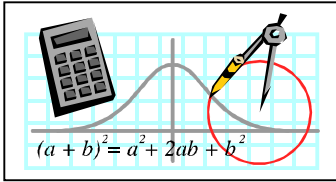

A Math-LAB in Your School?



**Let Meaningful Learning
Help Your School
Design an Engaging
Math Activity Lab**

Imagine a room dedicated to providing students a fully interactive and engaging set of experiences that has them investigating, applying, and conceptualizing the key concepts they learn in their math classes. Meaningful Learning will help your school set up one room in your school where math teachers can take their students to experience the fun side of mathematics,

Most teachers say that the reason they don't engage students in mathematical investigations and hands-on activities is that they don't have the time to design, manage, and set-up the activities. What if everything that was required to design, and set-up the hands-on investigations was done for the teachers? Guillermo Mendieta, the award winning teacher and author of Pictorial Mathematics will work with your teachers not only in selecting and setting up the math lab activities, but he can come to your school to model running the lab.

The Math Lab Structure and A Sample Investigation

At the end of every four to six weeks, every teacher will have the opportunity to take his or her classes to the math lab. We will set up the math lab with all the materials needed to run each investigation. Each lab will have one or two centers where students will be working in groups of two or four. Using a hands-on approach, active learning strategies, and fun interactive activities, your students will be exploring and learning meaningful mathematics in a highly stimulating and motivating environment. Depending on the lab experiences chosen by the teachers, a lab can take from one to three one-hour periods to be completed.

Sample Math Lab Activity: *The Car Ramp*



Using matchbox cars, students release a series of cars from the top of a ramp to find the relationship between the slope, the angle of the ramp, the length of the ramp, and the distance each car travels. During this activity students learn the meaning of a slope, see the difference between a positive and negative slope, develop an understanding of equivalent triangles, proportions, and work with rational numbers while having fun with fast moving cars. This type of activity keeps your students engaged, learning, and allows them to see and experience the mathematics in a meaningful context.

The Materials and The Design of the Math Lab

Guillermo will present your teachers with a variety of worthwhile mathematical investigations. After considering factors such as the resources needed for each investigation, how each investigation aligns with the most pressing needs of your students, and the time each investigation takes, Guillermo will lead the teachers to select the mathematical activities for each of the six to ten labs. Teachers would receive a one day training where they will conduct all the labs their students will experience. After this initial training, the school can contract with Meaningful Learning to have Guillermo run as many labs as desired, or the school can select to have one or more teachers trained on how to run and set-up each of the lab investigations. Meaningful Learning will provide schools with a quote on the materials needed to conduct all the labs.

Creating a Math-Lab ensures that all students have the opportunity to see and experience mathematics by doing. For more information about the Math-Lab-Investigations, contact Guillermo Mendieta, director of Pictorial Mathematics, at (909) 730-7312, or through email at pictorialmath@yahoo.com.