

## CASE STUDIES

Schools and school districts across the United States have already begun the process of shade planning. This chapter introduces three case studies. The first, Collier County, Florida, demonstrates the power of a single individual to motivate a school board to erect shade canopies over the playgrounds of all of the school district's elementary schools. The second case study, Pinellas County, Florida, demonstrates the fund-raising capacity of schools' parent-teacher organizations (PTOs) and the effect that they can have on decisions of local school boards. Lastly, the story of the collaboration between Shonda Schilling SHADE Foundation and the United States Environmental Protection Agency's SunWise School Program demonstrates the great potential for partnerships that exists for schools and organizations concerned with preventing skin cancer.

### **Collier County, Florida**

Located in Southwest Florida, Collier County encompasses 2,025 square miles and is home to 296,678 residents, according to the U.S. Census Bureau (2004). The January average high temperature is 77.6°, which is also the lowest average high throughout the year. The county's per capita income for the year 1999 was just over \$31,000, approximately \$3,000 above the U.S. average for that year, and 10.3% of the county's population lived below the U.S. Department of Health and Human Service's poverty guidelines.

One reason for the county's higher-than-average per capita income may be the large number of retirees who have chosen to take up residence in this county. Even with the large percentage of residents older than 65 years of age, almost 20% of Collier County's residents are 18 years old or younger.

The Collier County school district is home to 44 public schools including 2 charter schools. The policy-making body for the school district is a five-member school board.

### ***Getting Started***

Teryl Brzeski is a skin cancer survivor. In 1986, at the age of 37, Ms. Brzeski was diagnosed with melanoma, the most deadly form of skin cancer. Her diagnosis motivated her to research the causes of skin cancer and inspired her to do all that she could to help prevent others from developing the disease. "Having a deadly disease and being lucky enough to have a full recovery is a wonderful thing. In my case, it has instilled a passion for being alive and a desire to share cancer prevention information with others."

Ms. Brzeski became especially concerned about her daughter and the other students at Seagate Elementary School. Other Collier County parents were equally concerned about their children's exposure to ultraviolet (UV) radiation. In fact, during the late 1980s, Seagate's PTO raised the \$30,000 necessary to erect a pavilion on the school grounds to provide a shaded area for physical education classes. Other than the covered pavilion, however, much of the playground was not protected from excessive solar radiation, and during recess, children played in areas where there was no shade.

Determined to do something about the situation, Ms. Brzeski began her campaign for a shaded playground by researching options for providing shade on school grounds, eventually presenting her ideas to the Collier County School Board. Along with two dermatologists and a representative from the American Cancer Society, she explained to the school board why it was important to provide children, teachers, and staff with

adequate protection from solar radiation. Their presentation included an architectural drawing of their vision for a shaded playground at Seagate. Informational packets were distributed to school board members, making a clear and convincing medical case for providing sun protection on a daily basis. The presenters told the school board that they were prepared to raise funds themselves, if necessary, to have the shade structures built.

### **Approval and Building Costs**

The school board not only approved the request for Seagate, but also approved the construction of shade structures on the playgrounds of all Collier County elementary schools at a cost of \$2.1 million dollars. In June 2002, Seagate Elementary School became the first county school to be fitted with a shade structure over the playground. By August 2002, before the school year began, 21 more schools in Collier County were fitted with shade structures. Funding for the project was drawn from the school district's capital budget.

Once the school board decided to build the structures, the project was outsourced to a contractor, with specifications that 95% of the playground of each school should be covered by the shade structure. At Seagate Elementary School, the structure covers 8,100 square feet of the playground.

The shade structure comprises multiple canopies. Each canopy is made of a polyethylene mesh fabric that is supported by steel cables and held up by galvanized steel poles, which are secured to concrete pilings. The canopy over Seagate's playground covers a swing set, three slides, and other playground equipment. The polyethylene mesh fabric blocks 90% to 95% of the sun's UV rays. In addition, it allows heat to escape, promoting air circulation. As a result, the temperature beneath the canopies is about 15° lower than that of the ambient air in the middle of the day.



**Seagate Elementary School**

*Students, teachers, and staff at Seagate Elementary are now protected from ultraviolet radiation during recess.*

### **Maintenance**

After the shade structures were built, several potential modifications were identified as necessary to increase the longevity of the structures. For example, additional poles were subsequently added to guard against severe windstorms, and the sails were redesigned and restrung. In 2005 the county incurred additional expenses due to hurricane damage. Consequently, when hurricanes are forecasted, maintenance staff take down the structures. However, contractors must be hired to reassemble them. The county school board will continue their cost benefit analysis and may consider other options in the future.

### ***Continued Efforts***

To date, 25 Collier County elementary schools have been outfitted with shade structures over their playgrounds. The scope of the initial project was 22 schools, but since that time, Collier County has built three more schools and has incorporated shade structures into their design and construction.

Since the implementation of shade coverings in the Collier County school district, other neighboring school districts have seen the utility and importance of providing students, teachers, and staff with protection from UV radiation. For example, in the Lee County school district, Bonita Elementary School has begun fund-raising efforts to build a shade structure for the school. The school's parent-teacher organization has pledged to donate a portion of the funds, and solicitations of businesses and service clubs are expected to raise more. The school expects to pay \$64,000 to install shade canopies over its two playgrounds.

Teryl Brzeski has won her battle with skin cancer and now fights every day to ensure that her daughter and the children of Collier County will not have to face the same battle. Her efforts to educate others on skin cancer and its prevention and to promote sun safety through the construction of shade structures at elementary schools have motivated not only her county to take action but have also influenced neighboring counties to take the same steps.