

Teachers Participate In 'Build It' Program

WESTFIELD—As a result of training this summer at the Stevens Institute of Technology, two Westfield High School teachers will introduce robotics as a joint venture between the Advanced Placement (AP) Physics and Computer Science departments.

Physics teacher Valentino Scipioni and Computer Science instructor Martin Maruschak participated in a prestigious engineering education and research two-week program this summer at Stevens called the "Build It" project.

According to Stevens, "The program is part of a National Science Foundation initiative to increase the numbers of students pursuing technological degrees and careers, particularly those focused on the development and use of information technology."

During the first week, Mr. Scipioni and Mr. Maruschak worked with teams of researchers from Stevens to learn how to design, build and test underwater robotic vehicles.

In the second week, two students selected from each school joined the teachers, challenging them to use the engineering design process and problem solving skills.

The final day of the program, each

school's robots competed against one another. Superintendent of Schools Margaret Dolan, Instructional Technology Supervisor Barbara Mammen and board-of-education member Ann Cary witnessed the final challenge at Stevens, where the WHS student team took second place among approximately a dozen challengers.

In reaction to this accomplishment, Mr. Scipioni said, "We are very proud of our students. When the students first joined us, they initially showed some anxiety, but they quickly and very naturally dug their heels into the engineering aspect of the project."

The two-year project focuses on the building aspect, engineering and construction of the Remotely Operated Vehicle (ROV) during the first year.

Next year, the project will introduce a computer that can be programmed. This will allow the ROV to become strictly autonomous, and the machine will perform tasks with human interaction once in the water.

In May 2008, all students in Westfield's AP Physics and Computer Science classes will have the opportunity to build the underwater robots and compete with other schools.

"Original source material contains defects"



I, ROBOT... Westfield High School students, from left to right, Thomas Purcell and Charles Cary engineered an underwater robot that took second place in a Stevens Institute workshop; their teachers Valentino Scipioni and Martin Maruschak also attended.

