one of the most interesting things has been, just the depth of understanding that the children bring themselves to through discussion and through working on these activities, and how similar that thinking is across different classrooms, across different kids and across different grades. So there seems to be something fundamental that we're tapping into with these activities, because they're universally engaged and delighted by them. They're universally pushing their own understanding, as a result of being a part of these activities. And the kinds of mathematical thinking that they're coming out with, we can see now are really similar, which is really helpful for us, because it tells us that we're on the right track. You know, if everybody's thinking about this in the same kind of way, and they're bringing the same rich knowledge, that it seems to be working.