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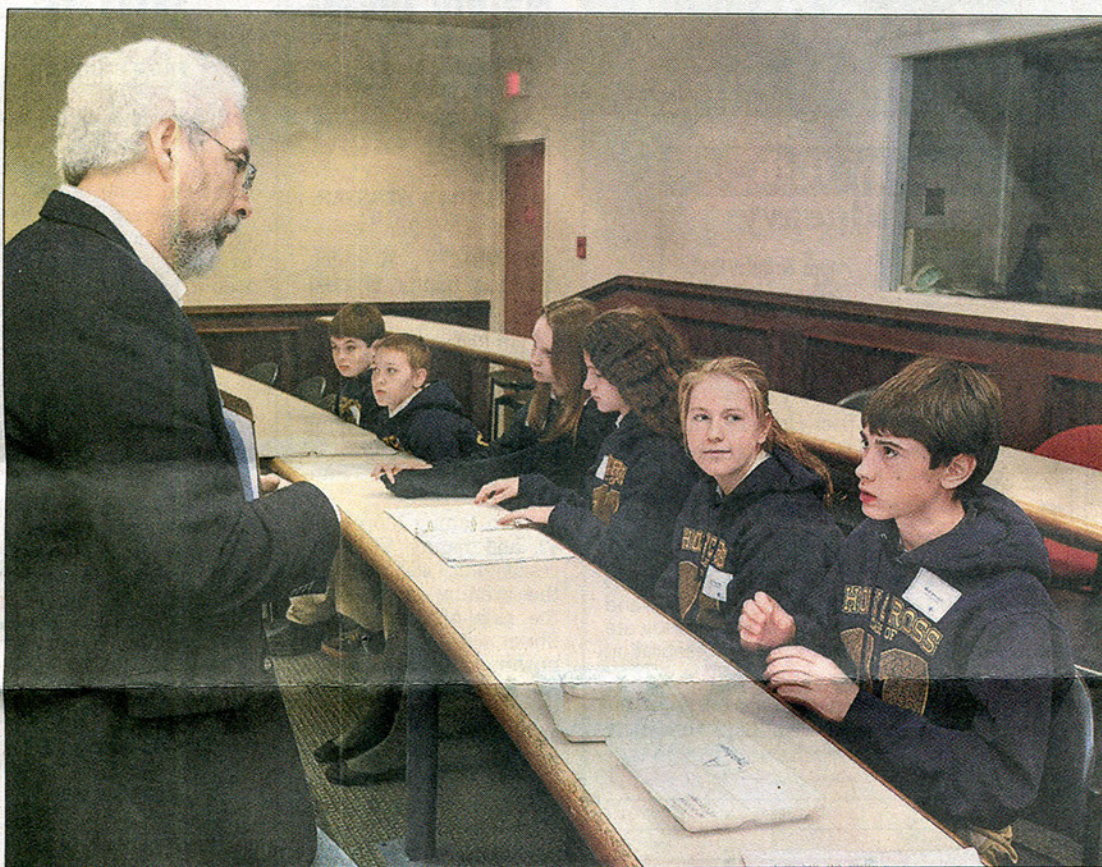
MIDDLETOWN



COMICS &

PLUS

Middle school kids devise offbeat solutions at Monmouth U.



STAFF PHOTOS: BRADLEY J. PENNER

Holy Cross students (from left) Brian Butler of Little Silver, Michael Cornette of Rumson, Julia O'Malley of Middletown, Courtney Labrecque of Rumson, Allie Kazalski of Little Silver and Matthew Brangan of Sea Bright explain their science project to judge Michael Roche.

Students brainstorm in science competition

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By JOSEPH SAPIA
STAFF WRITER

WEST LONG BRANCH — The cafeteria at Rumson's Holy Cross School uses 40,000 plastic foam trays a year, according to the school's Science Club.

The problem, according to the club at the K-8, 450-student school, is that it could take the foam, depending on what kind was used, 50 to 1 million years to decompose.

Presented with that problem, the Science Club went to work solving it.

In recent weeks, the 10-member club took trays made of foam, wheat, potato, sugar cane, palm and cardboard and mixed them with food, leaves and paper, according to Rachel Diaz, 13, an eighth-grader from Eatontown who is club president.

The foam showed no sign of decomposing, while cardboard breaks down in about two months, according to the club analysis.

"They feel so passionate about it, they want the (foam) trays out of the school," said Michelle Tomaino, 32, a Holy Cross science teacher.

The club also reported the foam trays cost about 4 cents each, while cardboard trays run about 2 to 3 cents each. So its solution had both an environmental and cost-savings component to recommend to the school.

With that project, the Holy Cross team won first place in the first Stars Challenge Science Competition held Saturday at Monmouth University. Eleven teams competed.



From left: Students Molly Laterza, Kerrienne Sullivan and Alex Winter of G. Harold Antrim Elementary School in Point Pleasant Beach work on their composting bin for the competition.

BEHIND THE NEWS

The Stars Challenge, a nonprofit organization to advance sixth- to ninth-graders in science and technology, 11 Buttonwood Lane, Rumson; 732-530-1061; www.starschallenge.org

"What impressed me about them (the Holy Cross students) is they did science," said judge Lois Lyons, 65, a retired chemistry teacher from Monmouth County High Technology High School, Middletown. "They were active in the process. They did an experiment."

A Rumson husband and wife — Stephen G. Chappell, 63, and Margaret Ann Chappell, 59, former Bell Laboratories scientists — started the nonprofit Stars Chal-

lenge in 2006 to advance sixth- to ninth-graders in science and technology.

Some students may not be able to attend the formal, multi-week Stars Challenge program, Margaret Ann Chappell said. So, they had the option of participating in the Science Competition, which schools could run as they wished and then attend the one-day final competition, she said.

"This is a way of reaching more students," she said.

Middle school-age children are "curious and science is about asking questions," she said. Also, according to Stephen Chappell, this gives students an opportunity to test the waters before deciding on a science or mathematics track in high school.

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Science

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The science competition drew 60 to 70 students on teams from Holy Cross, Forrestdale in Rumson, Ocean Township Intermediate, Belmar Elementary, Red Bank Middle, Knollwood in Fair Haven, and G. Harold Antrim in Point Pleasant Beach.

The competition — also sponsored by the university and the Telcordia communications company, based in Piscataway — encouraged students to identify a problem, then solve it with science, creativity and teamwork.

"Whenever we squish them, a million more would

come. It's like an SOS," said Jack Hodge, 12, a Forrestdale seventh-grader explaining his teams nonsmelly trap for the invasion of brown marmorated stink bugs.

The bug, when killed, emits an organic odor. So, the Forrestdale kids took a small, plastic beverage container and baited it with an orange coated in over-the-counter pesticide. The bug would seek the orange, eat it and die — its odor contained in the container and masked by the orange scent.

"When they died, they were easy to dispose of," Jack said. "You could shake them out."

Forrestdale produced four other teams whose projects were a solar cellular telephone charger, a demonstration of the benefits of video games, filtering rain water

and a way to encourage the proper disposal of chewing gum.

Belmar Elementary had an idea for its town, adding more street lighting but using brighter, longer-lasting bulbs whose energy would come from solar panels.

"This seemed to be the most beneficial to our community," said Carly Abraham, 13, an eighth-grader. "There are patches of darkness."

Holy Cross won \$1,000, while Ocean Township Intermediate came in second — for an idea to realign the school locker style — and won \$800. The prize money is to be used for science education at each school.

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