

## Fellowships renew gusto for teaching

### REAL WORLD COMES INTO CLASSROOMS

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A few days' break following the end of school was more than enough for Carlmont High School teacher Dan Raffa.

"After two weeks of summer vacation, I need to be doing something," said Raffa, who teaches science at the Belmont campus.

So he donned a white laboratory coat, safety goggles and purple latex gloves for several weeks this summer, doing molecular-biology experiments at Applied Biosystems in Foster City.

He joined about 70 other educators from the Peninsula and South Bay who decided to become students again for a while instead of taking the whole season off or teaching summer school.

They were chosen for a fellowship program run by Industry Initiatives for Science and Math Education, a Santa Clara-based non-profit that partners with companies and universities to improve teaching and learning in those subjects.

When classes resume soon, the teachers will bring what they have learned as interns to their students. Part of the fellowship requires participants to develop curriculum to be used at their schools.

Raffa learned how to analyze DNA and isolate a gene, using state-of-the-art instruments. "I'm going to have my students grow a plant and look for a specific gene in that plant by analyzing DNA," he said.

Janice Yee, another Industry Initiatives fellow, spent the summer at Lockheed Martin Space Systems as a production coordinator.

"At the lab, I discovered a new career area that I could share with my juniors and seniors as they start to explore their career options," said Yee, a math and special-education teacher at Sunnyvale's Homestead High.

Jennifer Bruckner, Industry Initiatives' executive director, said the fellowship helps "retain teachers by inspiring them and giving them renewed confidence."

Typically, she said, about 10 percent of teachers nationwide leave the field or retire every year. But the attrition rate is about 4 percent for those who have gone through the fellowship, she said.

Manohar Furtado, director of research and development at Applied Biosystems, said the fellowship offers "a great learning tool" for teachers.

In turn, the fellows provide companies and universities with skilled summer employees and a

way to tap into a future workforce.

Most of the fellowship projects focus on science, math or technology, but other work involves fields such as marketing and technical writing.

In its 23rd year, the fellowship pays a teacher \$6,400 for eight weeks and an additional \$1,000 for developing classroom lesson plans. Fellows can also apply for funds of up to \$1,000 for school laboratory supplies.

Raffa acknowledged that the stipend is "good money." But, he said, "the experience lasts a lifetime."