October 11, 2011

Dear Parents,

For those who were unable to attend Open House or schedule an individual conference this summer, this letter is to provide a deeper understanding of our curriculum change in mathematics.

There are basically two approaches to mathematics instruction today. One approach focuses solely on conceptual understanding and requires students to perform little in the areas of procedural skill or drill. The second one is virtually void of conceptual understanding and focuses on facts, drills, and processes. The Purposeful Design Mathematics program, however, combines these two extremes by emphasizing conceptual understanding while providing adequate attention to drill and practice. NCTM Administrator's Guide How to Support and Improve Mathematics Education in Your School (2003) states, "Drilling students on facts and procedures without emphasizing understanding also leads students to think that memorization is the key to mathematical power and does not help them understand that mathematics is about thinking and reasoning. Procedural skills should always be developed and assessed alongside conceptual understanding." When students simply memorize procedures and math facts, they may miss key concepts that could make it easier for them to remember and apply what they have learned in mathematics.

Based on the transition from the prior curriculum, we anticipated the current conceptual understanding of certain mathematical concepts to be insufficient for our students. For example, the foundational concepts for data analysis, geometry, and algebra were not adequately introduced in the lower grades by the curriculum used prior to this year and therefore may pose a challenge to students in those areas. As students are taught these unfamiliar concepts, each teacher has been cautioned to recognize areas of weakness and/or signs of frustration. They have also been instructed in the use of "recovery materials" provided by Purposeful Design, should a student need them. Much of the recovery can be done during the school day, but if parents feel extra help is needed, you are encouraged to contact your child's teacher to set up further recovery time.

This change in approach, while challenging at first, promises to take our students to a higher level of conceptual understanding and critical thinking in the area of mathematics.

Sincerely,

Adell Keen

Bonnie Cave