

West County Educators Consider Singapore Math, State's New K-8 Titles

Educators in the West County region are evaluating, for the first time since 2001, a new list of K-8 math textbooks adopted by the state to determine which titles they'll use next year and how, if at all, our schools' curriculums will change.

From Santa Rosa to the Coast, our district officials, administrators and teachers will be doing a bit of self-examination and assessing 41 new K-8 math textbooks -- including ones developed by Singapore's Ministry of Education and one developed by the UCLA math department -- which the California State Board of Education included in its recent 2007 Mathematics Primary Adoption.

Parents in West County can get in touch with their districts, attend school board meetings and follow the review process to offer their input to both administrators and board members.

The recently adopted textbooks meet state math standards, and our schools can purchase the books with state funds.

For instance, come next fall, some K-5 students in the Golden State will be using state-approved versions of the math textbooks that helped their counterparts in Singapore crunch numbers better than any children in the world, according to Jeffery Thomas, president of the textbooks' North American distributor, SingaporeMath.com Inc.

As part of the statewide adoption, elementary school teachers in California will be allowed to use state funds to order adaptations of math textbooks that were developed by Singapore's Ministry of Education and helped students there earn first-place rankings in three widely cited studies of student math performance conducted in 1995, 1999 and 2003, Thomas said. The global study -- Trends in International Mathematics and Science Study (TIMSS) -- is conducted every four years.

The state Board of Education included the adaptations, or "Standards Edition" titles, published by Singapore-based Marshall Cavendish International in the adoption after receiving a list of recommended textbooks from the state's Curriculum Commission.

The state-approved adaptations of the Singaporean texts represent a "marked departure" from most K-5 math textbooks used in the U.S., according to Thomas, a former community college professor.

The "Standards Edition" textbooks generally replace Singaporean dollars and cents with U.S. currency, Singaporean proper names and various British spellings, Thomas said. Teachers in Singapore deliver classroom instruction in English.

The adopted Singapore math titles are relatively thin books full of colorful illustrations of children, shapes and animals designed to support multi-step word problems that require students to work with numbers in various forms such as decimals, percentages and fractions.

"The presentation is astonishingly clear and child-friendly, yet is mathematically sophisticated," said Thomas Parker, a professor of mathematics at Michigan State University. "Students learn through carefully-designed problem sets. By grade six, the Singapore texts are one to two years ahead of U.S. texts, and the students are extremely well-prepared to start algebra."

Jim Milgram, a professor emeritus of mathematics at Stanford University, added that, "Singapore Math is one of the best programs out there -- especially in the lower grades."

By comparison, in the U.S., elementary school math textbooks "frequently present mathematics in 'template' form," Parker said.

"The teacher does several examples, then the students do problems that are identical except for the choice of numbers," said Parker, the co-author of "Elementary Mathematics for Teachers," which has been used by undergraduate education majors at various universities, including Cal State University, Northridge and the University of Michigan. "The 'reform' textbooks written in the 1990s go to the opposite extreme, omitting skill development and instead give problems that involve much writing and little mathematics."

The Singapore books, he said, "strike a perfect balance."

Undergraduate teaching majors work with editions of "Primary Mathematics" in conjunction with Parker's "Elementary Mathematics for Teachers" -- which is co-authored by Scott Baldridge, a professor of mathematics at Louisiana State University.

"Teachers think about what skills are developed, how the problems are organized, what the prerequisite knowledge is and what order topics are developed," Parker said. "This becomes a challenging and effective college course because the emphasis is on understanding elementary mathematics at the level of 'teacher knowledge'."

Earlier editions of the Singapore math titles helped teachers at Ramona Elementary School in the Los Angeles Unified School District graduate 29% more fifth graders that met the state's "proficient and advanced" math standard in 2005-2006 than in 2004-2005, according to Robin Ramos, a district math coach at Ramona -- a Title I school in East Hollywood.

Taking Science out of the Classroom

Forestville Academy Students to Attend Headlands Institute Award-winning Field Science program

Twenty-four 6th grade Forestville Academy children will take science out of the classroom on January 28, when they complete a 5 day field science program at Headlands Institute in Marin County, California. While at Headlands Institute, students will explore and identify the local fauna and flora, participate in hands-on activities that teach them about science and marine biology and explore the on-site ponds to find and identify invertebrates under the microscopes in the science lab. For the overnight portion of the trip, the students will stay in dorm style camp rooms located adjacent to Rodeo Beach in the beautiful Marin Headlands.

During their visit to Headlands Institute in the Golden Gate National Recreation Area, the students will use a hands-on approach to learning about science and the environment and utilize the outdoors as their primary classroom. Students will learn about the connection between the natural world and how human actions impact it. The Institute's field science curriculum is aligned with national and state science content standards and is specifically designed to enhance what the students are already learning in the classroom.

Beverly Cherner, a Headlands Institute educator said, "Our program focuses on interconnections. After attending our program, students will recognize how nature is a part of their own community back at home. Students are then better prepared to be active and make a difference in their home environment." Headlands Institute prides itself on employing some of the most diverse and most skilled educators in the field.

Headlands Institute is a National Park Partner and non-profit organization located in the Marin Headlands of the Golden Gate National Recreation Area. The organization has provided excellence in environmental education to more than 300,000 California students since 1977. In 2004 its Field Science Education program received the Governor's Award for Environmental and Economic Leadership in Children's Education. Groups participating in Headlands Institute's Field Science Education program can focus their studies on marine science, terrestrial biology, watershed ecology, earth and physical sciences or cultural history.

For more information about the program, visit www.HeadlandsInstitute.org.

"Our scores have jumped considerably," Ramos said. "We need to learn how to teach math differently from how we were taught -- or we'll get the same results."

Ramos added that the improvement at Ramona is the byproduct of committed teaching, using the new textbooks and the training in Singapore math teachers received from Yoram Sagher, a professor of mathematics at Florida Atlantic University.

Students who use Singapore math titles at Ramona Elementary "love the simplicity of the pictures" and "generally are very affectionate about them," Ramos said.

"They love the little children giving advice," Ramos said. "There's joy, and they respond to that -- the book presents math simply and the students get that."

MATH
it's how we
balance our
checkbooks

the Music Man Jr.

As many in the Forestville community know, each Spring provides another wonderful opportunity to enjoy an outstanding play performed by the students of Forestville School. Last year was Aladdin, Jr., and this year will be The Music Man, Jr.

We are very pleased to announce that this year's Director will be Rob Olmsted, a parent of students who have graduated from, and currently attend, Forestville School. After graduating from high school, Rob became a founding member of "General Amazement Theatre Unlimited", a company of Actors, directors and writers all under the age of 18. The company found great success with their productions. While obtaining his BFA in acting, Rob performed in plays, and student films, and found he enjoyed Directing as well. His first production as a director, Table Manners, received great reviews. Rob currently owns an Advertising Agency and Video Production Company in Santa Rosa.

**Mark your calendar for
April 11, 12, 13, 18, 19 and 20.**

We look forward to great performances in this truly memorable production. Don't be surprised if you hum tunes from this musical on your way home!