

Academy restructures math curriculum and sets new class schedule

New math program imported from Singapore to take students 'beyond the test.'



The country of Singapore was among the top-ranked countries in 1995, 1999, 2003 and 2007 for math performance in school-age children, according to the "Trends in International Mathematics and Science Study." Further, the "Global Competitiveness Report 2015-2016," from the World Economic Forum, placed Singapore first out of 140 countries in the quality of math and science education.

The methods of math that prevail in Singapore and which are behind such success have now gone 'international,' as more than 25 other countries worldwide, including the U.S., have imported the "Singapore math" in many of their more innovative schools and school systems.

Administrators at The Grosse Pointe Academy recently announced that beginning with the 2017-18 year, the school will begin to integrate Singapore math into its lower school-through-middle school curriculum. In addition, beginning with the 2017-18 school year, the implementation of a new class schedule will provide significantly more class time and learning depth to core subject areas such as math and English while still supporting the whole child concept of education long embraced by the Academy.

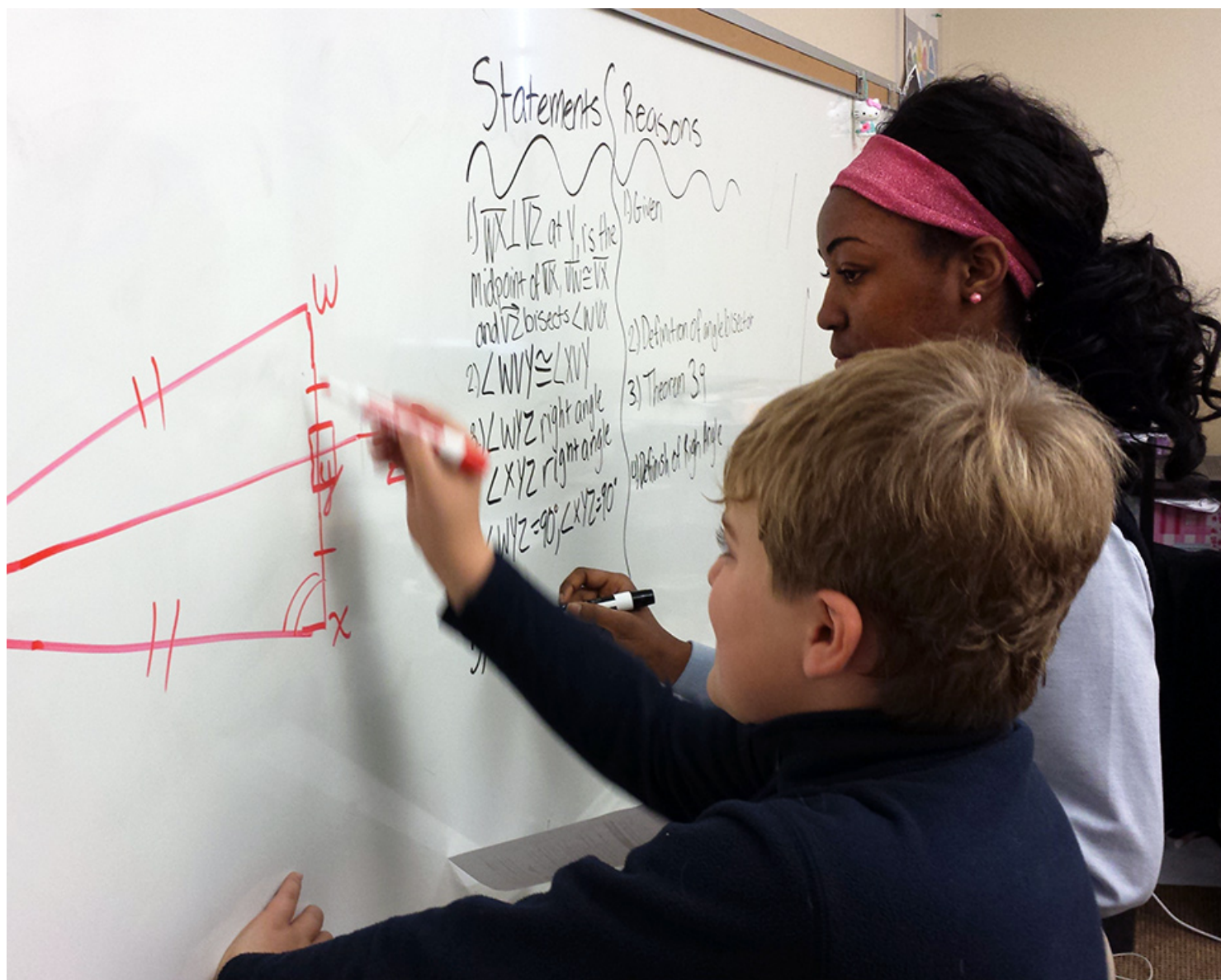
For Didi DeBoer, who will be the Academy's new assistant head of school for grades 4-8 on July 1, the new direction in math is exciting and timely.

