Program Reduces Pesticide Use in Phoenix School District

By Joanne Littlefield

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(From left): Marc Lame, University of Indiana entomologist; Robert C. Briscoe, Jr., Kyrene School District president; and Bruce Tabashnik, head, UA Department of Entomology.

Students flocking back to school last year in Phoenix's Kyrene School District didn't have to leave campus a day or two each month while the schools were sprayed for bugs. An award-winning pilot program in integrated pest management (IPM) has reduced pesticide spraying around buildings while still keeping the pests under control.

For their efforts, the Kyrene School District and the University of Arizona College of Agriculture and Life Sciences Entomology Department were recently presented with an award from the National Foundation for Integrated Pest Management Education.

"Making schools safer for kids by reducing pesticide use is the right thing to do," says Bruce Tabashnik, head of the UA department of entomology. "We're delighted to provide the expertise that makes this possible. It's why we're here."

The approach focuses on identifying key pests and using nonchemical means for keeping them out, such as sealing openings around pipes and crawl spaces, repairing drains and building slabs, and trimming back trees.

An initial three-school pilot project was undertaken in 2000 with assistance from UA entomologists and representatives of the Arizona Structural Pest Control Board. This included a walk-through pest audit, educational programs on exclusion techniques, and sanitation measures such as tracking down and clearing pest habitat. The subsequent 85 to 90 percent reduction in the use of pesticides at the three schools encouraged the district to expand it to all 25 schools.

This is the second award this project has received. In May 2001, the department of entomology was honored by region 9 of the Environmental Protection Agency for "Outstanding efforts to protect children's health and the environment through the initiation of Integrated Pest Management into the Kyrene School District." The award was presented to UA entomology faculty members Dawn Gouge, Kirk Smith, Carl Olson and Paul Baker.

Because of its success, the Kyrene Schools IPM program is serving as a model for other schools in the Southwest, including several on the Navajo Nation. Marc Lame, the University of Indiana entomologist who brought the pilot program to a nationwide audience, has met with the Environmental Protection Agency to discuss the success of the program.

For more information contact Dawn Gouge at (520) 568-2273, or dhgouge@ag.arizona.edu.

Young Students Get a Taste of Applied Technology

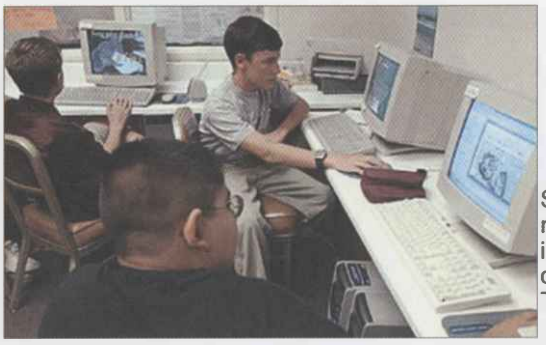
By Robert MacArthur

The Tucson Community Technology Education Network (TCTEN) is a spin-off from a collaboration between the city, county, university, and other agencies to share geographic data. It is a volunteer group whose purpose is to extend geographic data to the public as education. Primary target audiences are neighborhoods, small businesses, and youth.

TCTEN teaches these audiences how to use Geographic Information Systems (GIS), Global Positioning Satellites (GPS), digital photography, and 3D visualization. In a typical application during summer 2002, TCTEN taught youths aged 9 to 13 to map downtown's Scott Avenue for a beautification project (see cals.arizona.edu/agnet/cte/tpac.html).

The students were given a budget and instructed to locate benches, trees, water fountains, and lights to make Scott Street a more attractive urban hike. They interviewed business people and recorded historical sites on Scott to collect cultural data. Their work was turned into an online map, with budgets and explanations for their proposals. They presented their work to an audience of parents, professional planners, and city council members. They were also interviewed for radio and TV, and the work will be included in future planning models for downtown Tucson.

Applications like this are at the heart of TCTEN outreach efforts. The students are not taught technology per se, but given a real-world project to work on, and the technology education becomes a means to solving that end. The University benefits in several ways: its existing data is used in these applications, and new data is collected; students are recruited into UA areas of study; interns from UA gain good practical experience; and the university experiences good public relations.



Francisco Medina © Tucson Citizen

Students map their ideas for downtown Tucson

Other classes are under way: Rogers Elementary is working on an urban habitat model of their neighborhood, primarily mapping for birds; the Santa Rosa Barrio is working on mapping its cultural assets (and also crime) to help track substance abuse; and Sunnyside is measuring wash erosion and run-off. There is promise that someday this type of vertical education model will become much more widespread.

For more information contact Robert MacArthur at (520) 621-2489, robmac@ag.arizona.edu, or see cals.arizona.edu/agnet/cte/tpac.html.