Young Math Masterminds

Office of Kindergarten to Third Grade Education
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Support for Parent and Family Engagement in Student Learning

Understanding Math Anxiety in Young Children

Thoughts on Math Anxiety

Have you ever heard someone say, "I'm just not a math person?“ Many children (*and adults*) feel tension and uneasiness in situations where they must do mathematics. This is called “Math Anxiety.” Math Anxiety is different from simply not *liking* math. It is a feeling that can be distracting, cause avoidance, and keep people from performing at their best.

Children can start developing math anxiety in kindergarten and the early grades. Often it begins when the adults in their life have anxiety about mathematics themselves and children notice it whether they know it or not. So, how can adults help children feel positive about mathematics and stop any anxiety from spreading?

I hate math !

One important way for adults to help young children develop strong early mathematics skills is to become aware of how they talk about doing math. Even if they don’t like math, or are unsure of their own abilities, adults should avoid making excuses for their own anxiety or speaking negatively about their own math experiences. They should be positive and model confidence for the student.

Another way to help young children resist math anxiety is to practice “mindfulness.” Mindfulness means paying full attention to something in a relaxed way. It means slowing down to really notice what you're doing. Being mindful is the opposite of rushing into a learning activity. There are many mindfulness techniques that involve simply relaxing and listening which can help children’s brains focus on doing mathematics instead of getting distracted by anxiety.

Mindfulness activities at school and home can take as little as one to three minutes. Each child responds differently to learning anxiety, but simple things like deep breathing with eyes closed or taking time to doodle before starting a task often helps to reduce anxiety and brings the learning task into focus.

Strategies for Families

If your child struggles and becomes resistant, disagreeable, or if they try to avoid learning and practicing mathematics, adults can take notice and be prepared to help. Recognizing that your child is becoming anxious is the first step in helping your child with math anxiety. It can be a challenge to balance sensitivity, reassurance, and guidance when helping your child cope with anxiety. So, before math anxiety takes root – even before your child recognizes it himself or herself – prepare to try a few things that might help your child.

- When practicing mathematics, if your child becomes frustrated or upset focus on what he or she already knows before adding new ideas or challenges. Suggest that he or she try to *"show versus tell."* For example, if the problem is 8 plus 3 equals 10, you can ask him or her to show it and draw 8 marks on a paper, then 3 more marks. Looking at the marks that represent numbers can help your child envision the problem and find the correct solution. This type of "self-correction" allows your child to solve the problem rather than just being told the right or wrong answer.
- Recognize and explain to your child that mistakes are part of learning and it is OK to consider more than one approach. In school, teachers sometimes encourage students to suggest two or more ways to solve a math problem. If he or she doesn't get the problem correct the first or second time, ask your child to try trial and error. The process can be a valuable approach that involves persistence, creativity, and critical thinking, which makes math more interesting and encourages discussions that enhance understanding and skills.
- Help your child build and keep a positive "Mathitude" (math attitude). Agree that you can both remind each other when it feels like math is too hard and your child begins to feel anxious or negative.
- Encourage "Math talk" and ask open-ended questions that prompt your child's natural curiosity. Ask how he or she came to the answer or how they solved the problem. Math talk helps your child get more comfortable with mathematics. As part of the regular day, ask questions such as: "How many?" "What size?" "How did you do that?" "Which is more?" "Can you compare?" "How do you know?" "Can you explain?" "What will happen if?" "Tell me how you figured that out."
- In addition to the ideas above, remember to give your child plenty of "wait time" after he or she begins to solve a problem. Waiting patiently, without judgement, shows your child that you respect his or her ability to try. It allows your child to feel your support and a little less anxiety about trying to please you. Some children are perfectionists and don't want their answer to be wrong, so they don't want to answer at all. Positive encouragement puts both of you on the same team.

In the classroom, teachers help students learn mathematics with creative approaches called "instructional strategies." When students leave their classroom, educators can support continued learning by sharing "instructional *support* strategies" with you. Instructional support strategies provide information and guidance on ways families can support their child's teaching and learning that takes place at school. The purpose is to help children generalize and apply new knowledge and skills to their everyday life.

Being conscious of the way we speak about math, using mindfulness activities, prompting positive confidence, using math throughout the day, and maintaining a learning partnership with your child's teacher are ways you can help your child be more successful in reducing math anxiety.

For more information on strategies to address your child's math anxiety, tell your child's teacher what you observe when your child practices math outside of school. Together, set goals to help your child build math skills, confidence, and joy in learning new ideas and skills.

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