

The Case for 21st-Century Schools

INTANGIBLES SUGGEST NEW ENVIRONS ARE HELPING D.C. STUDENTS.

AT THIS TIME, NEARLY ANYONE FOLLOWING national trends in public school modernization is aware of the monumental program occurring in Washington, D.C. The city has seen dramatic changes in the last 20 years, drawing an influx of new residents with diverse socioeconomic backgrounds and a desire for modern-day urban life. Naturally, the public school system has been a centerpiece of the changing times and desire for improvement. New residents want to plant roots and have a high quality education for their children without the price tag of private education. And longtime residents want to see improvements in an educational system that has had struggles in the past.

In 2007, the city responded with a 15-year, \$3.5-billion plan to create school buildings that would become landmarks in all neighborhoods across the city. The program currently implements nearly \$300 million in design and construction annually. In a district of 4,000 teachers, 111 principals and 47,000 students, that is approximately \$6,300 per student each year. By comparison, New York and Los Angeles spend \$2,000-\$2,500 annually by the same measure. The investment is considered monumental, and so are the expectations.

The modernization program will touch every building in the city in a variety of ways. Outdated mechanical and electrical systems are replaced by sophisticated controlled systems to increase user flexibility and comfort. All classrooms have interactive whiteboards and enhanced listening systems to fulfill a commitment to use the latest technologies available. Auditoria are outfitted with acoustical treatments and audio-visual systems to support college-level performances. High schools are outfitted with swimming pools and secondary practice gyms to accommodate more student athletic programs. Geothermal well fields, green roofs, rainwater-harvesting cisterns and LED light fixtures are all employed to reduce energy costs over the buildings' lifecycles.

The new Dunbar High School was the first project to incorporate a power purchase agreement where a third-party vendor provided solar-panels at no initial cost to supplement the building's power supply. The improvements being made are not only widespread, they are keeping up with — and sometimes setting — the design trends of the day.

When results of 2012-2013 statewide tests showed students earned

their highest test scores ever, and largest yearly increase since 2008, D.C. Public Schools made headlines. More positive news came in December, 2013, when a national study showed DCPS students made more progress than any other major urban school system. With overall proficiency rates now around 50 percent, most agree there is room for improvement. But the growth is notable and an 18-percent increase in test scores since 2007 is an encouraging sign.

Like any school district going through changes, it's hard to say how much of the progress can be attributed to the physical enhancement of the schools themselves. But there are indicators that the program is having a positive effect. When observing the Top Ten Gainers in Math and Reading scores in 2013, six out of the 10 in each category were schools that received modernization work in recent years. Considering the program has modernized only four out of 10 facilities to date, this indicates that modernized facilities

may be making greater strides since they represent a greater proportion of the top gainers.

In a more striking example, the 10 elementary schools (grades PK-5) and education campuses (grades PK-8) that received modernization work right before the 2012-2013 school year increased test scores by an average of 10 percent — a figure notably higher than the already impressive 3.7-percent increase realized citywide. Both of these examples indicate strong gains in the younger grades,

where one might expect changes in the learning environment can have their greatest effect.

As the city continues its journey of revitalization, DCPS is executing its Capital Commitment strategic plan to focus on improving test scores and graduation rates, but also student enjoyment of their school environments. Although there may not yet be substantial data to clearly indicate that students are doing better because of their new environs, the intangibles suggest a difference is being made. Hundreds of residents attend summertime ribbon cuttings to celebrate their new neighborhood facilities. Teachers and staff express delight and a renewed sense of purpose in their efforts to provide a great education for all students. So while time will tell just how much the investment in facilities positively affects the DCPS educational experience, one thing is for sure: the people of the District of Columbia — be it the residents or the policymakers — are certainly counting on it. **SPM**

As the city continues its journey of revitalization, DCPS is executing its Capital Commitment strategic plan to focus on improving test scores and graduation rates, but also student enjoyment of their school environments.

>> Michael Quadrino, LEED-AP, is project manager and **Nikkia Martin** is assistant project manager for Brailsford & Dunlavey, Inc. in Washington, D.C. and active members of CEFPI. They can be reached at mquadrino@programmanagers.com and nmartin@programmanagers.com.