

THEY LAUGHED WHEN I STOOD UP TO TEACH MATH

By Dave Mitchell



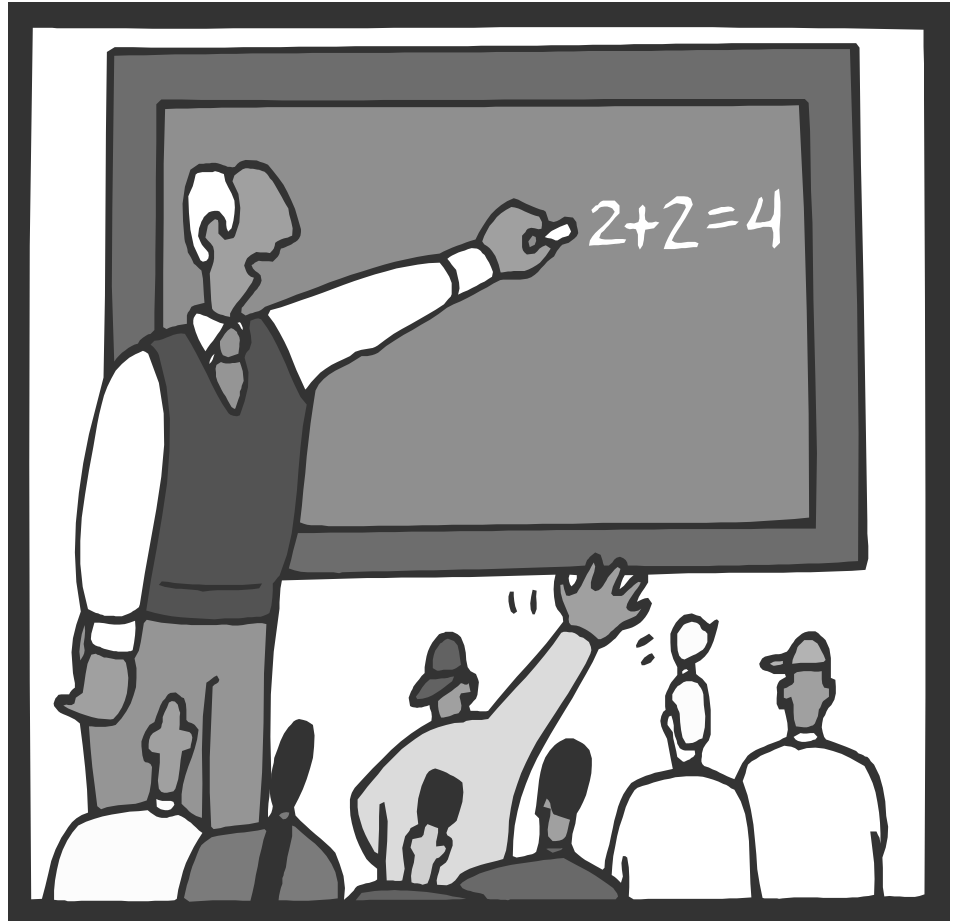
It would be impossible to teach math for the better part of 28 years and not come to some conclusions about the problems some students seem to have with the subject. In this brief article, I would like to point out a few of these problems and offer some starting points for solutions.

For an unacceptably large subset of our student population, math remains a painful mystery to be endured, rather than a source of intriguing ideas to be investigated, enjoyed and ultimately mastered to some extent. I have seen too many students who wake up one day to realize they have not mastered fundamental math skills that many of their classmates have, and who give up because they can't "play the game". Who wants to play a game you can't win?

What are the consequences? Take a look at a calendar for a community college or university and see what programs are eliminated for a student who does not have prerequisite math courses in the academic (advanced) stream. Say goodbye to many programs in engineering, science, math, computer science, business, robotics, electronics, and technologies of all types.

For those students who, at some point, get off the track in math and never seem to get back on, how do we turn things around? Let's start with number facts.

I recently asked one of the most accomplished students I have ever taught how he became such an amazing math student. He said that when he was young, his mother sat with him at night with flash cards until numbers facts were second nature to him. From that point on, success bred success because he always just assumed he was good at math.



Can we count on every parent to do this? Of course not. Do teachers have unlimited time in a crowded curriculum to do this? No.



So, what *can* be done? For starters, there is some amazing finger math that is fun, easy to learn, and can help with some of the basics. All students in the country should know this, if not for themselves then for their younger siblings. Please email me (mitchell@arithmecode.com) and request the finger math instructions.

They are yours for the asking and I'll also send along a list of fascinating topics to be researched on the internet.

If you visit my website and click on "convention materials" on the main menu and then select "print" on your browser, you'll get five pages of ideas and instructions that you can share with your teaching staff. There are games to help with number facts, examples of math songs and math raps to be used as memory aids, math stories, ArithmeCode puzzles, and many other items of interest.

A colleague of mine proposed that there is an interesting and engaging way to teach just about any subject, any topic. I believe he is correct.

Tomorrow, I will try to inject some fun and passion for my subject and love of learning into each class. There *will* be laughter in these classes. En route to learning the main topic of the day, my students will perhaps do a puzzle or an old contest question, sing a math song, see the "Trigonometric Operetta" acted out, fold some paper and be amazed at the symmetry and geometric beauty that results or, simply take a break for some entertainment

Why bother with all of this? My experience shows that if students can have some enjoyment in math class, they are more willing to get down to work when hard work is required and it is hard work that breeds success.

<http://www.arithmecode.com>

