



*It is all about
Mathitude!!*

*Have a super learning year
With us at IEYMS*



In this module you will walk through a shortened version of a course offered by Youcubed a research center on Maths education. This research is led by Dr. Jo Boaler at Stanford University and she is the coolest Math teacher- she is making us (including all those big wigs) rethink what teaching and learning of Maths looks like!!

*Hmmm what is
changing about
Maaath!!!!*



There are six sections to this quickie from the course- you will watch a few videos in each section and then jot some thoughts. Make sure you have some pen and paper handy. At the end you will fill out a google form so we know you got this or we got this.

1. Knocking Down Myths about Math
2. Math and Mindset
3. Mistakes and Speed
4. Number Flexibility, Mathematical Reasoning and Connections
5. Number Patterns and Representations
6. Math in Life Nature and Work

1. Knocking Down Myths about Math

- How do people feel about Math? ([Click Here](#))
 - *Take a quick minute and jot down how you feel about Math and why people feel differently about Maths?*
- Math Myths and the Brain ([Another video- Dr Jo Boaler this time!](#))
 - *Write three things that you learned from this section*
- And of course smash those stereotypes ([Watch this](#))
 - *Write three things people may assume about you*

(click on the links to get to the videos)

2. Math and Mindset

- Let no one tell you that you cannot be good in Math. [Hear it from the experts](#) 
- *Think about 4 behaviors you can have that help you learn Math.*
- It is sooooo much better to do harder problems and enjoy the struggle. It helps your brain grow. [Watch this](#)
 - *Think about when you did something really hard and felt good after that.* 

3. Mistakes and Speed

- Don't be afraid and make that mistake. It makes your brain grow.

[Hear Professor Boaler explain](#)



- *Why is it good to make mistakes?*

- People who succeed make many mistakes. [You may be surprised to hear this about a very successful NBA player](#)



- *Who do you know who has made lots of mistakes and become very successful.*

- Being quick does not always mean being good at something. [Many mathematicians are not quick](#)



Let us take break.

Get up and let us be corny dancing to this [video](#).



4. Number Flexibility, Mathematical Reasoning and Connections

- How important is our understanding of numbers? ([Let us understand this](#)) 
- Now watch how different “mathematicians” approach this? [18x5](#)) 
- Talking about Maths is important. [What you talk about you learn better](#)) 
 - *Talk to someone about how you solved 18×5*
- Reasoning and Connections are very important. Think about why something is happening and then connect different ideas in mathematics. Ideas in math are all connected even when they may not seem so.

5. Number Patterns and Representations

- You can solve problems by using pictures to represent them. ([See how some math students solve different problems using pictures](#)) 
- Connecting big ideas in Math help you really understand a concept. The following three videos will really solidify the big idea in fractions for you.
 - [Part 1](#)-- after watching the video think which one is bigger $\frac{3}{4}$ or $\frac{7}{10}$
 - [part 2](#)
 - [Part 3](#)

6.Math in Life Nature and Work

1. Some of the most important mathematicians were inspired by patterns around them. [Fibonacci Sequence is a pretty cool pattern to learn](#) 
2. We are not the ones using math. [Math is used by animals and in nature](#) 
3. And [here](#) are some hip hop dancers using patterns.
4. Math is not a dead subject. <https://safeYouTube.net/w/zABab>. 
5. All the technology we see around us uses math patterns. [Creativity, connection and understanding](#) 
6. [Here](#) are some suggestions for apps that can help you learn math deeply

So what will your Mathitude be this year

Fill out this [Google Form](#)