"Singapore math will be both rigorous and enriching," said DeBoer, who has served as a lead teacher for both the intermediate and lower schools over the past several years. "It will provide our students with a mastery-level mathematical foundation, and give our students the academic advantage to achieve at the highest level. This program most definitely strengthens a student's ability to problem-solve, while creating a culture-of-growth mindset that will lead our students to lasting learning 'beyond the test.'"

What is it?

The result of a complete restructuring by Singaporean education authorities of math curricula in that country during the 1980s, math education at the elementary level in its schools moved quickly away from rote learning toward a much deeper understanding of math concepts that then led to a surprisingly rapid improvement in student math performance pretty much across the education spectrum in this Southeast Asian nation.

Jennifer Kendall, who will become the Academy's assistant head of school for early and lower school education and the director of curriculum on July 1, said the inherent ability of the new math program to strengthen number sense, core math facts, and problem-solving will be a big benefit for all GPA students regardless of grade.



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While Singapore math originated in Singapore, the term "Singapore math" was actually coined in the United States to help describe this new approach of learning and mastering fewer concepts, but at greater detail. This is accomplished, said DeBoer, by having students use a basic three-step learning process, which typically is defined by concrete, pictorial and abstract steps.

In the concrete step, students engage in hands-on learning experiences using concrete objects such as blocks, dice or paper clips. This is followed by drawing pictorial representations of mathematical concepts. Students then solve mathematical problems in an abstract way by using numbers and symbols.

DeBoer added that even though it may sound counter-intuitive, the Academy is switching to Singapore math from "Everyday math" to offer a more traditional approach to teaching mathematics. "It's more rigorous than our current math curriculum," she said. "Also, we can focus on the mastery of concepts that Singapore math provides so that we are not teaching a 'mile wide and an inch deep,' but rather our students will be getting a much deeper understanding of math."

Still another reason 'GPA is unique'

DeBoer, who most recently was a 4th-grade teacher and co-coordinator of the Academy's STEAM and garden classroom, has been on staff at the school for seven years. She said the new math curriculum is still another example of how the school is always moving forward with program enhancements.

"The Academy has really changed in the seven years I've been here," she said. "We have become a school that is not only on the forefront, technologically, which is amazing, but is moving much further than our peers in our core academics. Also, our focus on STEAM education is a tremendously positive change that I have enjoyed being a part of. Our garden classroom has been such a welcome addition as well. It has really opened up our learning opportunities and is one more reason out of many that GPA is unique and special."

School head Tommy Adams said that the upcoming changes are designed to provide the best educational foundation for children during the most formative years of their lives.



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“Our goal must be to prepare each student for the challenges of high school and beyond by ensuring that the knowledge they acquire is pertinent and prepares them for life success,” he said. “We want our students to actively connect the knowledge they acquire to life and to discover a curiosity for learning and thinking. The programmatic changes that will be implemented for the upcoming school year and beyond will direct attention to the core aspects of our mission, bring clarity to institutional goals, and strengthen our ability to support the **portrait of a Grosse Pointe Academy graduate.**”

More about The Grosse Pointe Academy and its current academic offerings is [here](#).

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About The Grosse Pointe Academy

The Grosse Pointe Academy is an independent, coeducational day school serving children age 2 1/2 through Grade 8. We foster an inclusive environment that respects all cultures and religious beliefs. We seek to remain faithful to our heritage as a former Academy of the Sacred Heart and to those who through their Catholic faith and perseverance sought to preserve and enhance the legacy of this past for generations. Incorporated as a non-profit institution, The Grosse Pointe Academy is directed by a Board of Trustees working together to serve the Southeastern Michigan community.