

Elementary math lessons in Wentzville will change to Singapore method

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WENTZVILLE — Singapore is coming to Wentzville in the form of math lessons.

Educators hope Singapore math will help develop students who are mathematical thinkers, rather than memorizers. The method has gained interest from teachers in the United States in the last decade.

Traditional U.S. math teaching has relied mostly on repetition. But students in Singapore have a narrower focus on mastering concepts early on with hands-on techniques, such as beads and blocks, and by drawing models. They develop mental math strategies for problem solving.

"Instead of memorizing a bunch of answers, it's really understanding how math works," said Sue Cooper, one of the Wentzville teachers trained in Singapore math last August. She has been using the method in after-school tutoring at Crossroads Elementary and thinks it will benefit students.

When the next school year begins, Wentzville district leaders plan to have 125 elementary school teachers ready with training and materials to start Singapore math in their classrooms. By the 2010-2011 school year, the district expects to have all first- through fifth-grade students using the system.

Wentzville is believed to be the first public school district in the St. Louis area to plan a widespread adoption of Singapore math, said Jeffery Thomas, president of SingaporeMath.com, which supplies school districts and home schoolers with books for the program. Some other districts in the region have recently purchased review materials, he said. The program or something similar already is taught in some private schools in St. Louis, and about 800 schools nationwide.

Susan Gauzy, assistant superintendent of curriculum and instruction in Wentzville, thinks other schools will follow. Wentzville began training some of its teachers at a session last summer, where Gauzy watched closely.

"I just knew we were on to something," she said. "You could see it in their faces. They were so excited about the potential of teaching math like this."

Educators have debated about how to teach math for years, but many began looking at Singapore after students there repeatedly scored better on international tests, while the United States fell behind other countries.

Teachers from Massachusetts, where many schools use Singapore math, came to Wentzville to conduct the training sessions after using the program for years.

According to the National Center for Education Statistics, fourth- and eighth-graders in Massachusetts public schools were ranked first in the nation in math last year. In Missouri, fourth-graders were 29th and eighth-graders were 32nd. Illinois students in those grades were slightly behind Missourians, placing 34 and 33, respectively.

"It's not that we're not working hard," Gauzy said. "It's not that kids aren't capable, because they are. It's just that we were going after it the wrong way."

The need for improvement in math education in America was the focus of the National Mathematics Advisory Panel appointed by President George W. Bush in 2006.

In a report issued last month, the panel did not take a stance on what was the best way to teach math, saying they did not know of any "high quality research" in support of either traditional or reform math instruction. The group did agree, however, that students must master essentials — arithmetic early on, fractions in middle school and algebra in high school or earlier.

Businesses, such as MasterCard, which has its global technology and operations headquarters in O'Fallon, Mo., also have taken an interest in improving math skills. The company hosted a math education meeting in October for teachers in the St. Louis region that featured an education expert on Singapore math.

Wentzville plans to spend about \$227,000 on the Singapore math program in the next school year.

The district also says it will hold meetings at each of the elementary schools in an effort to help parents understand the new program and answer questions.

William Tate, professor and chairman of the department of education at Washington University, said that a series of workshops for parents consistent with what the teachers learned about the Singapore math would be vital. The program is different enough from traditional teaching that parents will have a steep learning curve, he said.

"They will have to get up to speed with how the program works," Tate said. "If students become frustrated, parents will need to be ready to support the thinking that goes along with that program."