

## Growth Mindset

### Video: Differentiation

(JO BOALER:) Allowing kids to have a growth mindset, teaching through enquiry-based maths where the problems are more open-ended, where it's more visual and creative, we have many children who were more interested in more artistic and creative endeavors who've said I've just seen maths in a whole new way, it's so much more creative than I thought. So giving them open, more creative mathematical problems and then valuing all the different ways people think and the perspective that they have on it is really important. And you can do that with any content, it's not that you can teach some things in this beautiful, creative way but then there's other things you just have to get them to work with a textbook, you can do it with any content at all. And in our summer camp we actually taught, the kids were seventh grade mostly, and we taught them what is a course in high school in the US, so it was really Algebra 2 that we were giving them, and we told them that this is really hard stuff and sometimes they were doing things that Stanford students get wrong. But we just told them we're just going to, you know, dig into this, this is high level but that's great, it gives us more opportunity to fail and they responded fantastically. So first of all you have to have kids doing different things, you can't have no ability grouping, put them all together and everybody works on a worksheet or whatever, they have to be doing different things. So, there's two ways of doing that, one way is to give more open-ended work like the tasks we have on our website and other things that are like that, that kids can take to different levels. So, if you're a lower achiever at that point, you can access it, you can develop the idea, somebody who's very high achieving just might take them further. The other option is to have choices of work where you might have three different activities and you, what's really important in that scenario though is never to tell kids which they do, but to say I have three different activities, come up and look at them, choose the one you want to do, encourage everybody to go for the most challenging ones. The key thing is not that we need all kids doing the same work, but it's that we don't give kids these messages, that you're a lower achiever. I mean you can't just say these words to kids and expect change to happen. It's not up to students, I don't like this sort of idea of growth mindset that puts all the onus on the students changing, because if they're given growth mindset messages through teaching they'll develop a growth mindset, it's really about teachers' messages and, not just messages, the ways teachers teach. So, it's, it has to be ongoing really, they have to be in situations where they actually see that growth and struggle, and even failure, is good for their learning, they're not being told you are this kind of learner or that kind of learner, they're not being given grades all the time which give them these fixed messages and they, everything about their environment is growth-orientated. But yeah, it has to keep going 'cause you can take kids out of that environment and give them lots of fixed messages, they'll drop back into having a fixed mindset.