

Arlington Heights School District 25 drops University of Chicago math instruction for Singapore model



Ivy Hill Elementary School teacher Nashwa Mekky (right) teaches her fifth graders in Arlington Heights to use a new Singapore-style mathematics curriculum. (Mark Kodiak Ukena / Pioneer Press)

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After 25 years of instructing students with a [University of Chicago](#) mathematics program, officials with Arlington Heights School District 25 are switching to a new Singapore-style curriculum that they say is more closely aligned with the [Common Core](#) standards.

District 25 has used the university's Everyday Mathematics program for students in kindergarten through fifth grade since 1992.

But with the debut of the new Common Core standards, district officials decided their longtime math curriculum did not adapt itself to the new standards as much as officials would have liked, said Eric Olson, assistant superintendent of student learning for District 25.

"Everyday Mathematics, unfortunately, no longer meets our needs," Olson said. "We are a high-performing district, and we need a curriculum that best meets our students' needs."

Even as a couple of other area districts continue to use the University of Chicago program, District 25's new math curriculum, called Math in Focus, was written since the new Common Core standards were adopted, making the program more closely aligned with those uniformed set of standards designed to prepare students for college and the workforce. Olson said.

Commonly referred to as "Singapore math," the new math curriculum typically involves a teaching method where students are taught to master fewer concepts but in greater detail. It also includes a three-step learning process, including concrete, pictorial and abstract.



Ivy Hill Elementary School fifth graders Gokul (left), 10, and Timothy (right), 10, use a new Singapore-style mathematics curriculum. (Mark Kodiak Ukena / Pioneer Press)

Olson said district officials and teachers also no longer liked idea of using the Everyday Mathematics "spiral" curriculum.

With a spiral-style curriculum, a classroom teacher introduces a mathematical concept to students and even if some students in the classroom do not fully understand the concept,

the teacher is supposed to move on since the curriculum is designed to circle back to those concepts in future lessons.

"The issue we found with this type of (spiral) curriculum is that it was hard for teachers to move on from a concept if students were still not understanding that concept," Olson said.

Considered more of a mastery-style curriculum, Math in Focus will cost the district \$300,000 for a total for six years — a one-time charge that includes implementation costs, such as professional development and materials, Olson said.

After six years, if district officials decide to continue with the Math in Focus curriculum, the cost to continue the program will be much less, he said.

But the move has puzzled Andy Isaacs, the director of the University of Chicago's STEM education, who said he did not know what was behind District 25's decision to drop the Everyday Mathematics curriculum.

The latest edition of Everyday Mathematics specifically was designed to align with the Common Core standards, he said.

"We did a complete, ground-up revision of the program, which was re-built for the Common Core," Isaacs said. "We were dealing with those who wrote the Common Core standards for almost two years, and everything has been field-tested at schools across the country."

Other area school districts, including Wheeling Community Consolidated School District 21 and Evanston School District 65, are using the new Everyday Mathematics 4, known as EM4, Isaacs said.

"Singapore math has become the darling in some circles, but the (District 25) teachers had good success with Everyday Mathematics, so I'm a little puzzled," he said.

District 25 recently has experienced a slight decline in students' math scores, with 63 percent of students having met or exceeded standards on the state's Partnership for Assessment of Readiness for College and Careers (PARCC) test for the 2014-15 school year before dropping in 2016 to 60 percent of students who were tested, according to district figures.

But district officials have said many factors might explain the district's slightly lower scores during the second year of the PARCC test, given in April 2016, compared to the first time the state assessment was administered during the spring of 2015.

While the PARCC assessment last year featured just one test, the 2015 PARCC assessment consisted of two tests, one given in March and a second in May. The two scores were combined to create a total, overall standard score, district officials said.

Even with the recent drop in math scores, the school board's decision to approve the new Math in Focus curriculum was not prompted by concerns over students' state standardized test scores, Olson said.

"The district relies much more on our MAP (Measures of Academic Progress) scores, which have stayed consistent for years," Olson said. "We are not at all concerned about our schools' test scores, but we always want our students to perform better, and with the Math in Focus curriculum aligned with the state's learning standards, our scores should rise."

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