K-12 EDUCATIONAL FACILITIES DESIGN AWARDS / 2009

Jurors' Comments

The jury examined 47 submissions to this year's K-12 Educational Facilities Design Awards program. This biennial design awards program was started by the BSA in 2002 and is co-sponsored by the AIA New York Chapter.

The work we viewed this year included both public and private projects that were all competent examples of educational-facility design. Our overall response to the submissions was favorable.

We think all entries should include photographs of the classrooms, where children spend the vast majority of their time. We were thrilled by the submissions that showed children and teachers in these spaces.

It appears as if many architects are spending most of their project budgets on the exterior, which makes for generic interiors. This is an unfortunate indicator of where the architect's cultural values lie. That said, we think it would be helpful if each entry had shown a photo of every aspect of a project's exterior to allow for an honest assessment: front, sides and rear (including loading docks).

Most entries exhibited traditional school planning, with classrooms in rows and other functions (such as administration, guidance, arts and technology) highly separated and apparently not highly related. A few designs were cited for more progressive educational thinking, such as relationship-building efforts of small learning communities and the strategic location of guidance counselors' offices or administration in the learning areas, where the students are.

Entries showcasing facility renovations should show the floor plan for the existing conditions so we can understand the project's scope.

We also encourage designers to show more ingenuity to negate the effects of large schools. Budget doesn't need to limit imagination when it comes to intentionally trying to make smaller learning communities within bigger schools.

The lack of public schools in the mix was disheartening. The jury made a special effort to recognize public schools of meritorious design but had to choose from among the few publicly funded Massachusetts schools submitted. Sustainable design elements in all types of submissions also were limited.

In the end, we identified 12 projects to honor this year. We believe these projects represent examples of appealing design that supports teaching and learning through thoughtful architecture.

The Jurors
Robert J. Taylor AIA, Taylor & Burns Architects, Boston
Katherine Craven, Massachusetts School Building Authority, Boston
Clifford Gayley AIA, William Rawn Associates, Boston
Frank Locker, Ph.D., REFP, AIA, Frank Locker Educational Planning, Dover NH

HONOR AWARDS FOR DESIGN EXCELLENCE

Children's School (Stamford CT)

Designed by Maryann Thompson Architects (Cambridge MA) in collaboration with Ingrid Strong (Cambridge MA) with project team members Viking Construction (contractors, Stamford CT); Richmond So Engineers (structural engineers, Watertown MA); Van Zelm Heywood & Shadford (M/E/P/FP, West Hartford CT); Redniss & Mead (civil engineers/surveyors, Stamford CT); The Green Roundtable (green/LEED consulting, Boston); Schirmer Engineering (code consultants, Framingham MA); Collective Wisdom Corporation (specifications writing, Weston MA); Construction Consulting Group (owner's representative, Stamford CT); and Chuck Choi Architectural Photography (photography, Brooklyn NY)

This "one-room" schoolhouse for a PK-3 Montessori program replaced an existing concrete-block schoolhouse with a beautiful, inviting place for children. Sited to take advantage of passive solar heating and natural cross-ventilation, the building offers exterior views from nearly every spot inside, with daylight dappling the floor in two-thirds of the space. The design eliminated the need for air conditioning; radiant heat warms the floor, where children of this age group spend much of their time learning and playing. In the Montessori program, children move freely through a large open space, visiting different discipline areas (art, science, math, etc.) staffed by specialized teachers. We love how roof planes subtly tilt against one another, breaking up the visual landscape with shafts of daylight and creating smaller areas that are a perfect scale for children of this size. We also appreciated the stick work, wood decks and the site plan, which offers great connections to the landscape—including a stone-paved entry path through the surrounding woodlands. Kudos for taking a known school type and evolving it into something unexpected and new.

The Park School (Brookline MA)

Designed by Chan Krieger Sieniewicz (Cambridge MA) with project team members J. Calnan & Associates (construction managers, Quincy MA); Souza, True & Partners (engineers, Watertown MA); McPhail Engineering (geotechnical engineers, Cambridge MA); Richard D. Kimball Company (M/E/P/FP engineers, Andover MA); Vincent DiIorio (electrical engineers, Norwood MA); Tetra Tech Rizzo (traffic engineers, Framingham MA); Stantec (site, permitting and civil engineers, Boston); and Christian Phillips Photography

This addition and renovation project addressed the need for new classrooms and updated learning spaces while completely elevating the value of the school as a whole. To avoid detracting from the original architecture of the PK-9 independent school, the design placed a new wing alongside the blank north facade of the gym and made the fully renovated and expanded library the heart of the school. The ground floor plan reveals how small the space is, yet the planning makes everything feel much bigger through the use of materials and borrowed exterior views. Quirky touches include a small kidney-shaped stage in the library for browsing, reading and performances as well as playfully arranged window patterns that create child-scale window seats and display shelving. The design transforms the rear of the school into a new inviting entry and creates a fourth wall for an existing courtyard that now also functions as an outdoor room. This is not a normal or easy approach for adding a wing to building: it is brilliant with a great added value for the campus.

