Growth Mindset Thinkers
Video: Math Perceptions - Dispelling the Myth

(JO BOALER:) We have many teachers coming who've only ever received traditional math instruction themselves and then they just repeat it in the classroom. I think the most important thing to do with new teachers and I teach new teachers at Stanford, is to have them engage in math differently. So one of the first things we do and what we constantly do is have the teachers do math in the ways we want students to do. When I do that, actually I have teachers crying in those sessions because they work on math problems and for the first time, they understand the math and they see math as this connected subject, which they had always thought of as lists of rules so I think having teachers learn math themselves, relearn math really in the ways we want them to teach it, is pretty important. But we have many adults, including teachers who have had a very bad experience math themselves, some of them are really traumatized by math actually and it affects them on a daily level in their lives and so a lot of adults in our population believe that only some people can be good at math and if they had bad experiences in math, they've interpreted that as meaning they're not a math person. There's a very strong belief that there's math is like a gift that you have or you don't so it's really important to challenge those ideas. I'm finding -- I'm doing of work now with parents and teachers and getting these ideas out to them and finding generally, people are very receptive. Once they actually see the brain evidence and what we know from research, it's very hard to not understand it. That was a misconception that they may have had their whole lives so I think getting change to happen, getting more people to understand that anyone can learn math is really about getting the research ideas out to them in a really good, well -- a good form that's easy to understand so the only challenge really, I think, we're finding comes from people who don't want to dispel that myth. There are people who have their whole life, particularly if they're successful in math, believe that they're kind of special in some well or that their kids are special in some way, so those people are somewhat resistant to this new knowledge that actually everybody can learn math and it's not that you're some pre-genetically designed person that was able to do that. But generally I find little resistance, once people get the evidence. Unfortunately a lot of research evidence has sat in academic journals for a long time and universities don't have good systems for getting it out to the people that need it often, so what I have been doing a lot of my work on recently is taking research evidence that actually in journal articles that are pretty difficult to read and turning it into really sort of practical forms for teachers and for parents, good ways to understand it, good ways to implement it.