

design



# quantum leap

Students get a jump on their future at High Tech High in Los Angeles, a math and science intensive school where Berliner and Associates uses the progressive curriculum to shape a cutting-edge design, as well as tomorrow's brightest careers

By Holly Richmond  
Photography by Tom Bonner

If you asked the students at High Tech High-Los Angeles (HTH-LA), they would tell you Roberta Weintraub is like an educational fairy godmother—equal parts fund-raiser and fundraiser. Weintraub, founder and executive director of the High Tech High-LA Foundation, was a former teacher and a Los Angeles Unified School District (LAUSD) board member for 14 years. After seeing numerous high schools devoted to the arts thrive throughout Los Angeles, her dream was to create one focused on the sciences. "I know I've tapped into the right area. Kids finally have access to hands-on learning opportunities that will train them for high-tech information careers," she says. HTH-LA is also unique because the teenage students actually want to be there. "It's a marvelously happy environment," she adds. So who put the fun factor in the project? Richard Berliner, principal of Berliner and Associates Architecture based in Santa Monica, Calif., and a team devoted to getting technically savvy kids wired for success.

Weintraub remarks that fund-raising for HTH-LA was the project's biggest challenge, but luckily finding the right architect was fairly easy. "Richard was clearly creative and passionate about educational environments, but mostly I could see he was committed to sticking with me," she recalls. For his part, Berliner says he was excited to work on a school that was anything but typical. The standards for HTH-LA were high as it was the first local charter school to have a curriculum focusing on technology. "The structure had to be as progressive as the subjects being taught," Berliner remarks. "We literally designed the school as the curriculum was being written. It influenced everything from room adjacencies to common areas and key building systems."

A brightly-colored curved wall (above) displaying the name of a former Birmingham High graduate and the project's largest donor, the Lowell Milken Family Foundation, encircles the campus for added safety and privacy. Classrooms (right) feature large windows on three sides and doors to outdoor learning areas to facilitate a pathway for natural light, as well as views from the interior hallways, adjacent project rooms and classrooms.



Fortunately, finding a site for HTH-LA came easily as well. It sits on a one-acre parcel in an underutilized corner of LAUSD's 71-acre Birmingham High School in suburban Van Nuys. Two vacant warehouses were donated to the HTH-LA Foundation. They were gutted, seismically strengthened, and blended into a fluid, self-contained structure that included the addition of a central connective indoor/outdoor area to bring the school to a total of 27,000 sq. ft. Berliner's plans emphasized students' roles as self-directed learners in a space that fostered spatial and academic freedom, but also promoted a sense of community. Modeled after leading-edge corporate research centers, HTH-LA feels sophisticated, open, and airy, rather than science lab-sterile.

Some 181 students attended HTH-LA in its first year, but future plans call to offer enrollment to 275 students, as well as employment for 12 teachers, a principal, a guidance counselor, and administrative staff. "The idea was to build a school that wasn't overcrowded, so this number won't increase much. Demand already outweighs the number of spaces available," says Weintraub. HTH-LA features eight classrooms, a prototype lab, a commons/library and great room, teachers' and administrators' offices, two conference rooms, an outdoor amphitheater and a variety of garden spaces.

Even with numerous, seemingly individual areas, the school is totally transparent with views from one end to the other. Large windows face the interior and connect classroom to classroom, while doors open onto

Technology and science classrooms (below) are private yet remain visually open to wide, curved hallways.





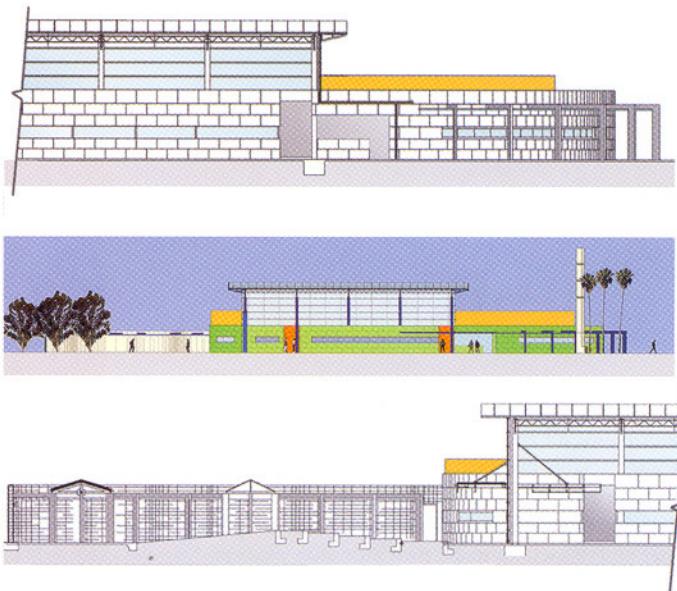
outdoor patios for expanded learning environments. Three classrooms feature retractable dividers allowing them to be halved, and most classrooms have an attached, 300–450-sq.-ft. project room to accommodate group projects and store works in progress. In response to the curriculum, Berliner and Associates made provisions for wired and wireless technology throughout. Computers are everywhere, as are “smartboards” that can display the screen of any computer in a classroom or conference room.

