

Changing Our Beliefs and Attitudes About Math

Myth of the Math Person

Most people believe that math is one of those subjects that you either “get” or you “don’t get.” This way of thinking cannot be further from the truth; there is no such thing as a math person. Everyone can achieve in any subject with hard work, perseverance, and someone to guide them. The key to shattering this myth is developing a growth mindset in our teachers and students, and a math classroom where students are challenged by engaging problems and supported in their learning.

The Evolving Classroom



“The reason so many people think math is the most difficult is the inaccessible way it is often taught.”¹ When we were math students our math teachers often taught us tips, tricks, and recipes for solving math problems. In the math classes of old there was only one correct solution. We could get the answer if we memorized and followed the teacher’s procedure, but if someone asked us the “why” behind our formula, most of us wouldn’t be able to answer.

Today, teachers are striving for students to have a solid grasp of the “why” behind each solution. This often means that students are encouraged to share a variety of methods and strategies to solve a single problem. By sharing different strategies, teachers can help students see the common thread that connects each solution, thus deepening their understanding of the concept being taught. The teacher’s role is no longer to teach procedures, but to help students make connections and understand the mathematical concepts behind the solutions.

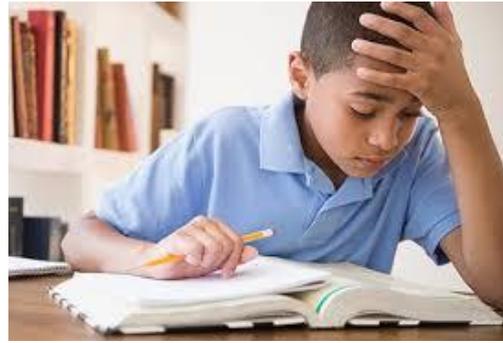


¹ Boaler, Jo. [Mathematical Mindsets](#). Jossey-Bass: 2016, pg 96.

Growth Mindset Homework Help Tips

Let your child struggle with math problems.

- See if they have the perseverance to work through their struggles. We need to break the math myth that we need fast answers to be good at math.



Never let your child hear you say: “I was never good at math.”

- Research studies have shown when parents tell their children they were not good at math, their child’s achievement is immediately affected.²

Ask your child if they can solve a math problem in another way.

- This shows that your child has multiple strategies at their fingertips and they are flexible with their math thinking.

Ask your child to explain the reasoning behind their response.

- “Why did you (add/ subtract/ multiply/ divide)?”
- “What does your drawing represent?”

Online Resources

Parents’ Beliefs about Math Change Their Children’s Achievement -

<https://goo.gl/psL33d>

“We now know that the messages we give students can change their performance dramatically, and that students need to know that the adults in their lives believe in them.”

TL Talk: The Gift of Failure – Interview with Jessica Lahey - <https://goo.gl/oo7xFc>

“Jessica is the author of the New York Times bestselling book, *The Gift of Failure: How the Best Parents Learn to Let Go So Their Children Can Succeed.*”

How to Learn Math: for Students - <https://goo.gl/OCywaf>

“How to Learn Math is a free self-paced class for learners of all levels of mathematics. It combines really important information on the brain and learning with new evidence on the best ways to approach and learn math effectively.”

² Boaler, J. (n.d.). Parents’ Beliefs about Math Change Their Children’s Achievement. Retrieved September 22, 2016, from

<https://www.youcubed.org/think-it-up/parents-beliefs-math-change-childrens-achievement/>