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## Schools back to old-style math

**By Andy Smith** *Staff writer* 

NORTH ANDOVER -- Call it a "constructivist approach" or call it "fuzzy math." It no longer matters, because the controversial Everyday Math program will not be part of the equation when elementary school classes resume in September.

Everyday Math was one of three curriculums under consideration to replace the district's often criticized TERC program, which relies on less memorization and has been used by the schools for about five years. But the committee in charge of selecting a new curriculum unanimously chose one of the others, a more traditional program offered by publishing company Houghton Mifflin.

A dozen classrooms in grades kindergarten through five used one of the pilot programs. In February, all elementary students were tested in math. Students in nine of the 12 classes scored higher on average than their peers in the TERC classrooms.

Of the remaining three classrooms, two scored about equally on average to the TERC students. Pam Lathrop, principal of Franklin School and chairwoman of the Math Committee, said the average scores in the Houghton Mifflin classes were all higher than the TERC classes.

Karen Trowbridge has a third-grade son in Franklin School who was part of the Houghton Mifflin pilot program. She called the program a significant improvement from TERC.

"I'm very happy to hear they selected it," she said. "The one they were using (TERC) asks kids to answer questions using pictures or words, and that was their big focus. I guess it's one of those new kinds of teaching strategies. But this one seems very straightforward. I don't know if it's considered old-fashioned, but you learn what you have to learn in a straightforward way."

The pilot classrooms began in September. By November, critics were already calling for an end to the Everyday Math pilot, saying it is too similar to TERC, which many believe failed students.

TERC embraces an educational approach known to its proponents as "constructivist" -- and to its critics as "fuzzy math." Emphasis is placed on collaborating to talk through problems, and math is put in the context of real-world scenarios. There is less emphasis on basic skills. Strict memorization of multiplication tables, for example, is not a high priority.

Everyday Math also places greater emphasis on critical thinking over rote memorization. It uses a "spiraling" approach that provides a variety of nontraditional methods to accomplish addition, subtraction, multiplication and division. For example, in explaining ways to subtract, Everyday Math teaches a method that bears little resemblance to the 'borrowing' technique that adults would recall from their education.

Among the vocal Everyday Math critics were School Committee candidate Ed Maguire and School Committee member Dr. Charles "Chuck" Ormsby. Both had recommended dropping Everyday Math in November. Yesterday, Ormsby said the best program was selected.

"Of the three math programs, that was definitely the one I was hoping would be picked," he said. "There was one particularly bad program that we wanted to avoid, and it was avoided."

Committee Chairman Daniel J. Murphy was also satisfied with the committee's work, but added that it would have been wrong for Everyday Math to have been dropped prematurely.

"I was pleased that we did not interfere and that despite the request of some, we did not suggest that they take any of the pilot programs out of the running," Murphy said. "Frankly, if we had interfered, I'd be sitting here thinking maybe the well had been poisoned."

The Math Committee included 24 teachers and administrators from the

district, as well as one paid professional consultant. In addition to the February test results, they based their decision on teacher evaluations and input from students and parents.

The committee judged the math programs on a variety of criteria and ultimately assigned each program a score between 1 and 5, with 1 being the highest possible score. Houghton Mifflin received an overall score of 1.2. MacMillan/McGraw-Hill followed with a 1.6. Everyday Math received a 2.8.

Implementing the Houghton Mifflin program will cost the district about \$124,600. Everyday Math would have cost about \$128,000 and MacMillan/McGraw-Hill would have cost about \$275,902. While Superintendent Harry K. Harutunian is searching everywhere for places to cut the school budget, Lathrop said potential cost had no impact on their decision.

Ormsby said that even though he is happy with the decision, a new curriculum should not be considered the magic bullet solution.

"Just having a good curriculum isn't going to guarantee good results," he said. "It's important, but it's also important to have highly trained and motivated teachers and set high expectations for the students and have involvement from their parents. All of those things are necessary if we're going to do well in math."

North Andover still scores higher than the state average in math. In 2004, 51 percent of the town's fourth-graders scored at proficient or advanced levels in math. That percentage was 1 point higher, 52 percent, in the sixth grade. The state scores were 42 percent for fourth-graders and 43 percent for sixth-graders.

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