AWARDS FOR DESIGN EXCELLENCE

Adolescent Center at St. Ann's Home & School (Methuen MA) for St. Ann's Home & School

Designed by Signer Harris Architects (Boston) with project team members Barr & Barr Builders (contractor, Framingham MA); Richard Burck Associates (landscape architects, Somerville MA); AHA Consulting Engineers (M/E/P engineers, Lexington MA); Lim Consultants (structural engineering, Cambridge MA); Nitsch Engineering (civil engineering, Boston); and R. W. Sullivan Engineering (code consultants, Boston).

This new adolescent center for students with social, educational or behavioral needs rises to the high aspirations of the larger school to which it belongs. The project includes dormitory housing, classrooms and recreational areas. Although the building

features a simple stacked-box design, changes in the exterior's palette of materials celebrate the multiple uses within and give the building dynamic appeal. The site plan fosters a cohesive campus by locating the Adolescent Center's primary entrance adjacent to the school's main building, creating a central landscape quad between the buildings. Within the building, an iconic staircase functions as a vertical circulation element between the first and second floors and a gathering place for students. The very cost-effective design taps only a few small indulgences, but these make a large impact. For example, clerestory windows offer loads of daylight and a mahogany barn door on the gymnasium rolls open so games can be watched from the outdoor amphitheater.

The East Harlem School (East Harlem NY) for

Designed by The Gluck Architectural Collaborative (New York)

This design for the first independent school to be built in Harlem in decades makes great use of a tight site. By packing a tall building into one corner and creating a playground around it, the design uses the entire lot effectively. The exterior features glazed brick and metal panels, which are both easy-to-maintain and graffiti-proof. Inside, the building's mixed uses are handled gracefully, with the middle school's core placed just right. The lower floors are linked by a formal public stair visible from the street, and they house a cafeteria, gymnasium and lobby. The interior has efficient circulation patterns, and space opens up on the top floor to create a commons area.

Family Court Conversion (Brooklyn NY) for New York City School Construction Authority

Designed by Gran Kriegel Associates Architects + Planners (New York) with project team members DVL Consulting Engineers (M/E/P/ FP engineers, Hackensack NJ); Robert Silman Associates (structural engineers, New York); Mike Wein (civil engineer, Monroe Township NJ); Shen Milsom & Wilke (acoustical consultants, New York); Harry Skolodz & Associates (kitchen consultants, Bayville NY); George D. Cattabiani & Associates (elevator consultants, Northvale NJ); and M.A Angeliades (contractors, Long Island NY)

This conversion of a family court into two high schools sharing a single facility demonstrates tremendously creative problem-solving. The existing building was gutted and reconfigured to accommodate the new schools, which are stacked

vertically. However, some major constraints remained, including the existing stairs at code capacity and limitations on expanding the overall floor area. In the conversion, elevator shafts were combined to accommodate larger ADA-compliant cars, and mechanical, engineering, plumbing and fire-protection systems were updated. The formerly somber and deteriorating limestone exterior was over-clad with an innovative, lightweight, thin-stone/aluminum honeycomb facade system. New windows introduce some color, and a new double-height glass entry expresses the schools' identity at street level. Open to the street, the lobby is recessed to provide a sheltered arrival area and features bas-relief panels salvaged from the building's original exterior. A rooftop addition houses a flexible multipurpose room that can serve as a gym, an auditorium or both at the same time. How inspired!

