

Leaders in Mathematical Thinking

Jill Gough - Classroom Culture

>> I think the most important thing is to be vulnerable too, that it's about the culture of your classroom and how you set norms. We are in it together; we are all going to learn. I might understand the math, but I might not be an expert at visualization or technology, or something I'm going to grow with you. And we're going to help each other. I think teaching everybody -- I was going to say students, but I think everybody -- to give constructive feedback and set a protocol for that opens up the possibility for people asking for feedback. So when you create a culture in your classroom where everything starts with, "I wonder why..." Or, "Have you thought about this?" Or, "I really like this, because..." If we put words and help our students understand how to give cool feedback as well as warm feedback, it makes it easier to take risks and try new things. I think the first thing to look for is, who is doing the talking? In the work that I've done with Tim Kanold, he challenges teachers to talk less than 70 percent of the time. Children need to be talking and in discussion. So can we do a mini lesson, like we do in literacy? Here's the mini lesson. Now I want you to try. I know I haven't given you enough yet maybe, but I want you to go ahead and struggle and ask your questions, instead of me telling you what your questions should be. So when I walk in and observe classrooms, I want to see students actively engaged in talking with, and politely arguing with, each other, to struggle and understand and to share ideas. I want the teacher walking around and monitoring and observing so that he or she can sequence the answers later, so that the first answer builds to the second way to do it, so that before the discussion is over, all different viewpoints have been shown -- words, pictures, numbers and symbols -- so that students can see and increase their own flexibility. And they don't get stuck in, "Well, everybody thinks like me."