FINDING THE GLORY IN THE STRUGGLE:
Helping Our Students Thrive When Math Gets Tough

Learning mathematics is a struggle at some level for all of us. Rather than seeing this struggle as something to avoid, we can see it as one of the most valuable things offered to our students. Mathematics offers them an opportunity to learn how to work through the struggle, how to bring to it what they have, how to find and use the things they need. Regardless of their perceived aptitudes or gifts in mathematics, they can learn that they have within themselves what they need to meet this challenge.

Struggling in mathematics is not the enemy, any more than sweating is the enemy in basketball; it is part of the process, and a clear sign of being in the game. Math asks our students to think in ways they are not used to thinking; they will be asked to look at the obvious in ways they're not accustomed to, and then we'll ask them to explore the not-so-obvious in similar ways. A rigor of thinking and a clarity of expression is demanded that will stretch them beyond familiar styles. It will also require an honest pursuit; there really are no shortcuts.

Children learn many things in school, encompassing not just *what* they've learned, but *how* they've learned. Maneuvering through struggles in school, young people learn how to meet challenges for which there is no map, and no shortcut. Life will present them with struggles, whether we wish this to be so or not. How they approach the struggle of mathematics will affect how they approach the struggles in life.

The opportunity begins when the struggle begins.

How Parents Can Help

Without knowing a factor from a function, the parent, more than anyone, is in a position to help the student engage in the struggle of mathematics. Parents don't need to fear this struggle, nor do they need to take it on themselves; it is an essential and important part of learning mathematics. If the parent accepts the struggle, the youngster can. And even more important, if the parent values the struggle, and sees math as more than just a series of right answers, the young person can approach mathematical learning in a way that will not only make success in mathematics more likely, but carry over to pursuits far beyond the mathematics classroom.

⇒ ***Know that the struggle is okay, that it takes time to learn things.***

Help students understand that they are not expected to get it all right or understand it all clearly, the first time. If parents believe that struggling means stupidity, students feel a tension that gets in the way of learning.

⇒ ***Students need to take responsibility for their own learning and their own struggle.***

Believing, erroneously, that math learning comes easily to some and not to others results in an attitude of "why bother? I'll never be good at this," when the subject becomes unclear. If students expect to encounter confusion we can help them see that the way through that confusion is application of effort - *their* effort. Encourage youngsters to dig in when it gets tough, not flee into excuses.

⇒ ***Resist the very common temptation to explain the struggle as genetic.***

Parents should not say, "I was never very good at math, either." The goal is to help students learn how to use what they have to meet the struggle, not to fear, avoid, or abandon the struggle from a belief that they cannot do it.

⇒ ***Guide children to resources that can help (their textbook, their notes).***

The answer to "where can I go for help?" is often sitting in the bottom of a backpack. What a valuable lesson for students to discover that answers come not from magic, but from reading and thinking and struggling to understand a sentence, or an equation in a book they have ready and available.

⇒ ***Value math homework - encourage students to do more than just 'get it done'.***

If parents actively praise and value the effort their youngster makes in pursuing understanding, the youngster gets the message that the struggle is important. They can feel a pride and confidence that is significant even when understanding is slow in coming.

⇒ ***Expand the focus beyond the grade.***

Overemphasizing the grade too often results in negative behaviors to get the grade. Rather than learning responsibility, or the confidence that comes from struggling through his or her own efforts, the student seeks quick fixes; missing the bigger picture.

⇒ ***Praise the process.***

If students are in the game, working at it, struggling and coming to understanding bit by bit, let them know how great this is! This is what doing math is all about.