

# Friday Focus Carter County Schools

FALL HAPPENINGS

VOLUME 4, ISSUE 9

**OCTOBER 23, 2015** 

- Oct 27 Writing
   Club
- Oct 28 Counselors Academy
- Nov 2 Teacher
   Planning Day
- Nov 3 Election
   Day—No
   School

INSIDE THIS ISSUE:

9 Strategies for Motivating Students in Math

Illustrative Mathematics

Common Core
Author's Blog
(Bill McCallum)

**Achieve Math** 

**Get KAHOOT** 



# **Learning to Love Math**

The first step to success in math is a positive attitude. Yet that's the last thing we can expect from many of our students.

Many students, like their parents before them, come to our classrooms with valid feelings that make them unhappy doing math. A 2005 AP-AOL News poll of 1,000 adults in the United States revealed that 37 percent recalled that they "hated" math in school. In the poll, more than twice as many people said they hated math as said they hated any other subject.

You would think that once they were out of school, these folks would have found the real-world value of the math they disdained in school. In an evaluation of math literacy of a random sampling of adults in the United States, 71 percent could not calculate miles per gallon on a trip, and 58 percent were unable to calculate a 10 percent tip for a lunch bill. Yet only 15 percent of those polled said they wished that they had learned more about or studied more math in school (Phillips, 2007).

Myths and misconceptions about math abound, such as the following:

- You have to be very intelligent to be good at math.
- It is acceptable to be bad at math because most people are.
- Math isn't really used much outside of special occupations.

In addition, many people have the attitude, "My parents said they were never good at math, so they don't expect me to be any different."

# How Do We Get Kids Back On Board With Math?

In a study that looked at middle school students' perceptions of academic engagement (Bishop & Pflaum, 2005), 5th and 6th graders were asked to draw their typical learning experiences and then draw learning experiences they liked. In the drawings of typical experiences, teachers and chalkboards were the focus, and the students usually did not include themselves in the picture. In the drawings of learning they liked, the students featured themselves prominently.

Students truly "get" math when they see it applied in real-life ways they care about—in other words, when they see math as a tool they need and want. This motivation is not promoted in word problems about the number of books or the number of students in a classroom. However, when you give small groups of students 67 toothpicks and some index cards and then ask them to model a pizza party seating problem for 12 people, they'll build the experiential knowledge of a realworld situation where remainders are a nuisance. When they consider dividing leftover pieces of pizza into parts, they will see that fractions or

decimals are a valuable tool to make the pizza sharing process fair, whereas a "remainder" would imply that perfectly good pieces of pizza sit in the box because there is no way to divide them.

# More Strategies for Building Math Positivity

Here are some more tips for helping families feel better about math.

### **Hold family conferences**

where you build alliances with parents, help them understand math concepts, and show them strategies for helping their child with math homework.

Reassure all students that if they want to achieve high grades, they will have opportunities that will allow them to regain some sense of control, such as retests. Because progress in math is so strongly based on foundational knowledge, students need to achieve mastery in each topic.

## Demonstrate the value of

math by capturing their imaginations. Instead of allowing them to think of math as an isolated subject, show the extended values of math in ways they find inspiring.

# Start the year showing that

you care. To demonstrate interest in your students as individuals, and to acknowledge that they may have had previous negative math experiences, ask questions they can respond to in a math autobiography, a class discussion, or a private conversation.