ARCHITECTURAL RECORD

REVIEW

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FOCUS on K-12 SCHOOLS

LESSONS LEARNED: Revisiting Three Small Schools

A SUPPLEMENT TO ARCHITECTURAL RECORD

Timothy Dwight Elementary School
New Haven, Connecticut

2002

MICHAEL HAVERLAND AND THE YALE URBAN DESIGN WORKSHOP ENHANCE A NEIGHBORHOOD SCHOOL WITH A MULTIPURPOSE ADDITION.

By William Weathersby, Jr.

Design Architect: *Michael Haverland Design Architect/Yale Urban Design Workshop—Michael Haverland, AIA, designer and project architect; Paul Arougheti, Ben deRubertis, Al Dasher, Dominique Davison, Marcos Diaz-Gonzalez, Thomas Dunn, Joe Fong, Billy Forrest, Mark Gage, Kristina Lamour, Jen Lau, Michael Lee Poy, Tom Morbitzer, Kieran Trihey, Paul Whittaker, Jim Woodworth, Belinda Young, Yale Urban Design Workshop*
Architect of Record: *TAMS Consultants—project manager: Raymond Proilio; Sam Gardner, Heather Van Deusen*
Client: *City of New Haven, New Haven Board of Education*
Engineer: *Salamone Associates*
Consultants: *Balmori Associates (landscape); Thomas Dunn/Paul Whitaker, Yale School of Drama (lighting); Kristina Lamour, Yale School of Art (graphic design)*
General contractor: *A. Prete Construction*

Size: *9,300 square feet; 500 students*
Cost: *$2.07 million (construction)*

Sources
Green glazed brick: *Elgin-Butler*
White split-faced brick: *Alba Stone Products*
Corrugated metal: *Reynolds Corporation/RAC*

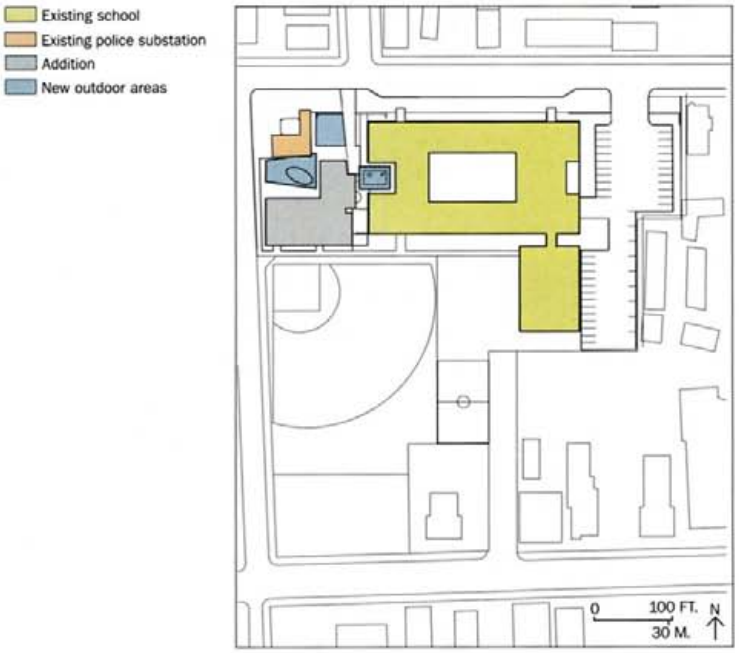
Program

Four blocks from campus, students from Yale University have learned lessons in the real world of planning and design for elementary education. Collaborating with community groups and the local government, the Yale Urban Design Workshop (UDW) enhanced the Timothy Dwight Elementary School with a 9,300-square-foot multipurpose addition. An eight-year-old organization that grew out of a design studio, the UDW brings together faculty and students from the School of Architecture and Yale's other professional schools to provide planning and design services for communities in Connecticut. Although the forum does not typically engage in construction projects, in this case federal, state, and local grants allowed this leap forward. "The Dwight School project is a model of how students can play an active role in community planning," says Michael Haverland, AIA, Yale assistant professor and UDW codirector, who was the project's principal designer, aided by 17 Yale students from various disciplines. "Students learned to navigate the intricacies of community coalitions and tight budget constraints."

