

Barrington Courier-Review

Barrington District 220 aims for international success in math

BY BRIDGET O'SHEA | boshea@pioneerlocal.com February 7, 2013 1:06PM

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BARRINGTON — District 220 elementary schools are teaching math differently.

Singapore Math, which is now used widely across the country, was introduced in Barrington area classrooms this year with the hope that the system will make it easier for students to master new rules and concepts.

Becky Gill, the district's director of curriculum and instruction, believes the approach can lift the district to the forefront of academic leadership.

"We have no bragging rights internationally when it comes to math and science," said Gill, noting that a district committee analyzed data including international test scores. "We want our students to learn how to think and problem solve."

On Jan. 29, District 220 parents were invited to a "Parent University Math Night" with Char Forsten, a New Hampshire-based math consultant who has been working with the district on the implementation of Singapore Math.

Barrington math teachers are teaching Singapore Math in grades K-5, and there are plans to expand the program into sixth grade classrooms during the 2013-14 school year.

Forsten said the problem with traditional math has been too much rote memorization of rules and not enough comprehension about how and why those rules are used.

"Lots of times, students memorize math rules, but there's no meaning behind them," Forsten said.

Singapore Math uses a pictorial approach, particularly with younger grades. Forsten called them "math stories."

An example could be a picture of frogs in a pond, she began to explain. Students would count how many frogs are on a lily pad, how many in the water, and how many are in the picture altogether. These "math stories" become more complicated in higher grades.

"Singapore is foundational," Forsten said. "When they get to algebra, it's based on seeing it first."

Forsten also explained that word problems can be made more understandable through pictures and bar charts, which also are used in problems involving fractions. When multiplying and dividing numbers, Singapore Math lets students use "number bonds," allowing them to break numbers apart into smaller numbers. Breaking a five into a two and a three, for instance, gives students multiple ways in which to solve the problem.

"This program is fabulous," said District 220 parent Kyle Kick, who attended Math Night. "What's strong about it is they're able to visualize math. You can play with it and the rules begin to have more meaning."

Anne Horwath, another District 220 parent, reported that her daughter has been responding very well to Singapore Math.

"It's like she's seeing the options in math that I never had as a kid," she said.

Before Singapore Math, Gill said math teachers covered a broad range of topics but did not have time for details on each.

With the new system in place, Gill said she's received very positive feedback.

"Our teachers are seeing that it's different and the kids are more enthusiastic about math," she said.

Jen Burton, an instructional coach who works with District 220, said she's also seen more enthusiasm for math among the students who use the Singapore model.

"It's not about what we're teaching, it's how they need to learn," she said.
