

FRAMINGHAM TAB

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“We do things that feel different and fun, but are able to supplement and buttress what they’re getting in school. ... It’s teaching them the skills they need to succeed.”

LUCIA CARBALLO • Wilson Wizards program manager

THE magic OF science



**NEW AFTER-SCHOOL PROGRAM AT WOODROW WILSON ELEMENTARY
SCHOOL AIMS TO DRAW STUDENTS INTO MATH AND SCIENCE**

COVER STORY

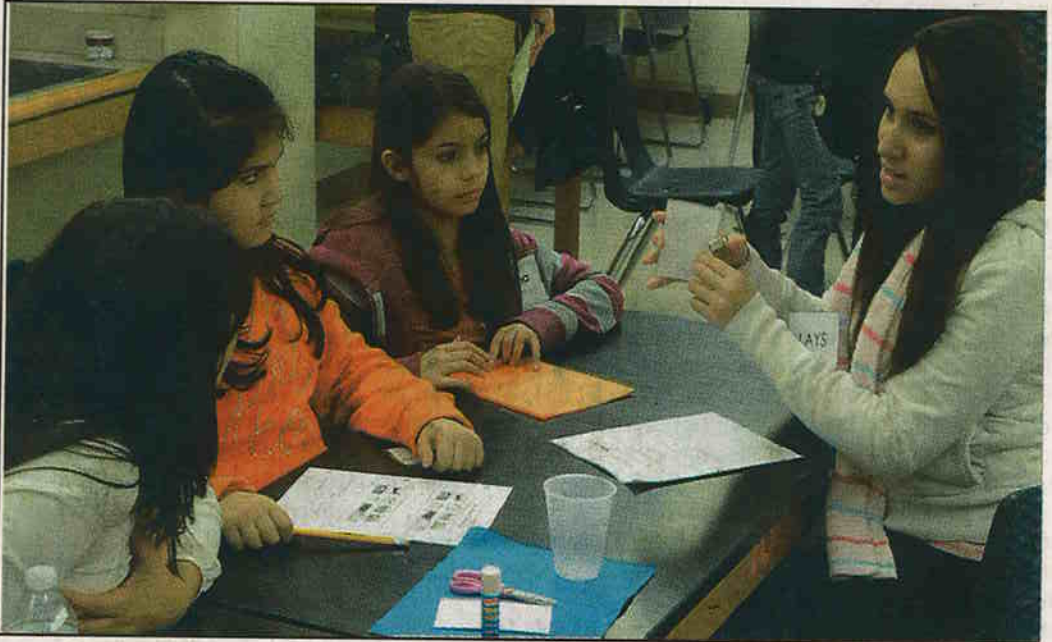


PHOTO BY MARK RSETTE

Volunteer Clara Fernandes helps Rosa Contreras, Marlyn Porter and Arlely Santos — students in the Wilson Wizards after-school program — are shown working on a wind and sail project on Monday.

Science for the fun of it

By Abby Jordan
STAFF WRITER

It took both brain power and wind power for a group of fifth grade girls to send a small boat made out of paper and straws on it's journey across two lengths of fishing line.

Their task, to create a sail that would most effectively power the boat, combined lessons in meteorology and mechanical engineering, while teaching broader lessons on how science and math are used in the world, and how much fun they can be to explore.

The Wilson Wizards, an after-school program run by Jewish Family Services of MetroWest, is held Mondays and Tuesdays and is one of four after-school programs held at Woodrow Wilson Elementary School.

Each week, staff members and volunteers lead the 26 girls in the program through fun math and science activities.

A geometry lesson becomes a quilt-making activity using different shaped material to create the quilt squares, while lessons on chemical reactions or geology translate into making slime or building layers of rock and sediment out of graham crackers and

pudding.

Lucia Carballo, program manager, said the activities exercise students' abilities to brainstorm, create prototypes and design projects, solve problems, record observations and come to conclusions, all while having fun in a hands-on environment.

"We keep things energized and interesting," she said. "We do things that feel different and fun, but are able to supplement and buttress what they're getting in school."

The program is aimed in part at raising the science and math test scores of female students, as a gap exists between how boys and girls at the school score, while test scores for girls also tend to drop between elementary and middle school, said Carballo.

The program is outcome-based, and assessments of students are conducted at the beginning, middle and end of the school year.

By the end of the program, in addition to improving their science and math knowledge, the students are better risk-takers, are more willing to raise their hands in class, are confident they can meet a challenge, Carballo said.

"I see improvement in those types of behavior," she said. "It's teaching them the skills they need to succeed."

On Monday, the Wizards chose from supplies like felt, tissue paper, aluminum foil, Popsicle sticks, plastic cups and coffee stirrers to make their sails in groups of three or four, overseen by a volunteer.

Fifth grade teacher and program staff member Deb Martin asked the Wizards to think what shape, size and materials would make the most effective sail. One group went for blue tissue paper and coffee stirrers, while another tried out aluminum foil and Popsicle sticks.

"The idea is to make a great sail that when we turn on the fan, the boat will move," Martin said.

The Wizards program teaches the girls problem solving skills, builds their confidence and reinforces the lessons they learn in school, as the activities are aimed at complimenting the curriculum, Martin said.

"This is the scaffolding, it gives them a base you can build upon in class," she said. "It's very helpful in the classroom, I see the benefits."