



# green TECHNOLOGY

strategy and leadership for clean and sustainable communities

## Envisioning the Future:

### Dublin School District's Strategic Plan

by Racquel Palmese



The The Dublin Unified School District is nestled in the rolling hills and valleys about 40 miles from San Francisco. Its five elementary schools, one K-8 school, one middle school and two high schools serve about 6,000 students. But that number is climbing. Dublin, among the fastest growing communities in the state, is expected to experience a 60 percent growth rate, or more, in the next decade. Taking on the challenge of planning for explosive growth has led the school district to create a unique strategic plan.

The school board members, with legal, financial, marketing and real estate backgrounds, took a pragmatic approach in working with the administration to develop a plan for their emerging school district. "We tried to identify what the world was going to be like in 15 or 20 years from now, what kids would need to know and to be able to do as they entered the world," said Stephen Hanke, the district's superintendent. "Environmental awareness and stewardship became one of

the components of our strategic plan." The vision for the district is "All Dublin Students Will Become Lifelong Learners." It has been a major influence in a district-wide green building, building renovation and energy efficiency program.

Green elements have been added to renovations at all district schools, funded by a \$184,000 bond measure approved in 2004, and a new building program paid for with state funds and an agreement with a local developer. Both programs are going on simultaneously and in the last five years, Dublin has built a new middle school that currently houses K-8 students and an additional elementary school. Another elementary school will be under construction in early 2010.

"We are trying to implement green technology into all our schools as much as we can," says Kim McNeely, director of facilities. "Every one of our schools has green construction features including energy efficient windows, natural ventilation, energy-efficient roofing

systems, and energy management systems. I guess these are becoming kind of standard tools of the trade in green design now."

#### The Crown Jewel, a High Performance High School

But the crown jewel of the district's building and renovation program is Dublin High School, what Hanke calls a "live rebuild." The school was originally built in the Sixties, "now it's being completely rebuilt," he says. The high school, which houses almost 1,500 students, is in the third of seven phases of renovation. In what the project consultant, Tim Boczanowski calls an "amazing feat," the school remains 100 percent occupied during the construction. "We all live it every day," he says. "It's not a green field site. A building will come down and we'll rebuild a building in its place."

The school board approved a resolution for the high school to meet or exceed CHPS (Collaborative for High Performance Schools) standards. The minimum for certification is

28 points, and the project is already at 35. Says Rick Kendrick, the school's project manager, "We've got natural lighting, superior acoustics, EMS [environmental management systems] that are linked to our lighting controls. Lighting controls adjust to how much natural light is occurring in the building. All of the building materials are low VOC, and when we do any demolition or create any debris from the construction process, all of it goes to a local recycler. We have bioswale systems that collect storm water, and the water is filtered before it goes into the local drainage systems."

Having a consultant onboard to review plans and help with the design features right from the beginning is seen by Kendrick as crucial to the greening efforts. Now, at almost the halfway point, Hanke acknowledges the fiscal and logistical challenges of dealing with multiple ongoing construction and renovation projects. "We have multiple projects virtually in every campus here in the school district. It's a very large undertaking. But this high school is a magnificent project. We're really proud of it."

As students watch their school being deconstructed and then reconstructed, McNeely, facilities director, feels they are aware of the green aspects. "The kids have been actively involved in the project, including videotaping the progress and then internet broadcasting that highlights the green features," she says. "It's an important thing to us, and frankly it's interesting and important to them, too, which always makes it more fun." The students did a presentation for the school board, highlighting the green design features of their high school project.

## Energy Efficiency Means Big Savings

"Every time we do a project," says McNeely, "the key feature is to make it more energy efficient. Many of our buildings are 45 years old, so we've replaced full roofs on three of our elementary campuses. We've upgraded equipment to meet more current energy efficiency standards. We've upgraded duct work, and installed environmental management systems. Every time we get a chance to renovate in some way, we absolutely focus on making it more energy efficient."



An example is the "cool roof" that has been constructed on one of the elementary schools. "We took a group of citizens on a tour of the roof," says Hanke. "I was amazed at the difference in the temperature that was reflected off the building. When we went inside, it was just spectacular, a noticeable drop in temperature. Now all the schools that are getting new roofs will get cool roofs."

For the past 18 months, Dublin has worked with an energy management company and has a part-time employee who is an energy manager. This has resulted in significant cost savings for the district. "The savings has been fantastic," says Hanke. "The energy management program and the green construction pieces that we're putting in place are working together to make the difference. I can tell you that our cost avoidance at this particular point in time is nearly \$500,000. We have dropped our energy consumption more than 25 percent – it might even be as high as 28 percent."

"There is a cost to building green," says Boczanowski. "Money has to be available either by state or local funds of a sufficient amount to incorporate green aspects to start with. And there is a payback period. But over the course of the life of the project and whatever system you're putting in, we certainly think schools in general feel that it's the right thing to do."



McNeely agrees, "We feel like whatever you can afford to do, it's the right choice to make. We're certainly committed to doing that, and I think many districts are. It's a good thing and a right thing to do to the extent that you can afford it as a district."

## Working with the City

What's coming up next for this forward looking district is furthering a dialogue that has gotten started with the city to form a partnership on a construction project. "There's nothing concrete yet," says Hanke, "nothing guaranteed, but there is the potential of them partnering with us to assist with instituting more green technology."

"It could be a joint use project that would not only be very effective for us, but also would send a strong and clear message across the community about how we believe these kinds of projects are important," he continues. Schools are all supposed to be joint use projects, but Hanke and the school board are looking to expand this partnership. To further this goal, a joint committee has been set up that meets with the school board and city council members. Hanke says he works closely with the city manager on a regular basis. ♦

All Photos Courtesy of Dublin USD



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