

http://www2.tbo.com/news/education/2009/oct/25/some-local-schools-look-singapore-boost-scores-ar-59618/



Published: October 25, 2009

[Home](#) / [news](#) / [state regional](#) / [education](#) /

## Some local schools look to Singapore to boost scores

By Michele Sager



With U.S. students lagging behind their counterparts in some countries, local educators are turning to Singapore to shake up their math curricula.

Several private schools have adopted the Singapore Math curriculum - based on the principles used in the Asian nation - and the Hillsborough County school district is thinking about adding it, too.

The math program puts a greater emphasis on problem-solving skills, visual techniques and hands-on learning. Many educators say the model in the United States is outdated because it relies too heavily on memorization.

Test scores show Singapore's approach seems to be working.

Singapore ranked second in the world on fourth-grade math scores in the 2007 Trends in International Mathematics and Science Study. Students in participating countries take the standardized test, commonly known as the TIMSS, every four years to compare academic achievement.

While Singapore students earned an average score of 599, fourth-graders in the United States averaged a

score of 529, ranking 11th among 36 countries.

At the Berean Academy in Lutz, students are responding to the new approach.

"It is very effective with the students," said Megan Carter, who has been teaching the Singapore Math curriculum there for the past three years. "I have students of all levels who are able to easily use this method because it uses so many approaches. Even students who come to our school using another method can catch on quickly."

The program teaches students to use critical thinking skills and visual techniques to solve math problems.

For example, consider the following word problem: If Johnny has seven ducks and five times more chickens than ducks, how many more chickens than ducks does he have?

In a traditional approach, a student would use a two-step process - first, memorizing that seven multiplied by five is 35 and then subtracting seven to arrive at an answer of 28.

With the Singapore method, a student would draw a box and put a number seven in the first line. Then, they would put five more 7s on the line below. Through a visual comparison, the student would quickly see there are four more 7s in the second line -- or 28.

The program also emphasizes using kinetic learning through games and other hands-on techniques, Carter said.

"It shows students there is more than one way to tackle a problem and gets them using their problem-solving skills," she said.

The program isn't a short-cut to math; students still have to put in the time and practice, Carter said. Also, teacher training is needed for the program but not always readily available. A school district in Maryland that used the curriculum saw drops in achievement in schools where teachers did not receive training.

The Singapore program is popular in elementary schools but can be taught on all grade levels.

And it's not just found in private schools. The Hillsborough County school district is considering adopting the math program next year as a supplemental choice for teachers.

The program can't be used as the main curriculum in public schools because the state has not approved it as a program that follows state standards closely enough, said Lia Crawford, the school district's elementary mathematics supervisor.

However, a district committee will review the program later this year to determine if it will make it in Hillsborough County schools as an additional resource.