Rumney Marsh Academy (Revere MA)

Designed by Drummey Rosane Anderson (Newton Centre MA) with project team members RF Walsh Project Management (construction manager s, Boston); GVW (general contractors, Boston MA); John G. Crowe Associates (landscape architects and civil engineers, Belmont MA); Foley Buhl Roberts &Associates (structural engineers, Newton MA); Griffith & Vary (M/E/P engineers, Wareham MA); 3SI (technology consultants, Northfield MA); and Tavares Design Associates (food service consultants, Arlington Heights MA)

The thoughtful, precise, restrained design for this new public middle school resulted in one of best-designed, cost-constrained projects we've seen. The scarcity of buildable sites in Revere required that the recreational fields next to the high school be used for the construction of this building (a common practice on school sites in Massachusetts). This smart-growth development required a compact footprint and careful reconfiguration of the athletic fields. The designer knew where to invest to get "good mileage" from architectural gestures. Detail and higher-end materials are used judiciously to emphasize the main entry, library and administrative offices. Light saturates these spaces, and curved forms and intersecting volumes distinguish these areas from the rest of the building. A simple curve at the main classroom corridor offers a relief from the restrictive density of a typical double-loaded corridor—and results in a "village square" near the teacher planning rooms. A lighted synthetic-turf field, which extends the playing season, was included as part of the project to mitigate the loss of one field from the athletic program. All in all, a lot of fun.

St. Hilda's & St. Hugh's School Science Department Renovation and Addition (New York)

D*esigned by Murphy Burnham & Buttrick Architects (New York)* with project team members Thomas A. Polise Consulting Engineers (M/E/P engineers, New York); Landmark Facilities Group (M/E/P engineers for greenhouse, Norwalk CT); Robert Silman Associates (structural engineers, New York); Design 2147 (expediter, Brooklyn NY); Melanie Freundlich Lighting Design (lighting design, New York); HI Interiors (contractors, New York); Rough Brothers (greenhouse contractor, Cincinnati); Adrian Wilson Photography (greenhouse photography); and Albert Vecerka/ESTO (science interior/classrooms photography)

This inexpensive renovation and addition at a New York City private school created a science department with loads of boutique details and style. Three classrooms/laboratories were designed to each serve a particular age group (early childhood, grades 2-5 and grades 6-8), with the heights of tables, chairs, sinks and equipment scaled to the appropriate sizes and heights. Furniture is moveable to ensure the spaces remain flexible. Brightly colored, framed displays showcase dioramas of live animals, shell specimens and plant life. A salt-water aquarium serves as a "window" between the hall and the early-childhood classroom. Floating and three-dimensional displays give the space depth and make small areas feel voluminous. The working greenhouse uses sophisticated environmental controls for the motorized shades, vents, LED grow lights, temperature and humidity. Overall, this design runs contrary to conventional thinking about schools…but the whole thing feels so right!

Garthwaite Center for Science and Art (Weston MA) for The Cambridge School of Weston

Designed by Architerra (Boston) with project team members Skanska USA Building (owner's representative, Boston); Consigli Construction (construction managers, Milford MA); Energysmiths (environmental design consultants, Meriden NH); Souza, True and Partners (structural engineers, Watertown MA); Van Zelm Heywood & Shadford (M/E/P/FP engineers, Farmington CT); Wastewater Alternatives (wastewater management, Plymouth MA); Andropogon Associates (landscape architects, Philadelphia); Haley & Aldrich (geotechnical engineers, Boston); Green International Affiliates (civil engineers, Medford MA); Vermeulens Cost Consultants (cost estimators, Richmond Hill ON); Kalin Associates (specifications writer, Newton MA); Chuck Choi Photography (photography, Brooklyn NY); and Bruce T. Martin Photography (night photography, Natick MA)

By doing more with less, this design of an independent school for grades 9 through 12 has created an interactive space uniting the arts and science is one building. We loved the flow of the interior, which proudly exposes the HVAC and structural systems and centers on a sunny, two-story atrium offering views of surrounding treetops, a green roof and an indoor wetlands garden. The bioclimatic, high-performance aspects of this project range from natural ventilation to composting toilets. Renewable energy sources include a passive solar design and a wood-pellet-fueled boiler that meets 80 percent of the building's heating needs. Bravo for getting over the right-brain/left-brain cultural hurdle by encouraging art and science types to talk to each other.