The project was launched as a three-day community design charrette in 1995. With more than 300 participants, including the mayor, civic officials, and local residents, the sessions targeted expansion of the school on Edgewood Avenue. Designed by Eliot Noyes in 1963, the single-story, 38,000-square-foot school is situated within a low-income neighborhood and lacked an indoor recreation space or assembly hall. Its classrooms have no windows. A program was developed for a multipurpose room to accommodate its 500 students while also serving as a community meeting place. A $2.4 million grant from the Department of Housing and Urban Development was awarded to Yale to develop the plan. Remaining funds were allocated by the state of Connecticut and the New Haven Board of Education.

The standing-seam aluminum-roofed addition extends the school's role as a community activities center, announcing itself with bold signage (opposite). The white split-faced brick relates to the precast concrete of the existing school, while alternating runs of green glazed brick introduce color and texture (above and below). Clerestories light the multipurpose space and project the school's identity to the neighborhood.

The elliptical foyer connects the addition to the classroom wing and provides a new entry point for the community (below). One of two office/meeting rooms required by the community (opposite, top). The addition frames a new playground for kindergarteners, well within view from indoors (opposite, below).



Solution

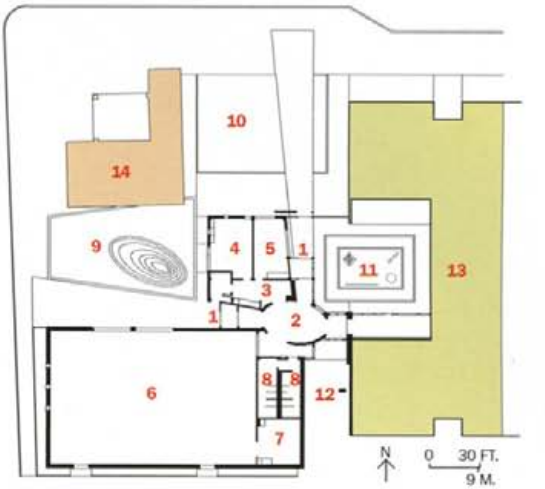
With maintenance and security as priorities, client mandates developed through the charrette included no flat roofs, no porches where the homeless could gather at night, the use of durable, vandal-resistant materials, and more natural light.

Rising at the west end of the school, the L-shaped addition creates a new, prominent entry axis. A supergraphic billboard announces the school's presence to the neighborhood. The short leg of the building's footprint runs perpendicular to two wings of the school to frame three outdoor spaces that pinwheel around it: a small playground, a formal entrance garden, and a flexible courtyard. A double-height, elliptical lobby serves as a pivot point between a classroom wing, the multipurpose room, and two office/meeting rooms earmarked for community organizations.

The 57-by-90-foot multipurpose room functions as a gymnasium and auditorium. Roll-out basketball goals, a folding stage platform, and stacking chairs can all be stored, and the room opens onto both the public courtyard and playing field.

Commentary

The Dwight expansion displays a creative exploration of materials and budgetary ingenuity. To counterbalance the dull concrete and beige brick cladding of the existing structure while relating to its masonry construction, alternating courses of green glazed brick and white split-faced brick clad the addition, interspersed with sections of corrugated metal. A dropped ceiling in the lobby is stripped to its perforated aluminum surface and dramatically uplit. Standard fire-rated doors in the multipurpose room were installed upside down so children could see through the windows, and small windows punched through the base of the walls also allow child-size views. Filled with light and reconnected to the community, the vibrant addition makes the Dwight's classrooms pale in comparison. They seem ripe for a redesign. ■



1. *Entry*
2. *Lobby*
3. *Security*
4. *Office/meeting room*
5. *Classroom*
6. *Multipurpose room*
7. *Storage*
8. *Restroom*
9. *Courtyard*
10. *Garden*
11. *Outdoor play area*
12. *Service area*
13. *Existing school*
14. *Police station*

Post-Occupancy 2005

Timothy Dwight Elementary School
New Haven, Connecticut

By Jayne Merkel

Four years after the Timothy Dwight School opened, its design architect, Michael Haverland, is still prouder of the planning process that brought it into being than any other part of the project. He sees it as "a model of how community-based planning efforts can lead to actual built projects, in this case one that is so much better than usual because of true resident participation and collaboration. I learned as much from the people in the community as they did from me about how to make this building good by any measure in our profession, but more importantly, really good for the neighborhood." Haverland added, "I am proud of the residents involved, too, for their focus and will to make it happen."

