

Continuing Education

Craig Gaulden Davis' Scott Powell keeps abreast of trends in school design by gaining feedback from administrators, teachers, parents and students—some of which are close to home

— Craig A. Shutt



Scott Powell, AIA, LEED AP

Scott Powell has had close relationships with schools throughout his life, from his days as a school athlete to his teacher relatives and his presidency of his kids' PTA. Today, as leader of the K-12 Education Design group at Craig Gaulden Davis (CGD), he uses those experiences to help create more functional, cost-effective and attractive schools for new generations of students, teachers and administrators.

"Education is critical to our future," says Powell, vice president and secretary at the Greenville, South Carolina based firm. "The key to success is the teachers, but the environment affects everyone greatly. Whatever we can do as architects to create an inspiring space enhances the learning opportunity."

Powell has considerable background for his perspective on educational facilities today. He played football, basketball and ran track in high school, while his wife and sister both teach school. "I'm really the only one in my family who went to college and didn't become a teacher," he says.

Today, he and his wife are raising two high-school aged boys who play varsity basketball, while their younger son is an all-state cross-country runner and plays on the state-champion

baseball team. "It's fun to follow them playing so many things and having such success," he says.

Greenville's one-county school district is the 49th largest in the country and the largest in South Carolina. Their facilities were boosted by a massive \$1-billion capital-construction program that began in 2002, aimed at upgrading the entire district's school facilities. It involved 70 schools, including construction of 20 new schools and revamping or expanding another 50. CGD received the largest contract in that program, a \$100-million commission to design three new schools.

By the time that commission arrived, Powell had begun designing schools and discovered it was where his passion lay. After graduating from Clemson University in 1987 with a bachelor's degree in design, he began his career at CRS Sistine in Greenville. There he helped design a huge military base in another region. "I realized that wasn't what I was meant to do," he says.

A year later, he moved to Odell's Greenville office, where a number of projects, such as hospitals for Shriners International, encouraged more creativity. Even so, something was missing. "As a young guy, I was doing the drawings for the projects, which were in other states, so I didn't see how they turned out," he explains. "I realized I wanted to work for a locally based firm doing local projects and show my children what I did."

He joined CGD in 1993 and worked on a variety of projects—libraries, religious facilities, performing arts, even residential. "It was a little bit of everything," he says. The first school com-



The A.J. Whittenberg Elementary School of Engineering in Greenville, S.C., features a variety of sustainable-design features aimed at achieving Silver LEED certification. They include precast concrete insulated sandwich wall panels, which are left exposed on the inside to show students how buildings are constructed.

mission came in 1998. The firm had done school designs early in its formation, but that work had tapered off some years earlier. Today, after a number of high-profile designs, schools account for about 70% of CGD's commissions.

Powell's work with the projects began to grow, as did his involvement on the personal side. As his children entered school, he quickly involved himself in their programs, becoming the first male president of the PTA in 22 years. "It was very important to me to get involved with my children's schools and know what was going on, both personally and professionally," he says. "You become familiar with the teachers and can offer support."

But there comes a time when kids would prefer not to run into their parents at school. So Powell shifted his efforts to related professional organizations. "It's also important to get involved with professional groups to promote the profession and perpetuate it," he says. He has served with the American Institute of Architects' Greenville chapter as well as the AIA state board.



The Salvation Army's Kroc Center shares the site of the AJ Whittenberg Elementary School. Also constructed with precast concrete wall panels, the center provides a pool for students and houses a Boys and Girls Club with after-school and summer activities. Powell calls it "the best-looking precast concrete building in Greenville."

"There are so many opportunities that you really have to look at where your passions lie," he says. "I've found that I really enjoy designing schools, so I wanted to be involved in that work on a larger scale." As a result, he serves on the board of the South Carolina Chapter of the Council of Educational Facilities Planners International (CEFPI) and has run its School Design Awards program for the past two years. "It's fun," he says. "I get to see a lot of different ways to overcome challenges."

Designs Evolve

Through the years, Powell has seen changes in what administrators, teachers, parents, and students need from schools. "It's important to understand all of those roles and how they function," he says. That becomes challenging, he notes, as curricula are adapting to student's individual needs. "No two teachers teach the same way, and they sometimes teach two different students in different ways," he says.

Flexibility in design has become important, as schools differentiate by knowledge levels rather than grades. "Classrooms have to be more flexible to fit more stations into the space." That creates challenges, as South Carolina dictates a minimum classroom size of 800 square feet, he notes.

"We emphasize making rooms multipurpose, but that requires a lot of storage space so they can be adapted for each use, and administrators don't like to pay for storage," he says. "But it makes the rooms flexible if there are teaching walls and cubbies for each activity rather than different rooms for each."

Much of his direction comes from the administrators and teachers, and some are more open to new ideas. "Some administrators are focused on what has worked for them in the past, while others are anxious to try new ideas as soon as possible and experiment more."

Powell thrives on the programming stage of design, getting involved in the intensive process of figuring out how the building is going to work, how people will use it, and how well it flows from space to space, he says. "A school is much more than just a building. It's an innovative, functional space that engages people—opening their eyes, stimulating their senses and, in some cases, changing their lives."

Educational efforts often carry over to the building's design, especially in the use of sustainable-design techniques. Those efforts have been focused on higher-education facilities rather than K-12 buildings, he notes, but the interest is there. "They want sustainable-design concepts but don't want to pay for the certification, even if they could get it," he explains.

As a result, he encourages schools to add green roofs, water-conservation equipment, and thermal-performance techniques wherever possible. "They become not only functional parts of the school but learning tools, too. We can teach the children about these ideas and they can go home and teach their parents."

Precast concrete can aid with those thermal techniques in particular, and Powell has incorporated those on several projects. The three major school projects designed under the Greenville program, done in conjunction with Perkins+Will's Chicago and Charlotte offices, featured precast concrete insulated sandwich wall panels with a variety of façade treatments, including the traditional red brick, which was embedded into some of the panels.

Another example is the A.J. Whittenberg Elementary School of Engineering in Greenville, where administrators asked for a precast concrete façade. "That was fine with us, as we had experience with it and knew it would work well," he says. The school is the first engineering technology elementary school in South Carolina, a trend

Powell is seeing more often. "Parents have more choices today, especially in specialized magnet schools like this."

The school's insulated precast concrete walls, with rows of punched rib-bon windows, are attached to a steel frame, which has been left exposed on the inside. "It helps explain architecture and construction to kids interested in engineering," he explains.

Security Demands Increase

Another key interest of administrators these days, unfortunately, is increased security and how school designs can enhance student safety. "Critics say schools have too much glass area for security purposes, but you can't have a school looking like a prison," he says. "You can't send that message. The school has to interact with the community. It can be frustrating. You can't design to stop every crazy person who might be out there."

With the firm's strong educational background, commissions are coming from further afield today, including a series of three schools in Charleston, about three hours away. Projects also are underway in Aiken and in upstate South Carolina.

"I hope to continue to design schools, and I'm encouraged by the amount of work we're getting with libraries, especially in Georgia," he says. Two have recently been completed, with three more planned in Fulton County, Ga. "It's very different work from schools, but there are similarities in the educational purpose and the variety of activities used."

As a result of the changing demands and expansion of project types, Powell continues to look for feedback from all sources. That includes those closest to home. "It's great listening in when we take our kids to basketball games with their friends," he says. "I listen to them arguing over which gym they like best, Woodmont or Carolina. I enjoy hearing what points they pull out as important to them."

The source of their satisfaction doesn't remain a mystery for long, he notes. "My kids are usually pretty quick to point out that I designed both of them. So I can't lose in that discussion." 