CITATIONS

CITATION FOR SUSTAINABLE DESIGN

New Science Center (North Andover MA) for The Brooks School

Designed by Architerra (Boston) with project team members Consigli Construction (construction managers, Milford MA); Souza, True and Partners (structural engineers, Watertown MA); Rist-Frost-Shumway Engineering (M/E/P/FP and civil engineers, Laconia NH); Andropogon Associates (landscape architects, Philadelphia); Vermeulens Cost Consultants (cost estimators, Richmond Hill ON); Haley & Aldrich (geotechnical engineers, Boston); Demand Management Institute (energy modelers, Wellesley MA); Kalin Associates (specifications writer, Newton MA); Environmental Health and Engineering (commissioning, Needham MA); and Chuck Choi Photography (photography, Brooklyn NY)

This newly constructed independent science school for grades 9-12 features a strong integrated sustainable design that is both easy-to-understand and a valuable teaching tool. The site plan preserved the oldest oak tree in North Andover, and a new wet/dry rainwater garden creates a memorable courtyard setting for an outdoor classroom. An intensive green roof is integral to the biology curriculum, retains stormwater and provides habitat for wildlife. Renewable, recycled and recyclable finishes are used throughout. A solar cupola at the top of the building provides daylighting and fan-assisted natural ventilation. The science atrium features a real-time digital display of energy use, providing continuous feedback on conservation efforts. We appreciate how this building reinforces the very mission of the school.

CITATION FOR A TRANSFORMATION OF TENANT SPACE INTO EARLY CHILDHOOD SPACE

Spruce Street Nursery School (Boston)

Designed by Bargmann Hendrie + Archetype (Boston) with project team members Shawmut Design and Construction (general contractors, Boston) and Fiskaa Engineering (M/E/P/FP engineers, New York)

This private nursery school buried in a 37-story residential tower could have been a very disjointed space. However, good ideas and ingenuous furnishings transform the formerly mundane retail space in downtown Boston into a rich environment for early-childhood education. Classrooms were not defined as closed boxes, but rather as flowing, intriguing, exploratory spaces. A large concrete support column was turned it into a "tree" for toy storage and displaying artwork. A computer "den" hung with tiny airplane lights was created in a niche between two other structural walls. A "pumpkin patch" structure offers multiple play areas that are visible from all classrooms. Despite the many initial limitations of the site and budget, we have no doubt that the children here will be constantly enthralled in their surroundings.

CITATION FOR INNOVATIVE INTERIOR DESIGN

Esther Eastman Music Center (Lakeville CT) for The Hotchkiss School

Designed by Centerbrook Architects and Planners (Centerbrook CT) with project team members Charles Cosler Theatre Design (theater/lighting consultants, New York); Marshall/KMK Associates (acoustics/sounds system consultants, Chappaqua NY); Gilsanz Murray Steficek (structural engineers, New York); AltieriSeborWieber (mechanical electrical engineers, Norwalk CT); CCA (civil engineers, Litchfield CT); GeoDesign (geotechnical consultants, Middlebury CT); Spec Tran (specifications consultants, Duxbury MA); Phillip R. Sherman (code consultants, Elkins NH); O & G Industries (contractors, Torrington CT); and Esto Photographics (photography, Mamaroneck NY)

Far more flexible than a standard auditorium, this gorgeous new multi-use pavilion eliminated the need for several buildings. The pavilion accommodates a wide variety of functions and seating arrangements specific to particular types of Hotchkiss School music performances: indoor/outdoor performances, meetings, dinner, dances and music listening sessions complete with lounge chairs and ottomans. Interior practice rooms receive daylight from above, and radio and technology studios attract non-

musical students to the center. Glass walls offer breathtaking, panoramic views of the lakes and hills nearby and also contribute to the building's acoustical qualities. We applaud the design for taking full pleasure in its surrounding landscape and capitalizing on the special qualities of the client.

CITATION FOR CAMPUS PLANNING

Lawrence High School (Lawrence MA) for Lawrence Public Schools

Designed by Flansburgh Associates with project team members Fontaine Brothers (general contractors, Springfield MA); Heery International (construction managers, Burlington MA); Boston Building Consultants (structural engineers, Boston); TMP Consulting Engineers (M/E/P engineers, Boston); and Geller Associates (landscape architects, Boston)

This construction of a new public high school—the largest in the state— in Lawrence, Massachusetts valiantly answers an extraordinary planning challenge. To mitigate the enormity of the campus size required by some 3,000 students, the design features a subdivision of smaller "schools within a school." This scheme supports an educational plan based on the Talent Development Model created at John Hopkins University, in which students explore specific talent-development areas alongside like-minded peers. The six individual "academies" are linked together via a central curvilinear spine that acts as a thoroughfare to all areas of the school—strengthening a sense of community. Bridges between the academies recall the elevated bridges that connect Lawrence's historic mill buildings, and bright colors are a welcome change from the corporate tones increasingly seen in high-school settings.