http://www.sun-sentinel.com/florida-jewish-journal//florida-jewish-journal/news/broward-county-news/fl-jjbs-posnack-0815-20130814,0,6022708.story

## South Florida Sun-Sentinel.com

## Posnack Day officials count on new math programs

By Randall P. Lieberman, Staff Writer

12:07 PM EDT, August 14, 2013

It is a well-known fact that the United States no longer ranks at the top in the world in student math achievement.

To do their part to turn this trend around — and to help their students be more successful in math — administrators at the David Posnack Jewish Day School in Davie are implementing new math curriculums in their elementary and middle schools this upcoming academic year.

For kindergarten and first grade, the school is introducing a program called "Abacus Math." The abacus, also called a counting frame, is a calculating tool used primarily in parts of Asia for performing arithmetic processes. At Posnack, students will be working with a Japanese abacus known as a "Soroban."

With the use of the abacus, kindergarten and first-grade students at Posnack will learn double-digit place value and create "pictures" in their minds to perform high-level math computations.

Said Joanie Silverman, K-8 director of curriculum and instruction: "We are introducing 'Abacus Math' to our youngest students as a way of promoting total brain development. The use of the abacus promotes 'Mental Math' skills, increases intuitive thinking and enhances concentration."

Teachers at the school recently took part in "Abacus Math" training to learn the proper finger movements, place value recognition and addition using the "small friend" and "big friend" rules, which are key words to illustrate mathematical processes.

Amanda Wancier, a kindergarten teacher at the school, said: "I believe 'Abacus Math' will help students gain a concrete understanding of math beginning with basic number sense. The abacus provides a hands-on approach, allowing learners to manipulate the beads to actually visualize each calculation. The children will be actively engaged while performing mental calculations and having fun."

For kindergarten through eighth grade at the school (but especially second through eighth grade), Posnack is greatly expanding a program it introduced last year called "Singapore Math."

According to Silverman, the program is based on the math instruction in Singapore. Not too long ago, Singapore was an impoverished nation with high illiteracy rates, but thanks in part to its math instruction, today Singapore regularly outranks the United States in literacy, graduation rates and trends in international math and science study scores.

With Singapore Math, there is great focus on the right-brain development in areas of imagination, memory power, visualization and analytical abilities. This differs from a traditional math class, where the focus is on left-brain development in the areas of logic, facts and patterns.

Said Silverman, "Singapore Math will help us develop both sides of the brain in our students. If you just practice left-brain activities, your abilities in those areas will increase, but it will do nothing for right-brain development. We want our students doing math activities that strengthen both sides of the brain."

Teachers at the school recently took part in training to re-familiarize themselves with the "Singapore Math" activities.

Brenda Stein, a third grade teacher at the school, said: "Last year, I got the opportunity to introduce Singapore Math to my third graders. The students quickly embraced the idea of conceptualizing math problems. They created bar graphs allowing them to visualize problems, and used base ten to mentally compute without using paper and pencil."

All in all, administrators at Posnack Day School expect great strides in their math performance this year thanks to these two new curriculums.

"Our new math curriculums are guided by a mathematical framework which encapsulates our aim to develop students' mathematical abilities, in particular their problem-solving abilities," concluded Richard Cuenca, head of school.

There will be a demonstration of "Abacus Math" at the school for parents of Posnack students from 7-8 p.m. on Thursday, Aug. 15. Limited seating is available. RSVP to (954) 583-6100, ext. 234.

Copyright © 2013, South Florida Sun-Sentinel