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Trends in Urban School Design

By Ima Dezina

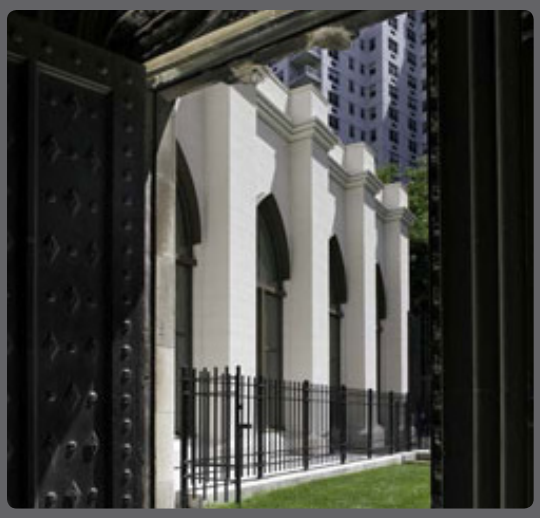
"For schools to achieve effective facilities, stakeholders have to assess their challenges, set a plan to resolve those challenges, and build a program," says Joel K. Sims, AIA, president of Sims Architects, Lancaster, Pa. "As numerous schools work through this process, trends start to be noted from school to school."

Indeed, trends in school design come and go, just as they do in the fashion industry. Here's a fresh look at trends in urban school design.

Quality Reigns

"It has been a gradual build up but, unquestionably, it is really important to have high-quality design," says Jacob Alspector, RA, principal of New York-based Alspector Architecture. "It has become the norm." Indeed, he points out a time in the past when the reigning attitude was simply, "Let's get it done." Not any more.

Peter Winebrenner, AIA, LEED AP, principal and vice president of Baltimore-based Hord Coplan Macht, agrees, pointing out a specific factor that has to be addressed on the road to high-quality design: the tough decision between rehabilitating and building new. "There is pressure in working toward LEED



Grace Church School | New York, NY

Grace Church School | New York, NY

certification to reuse," he says, "so we are seeing and will continue to see stronger attempts to rehabilitate existing schools."

One explanation for the trend toward high-quality design is because the urban environment is so competitive. "At least in Manhattan, the city has become a more desirable place for families, so there has been growth in the school-age population," says Leo J. Blackman, AIA, of New York-based Leo J Blackman Architects. Because the public schools are slower than private schools to offer a high-quality education, parents are looking to private schools. The challenge is that there simply isn't new building space available to keep up with the competition for students, so administrators look high and low for available space.

Take Grace Church School Gymnasium in New York, for example. It was built below ground, extends under the sidewalk and is just a few feet from the main subway line. "Urban schools are hybridized around an urban fabric," says Alspector, "and you find space where you wouldn't imagine you had it."

"Now, the quality of design, the quality of the space and the thought behind it is critical from the teachers, administrators, students, and parents," says Alspector. "Everyone realizes its value, and it'll be more and more important as we move forward."

Sustainability Is In

Closely related to high-quality design is sustainability, and urban schools have jumped on that bandwagon. "In New York, this is a real change from five years ago," says Samuel G. White, FAIA LEED AP, partner with Platt Byard Dovell White Architects, New York. "New York was really behind, but has now caught up with the rest of the world, at least as far as expectations go."

"Sustainability involves all the aspects of design that have become more and more the norm," says Alspector, "including materials, daylighting, energy conservation and an overall building flexibility so that facilities should have what is termed by some as 'long life and loose fit.' It all works together to allow a building to be used for many generations without tearing it down, the idea being to design and build for keeps. This hasn't been as prevalent in this country as it has elsewhere in the world."

One explanation for the sustainability trend is special-needs students. "A lot of special-needs children are susceptible to indoor air quality challenges," says Ray H. Dovell, AIA, partner with Platt Byard Dovell White Architects, New York. "LEED addresses indoor air quality, for instance in requiring low off-gassing materials."

