AIMING FOR WOW

By BERNETTE PEARSON
JOURNAL STAFF WRITER

Compared to students in other developed countries, American eighth-graders are ranked 15th in math achievement and by the time they graduate from high school, students rank near the bottom, according to the National Center for Education Statistics.

In an effort to close that gap, the Jersey City public school district, in conjunction with Stevens Institute of Technology's Center of Innovation in Engineering and Science Education and Honeywell Hometown Solutions, held a summer science training program last week for middle school teachers.

The weeklong program provided 18 teachers the know-how to use interactive tools and techniques to try to help make and math fun for students. Honeywell sponsored the program and paid a stipend to teachers for attending.

"We identified two great potential opportunities in Jersey City," said Tom Buckmaster, president of Honeywell Hometown Solutions.

"One is Stevens Institute of Technology and their curriculum development and expertise. The second thing we identified is Jersey City, like many urban cities, has limited resources. There are teachers who weren't formally trained to teach science and math but are in fact in that role."

Buckmaster said the program in Jersey City is the company's first.

"We hope to ultimately have applications like this in other places in the U.S. and potentially in the world," he said.

Jason Sayres, a former physics teacher in Hackensack, guided the 18 teachers through several experiments and trained them on applications available on Stevens' CIESE Web site, which uses real time data and allows for collaborative projects.

The Internet programs enable students from all over the country to work together on science experiments.

"We found that when students know other students are depending on their information, they are much more motivated to get the experiment right and to follow the procedure carefully rather than just simply turn an assignment in," said Beth McGrath, director of the CIESE program.

The teachers said they definitely learned something from the courses.

"I think historically math and science have been boring to children," said Vivian Laboy-McCredie, a sixth grade math teacher at School 23.

Her friend and fellow teacher, Christine Padilla, an eighth grade science teacher at School 23, agreed.

She and Laboy-McCredie said teachers are most familiar with older teaching techniques, such as handing out worksheets and reading from books. But with the Internet, students can have hands-on, interactive fun with math and science.

She said stirring up interest in science and math "starts with us."

"We're the teachers," she said. "If we can get motivated and get training, the kids are going to learn from us."
PERRY ZLOTKIN, a teacher at School 41 in Jersey City, performs an experiment.