His enthusiasm is seconded by Curlena McDonald, the director of the Dwight Central Management Team, the grassroots organization that got people behind the project, coordinated volunteers, and was instrumental in getting neighborhood and student investment in the project. McDonald works out of an office in one of the front rooms at the school; the rooms were designed to make Dwight a community center as well as a school and to enliven the site at night.

"I am involved in the school committee for remodeling one of our schools down the street, and my experience in the Timothy Dwight project helps me understand the impact these projects can have on the communities around them," said McDonald. "I advocate that the buildings are structures that work for the community and should reflect something that residents can live with."

What she likes best about the addition to Timothy Dwight are "the building and the space. The features are interesting, open, spacious, and colorful."

Dwight's exterior, made of green, glazed brick alternating with rows of white, has been described as "seersucker in brick." It won a Brick Industry Association award in 2004.

Jim Govang, a teacher at Dwight, likes the fact that the school now has "a structure that can accommodate our whole student population. The children can have gym in a real gym, not a lunchroom or classroom. Our new building has two extra rooms for faculty and community use. The bathrooms are handicapped-accessible."

Everyone involved with the planning of the school agrees that there have been very few alterations. Govang noted that "one of the extra rooms is set up for videoconferencing and book storage, etc. The basic arrangement is the same, however." Asked if there was anything he would do differently if a similar facility were being built today, he replied, "What we tried to do was done with very limited funds. Given what we had to spend, I would not have made any changes." But, he added, "some people didn't like the choice of colors, the green and white brick."

And not everyone appreciates some of the design innovations. School psychologist Richard Livingston said, "It is unclear what value the

architectural conceits add to the structure. For example, there is an elliptical central hall, which was undoubtedly expensive to construct, but was this needed? The low windows—knee height—are bizarre and eccentric in effect. There should be windows in the fire doors so they can be opened without hitting a person on the other side." (Of course, if that person were a small child, he would be visible through the upside-down door, but not through one with a window at the regular height.)

Livingston also feels that "more office space is needed for working with individual students and small groups." But he also believes that the "Dwight School's addition provides an excellent gym and assembly room as well as an office for a community agency."

There is some disagreement about how well the admittedly inexpensive materials have held up. "The materials used in consultation with residents have been very durable," Haverland said. "Plus, there has been no vandalizing of the building because of the amazing neighborhood pride and investment in it." McDonald agrees about neighborhood pride but "questions the longevity and durability of some of the building materials." She said that Plexiglas had been installed near the field area to replace the original real glass.

Noted Haverland, "Every detail was considered and each researched extensively to be economical in terms of amount of material and construction methods. The brick was done for the same budget as a plain red brick facade. I used expensive glazed green brick in moderation, combined with very inexpensive cast white brick and galvanized metal."

He also planned for change from the beginning: "Early planning for the entire site showed how additions could be made to the south while retaining the light in the multipurpose room and retaining the building as is. We also studied how the entire school could work if the main entrance shifted in the new addition. The dimensions of the two front rooms were carefully studied to fulfill Board of Ed requirements for different uses. The multipurpose room was also dimensioned to accommodate diverse uses. The pattern on the floor lays out a 10-foot and a 5-foot grid for different sports or setups, such as an assembly."

The one thing Haverland regrets is that "the elliptical lobby that projects educational images, such as a compass, is underused. It needs better access to make it easily updata-

EXPENSIVE GLAZED BRICK WAS USED IN MODERATION, ALONG WITH INEXPENSIVE CAST WHITE BRICK.

ble." The rounded form does, however, facilitate circulation and connection between the addition and the existing school. And it gives the entrance some drama.

The greatest testament to the success of the scheme came from a fifth-grade student who happened to see this author and her daughter looking around the school one day. He invited them in, showed them the gym with real pride, and offered to introduce them to the principal, clearly confident that they would be as excited about his school as he was. ■

LESSONS LEARNED

- The active participation of a community can lead to thoughtful details as well as a sound program.
- Children have a sense of pride and ownership in a lively and interesting school.
- Clever design details do not appeal to everyone.
- A thoughtfully built gymnasium can serve more than one purpose effectively.

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