Another explanation is cost. Renovating an existing facility is less expensive and requires fewer materials. "It reduces the amount of physical work, saves time, and maximizes resources," says Alspector. "Communities also find it more

Village Community School | New York, NY
Neighborhood context is important to urban schools

Village Community School | New York, NY
A custom built reception desk greets students and visitors

Village Community School | New York, NY
The spacious auditorium serves the students and the community

palatable to not have to get used to a new structure. People don't argue with giving life to an existing facility, especially if it's a school."

"There's a saying that the greenest building is the one that's already there," concurs Blackman. "We took that seriously when working with the constituents of Village Community School in New York." In this project, the existing facility was much loved, but additional space was needed. The solution was to simply add to the existing facility, via a trapezoidal corner lot. The new facility maximizes every inch of space. Classrooms were placed where they would receive maximum daylight. An auditorium is half below grade, and its roof is used as a play yard for younger students.

Another example of an urban school boasting sustainability is Poly Prep Lower School, which was actually the first school in New York to achieve LEED certification when it was completed in 2007. The project included an 18,000-sq.-ft. addition to a 22,000-sq.-ft., 1880s-era mansion. The new building accentuates the Victorian culture of the old building in a contemporary vocabulary. "A tremendous amount of attention went to creating classrooms with an abundance of daylight and using natural materials," says White.

Also in New York, administrators at the Reece School were looking for an ordered, comprehensive environment for their new building, with as much daylight and quality interiors as they could afford. Because the school serves special-needs students, the overall goal was to serve the students. "We focused on low off-gassing, natural materials within the environment," says Dovell. "The school has experienced fewer sick days from both staff and students – it's a healthier environment with extremely tangible results."

Grace Church School Gymnasium also boasts sustainable aspects. The underground gymnasium's roof is green. The space itself is energy efficient simply because it is below ground. Recycled rubber flooring was used for the gym and circulation floors. Above ground, a garden was enhanced and street trees were added. "While we didn't go for LEED certification because the project moved so quickly," says Alspector, "we were conscious of it in our decision making."

Anchoring the Community

A third urban school trend is serving as community anchors. "Urban schools need to fit into their neighborhoods," says Blackman. "They need to give something back to get past the 'not in my backyard' attitude, which is very big in New York. Schools need to be carefully designed to suit the functional needs of the community within the school but also the community outside the school."

Fitting in is becoming more important as people are moving back to urban areas. Giving back, notes Winebrenner, allows for strong communities. And giving back is just as important in poor urban areas, where a school becomes the heart of a community – a symbol for the community to rally around.

The Reece School | New York, NY
The facade stands out in the streetscape

The Reece School | New York, NY
Main entry from the sidewalk

Urban schools are giving back generously, with their gymnasiums, cafeterias and computer labs being used in non-school hours. "In an urban environment, that's appropriate," says Winebrenner. "It helps keep schools vibrant, and there's an added level of safety in not emptying the building at the end of the school day."

Urban schools are also giving back in that they're being designed in partnership with other organizations, such as libraries, health centers and public centers. The facilities are mostly separate, but may share common areas, such as a cafeteria or gymnasium. This trend allows tight urban space and ever-dwindling public dollars to be maximized.

Finally, urban schools are moving toward a K-8 model. Allowing students to be in the same building for nine years aids continuity – it helps parents identify with a school and solidifies a community. It allows older students to mentor younger students. "We're seeing more of them in urban environments, particularly," Winebrenner observes.

Walker Jones Pre-K-8 School in Washington, D.C., is an excellent example of a school anchoring its community. The school is replacing two existing schools as part of a revitalization initiative. "The motivation is, 'Let's get this community back on its feet, and let this school be the symbol of the community's renovation,'" says Winebrenner.

More specifically, the facility includes a branch of the public library. It also includes a community recreation center, in which there's a shared gymnasium but separate locker rooms and offices.

Similarly, the Grace Church School Gymnasium serves as a community anchor in that the space is available for community athletic groups and a nearby college, which does not have an athletic facility but does have athletic teams.

High-quality facilities that are sustainable and anchor their communities are current trends in urban school design. With input from all stakeholders and the consideration of these trends, it's possible to design and build schools that meet the needs of their constituents – the students.

David Douglas High School | Portland, OR

Grace Church School | New York, NY
From inside it works as a typical gymnasium