

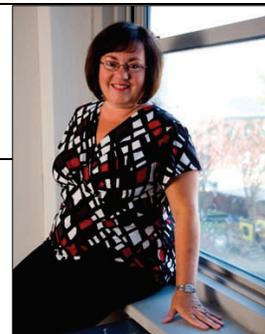


KENTUCKY CENTER FOR MATHEMATICS

Good News from KCM Coaching 2008-2009

Problem Solving is not a Problem at LaGrange Elementary

By Missy Cox, Senior Math Coach



While many people are intimidated by the words “problem solving”, at LaGrange Elementary, teachers and students get excited. Nationally Board Certified math coaches, Missy Cox and Sandy Gavin, challenge teachers and students alike to use thinking strategies in math as well as reading to provide a better understanding of math content.

At LaGrange Elementary, the math coaches assist their teachers to adapt reading and thinking strategies to solve mathematical problems. Helping students think at a deeper level has been a school and district goal for several years. Strategies that are taught to comprehend reading are applied to other content areas as well.

Coaches Gavin and Cox mentor teachers in the application of thinking strategies to mathematical concepts. Presently, the coaches lead teachers in a book study using Arthur Hyde’s book, Comprehending Math-Adapting Reading Strategies to Teach Mathematics, K-6 (2006). The text illustrates how the cognitive strategies of making connections, asking questions, visualizing, inferring and predicting, determining im-

portance, synthesizing, and monitoring for meaning can be applied to mathematical concepts and problem solving as well.

Sandy and Missy coach teachers to think about ways to help students thoroughly understand math problems they are attempting to solve. The math coaches model problem solving strategies in each K-5 classroom. Gavin and Cox advocate a four step guide to problem solving in which students understand the problem, plan what to do, carry out the plan, and check their work, while integrating the thinking strategies.

Students and teachers enjoy this focus on problem solving. One first grade teacher stated, “The students are beginning to visualize the problems before

they solve them.” She looks forward to more practice using the guide for solving problems.

A fifth grade teacher said the math coaches’ emphasis on using the thinking strategies in math has helped her students expand their higher level thinking and problem solving skills. She reports, “They can thoroughly explain how they solve the problem, and connect and implement the strategies in other content areas as well.”

One fifth grade student said, “I make math- to- math connections when I’m problem solving, like when I am thinking about the similarities in division and subtraction. Another student discussed how using his “schema”, or background knowledge, helps him understand the problem before he begins to solve it.

At LaGrange Elementary, teachers weave thinking, language, literacy, and mathematics together to help student build confidence in solving problems. Problem solving is “no problem” at this school!