The hub of the school is a 25-ft.-high, 9,000-sq.-ft. glass and steel commons, which is the connective structure between the two existing buildings. To call it a multi-purpose space is an understatement—it provides a central meeting place and can be reconfigured to accommodate

The 9,000-sq.-ft., 25-foot-high glass and steel commons (below) serves as the connective space between the school's two wings and also provides an area for both small and large group gatherings. An outdoor study garden (right) is shaded by a steel awning and used by students as a gathering place, lunch area, and classroom extension if necessary.



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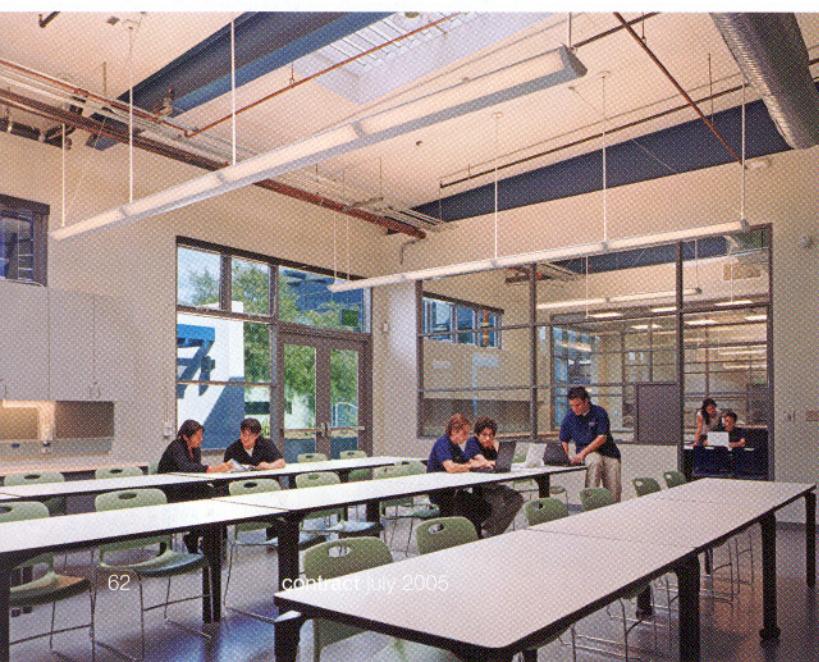


anything from small collaborative projects to all-school assemblies.

Acoustic panels line the room's open ceilings, and rubber flooring provides high acoustic quality. "Not only is the commons functional and the place where students love to be, but it also gives a distinct identity to the school," says Berliner. Weintraub agrees with him but feels the school's bright green, blue and orange façade gives it its one-of-a-kind flair. "Anyone can build a beige school," she laughs. "HTH-LA is imaginative and lets kids and their parents know that it's an exciting place to learn."

Designed to be a sustainable school, HTH-LA exceeds the California Energy Commission's High Performance Schools standards. Skylights and roof monitors bring in controlled sunlight to minimize the need for electric lights, while photovoltaic panels and heat-reflective paint stabilize indoor temperatures. Fifty-year-old sycamore trees and low-maintenance native plants offer shade from the sun in garden areas and the outdoor amphitheater, which is critical since students use them as lunchrooms. It's clear that HTH-LA celebrates an open-minded philosophy in almost every way, from its design to how students learn, but it seems there's one point that's not open for debate. "There's no eating around the computers, which pretty much limits students to the outdoors," Weintraub explains. In a school where design is equally as sunny outside as it is in, that's a deal that's easy to stomach. **C**

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contract July 2005

who

*Project:* High Tech High—Los Angeles. *Client:* High Tech High—LA Foundation, Los Angeles Unified School District. *Architect, interior designer:* Berliner and Associates Architecture. *Structural engineer:* Brandow & Johnston Associates. *Mechanical engineer:* J & S Consulting. *General contractor:* Taslimi Construction. *Furniture dealer:* Purchase Planners Group. *Landscape:* Glen Dake Landscape Architect. *Civil engineer:* P.A. Arca Engineering. *Photographer:* Tom Bonner.

what

*Paint:* Frazee. *Laminate:* Nevamar. *Drywall:* SSMA, USG, Hamilton. *Masonry:* Standard concrete masonry. *Flooring:* Nora Rubber Flooring. *Carpet/carpet tile:* Interface. *Carpet fiber:* Antron Lumena. *Carpet backing:* Glasbac RE, +40% recycled content vinyl backing. *Ceiling:* USG. *Lighting:* Prudential. *Doors:* Ceco, US Aluminum, Wilson Partition. *Door hardware:* Schlage, Hager, LCN, Trimco, Pemko. *Glass:* Viracon. *Window frames:* US Aluminum. *Window treatments:* MechoShade. *Railings:* Custom. *Tack panel fabric:* Designtex. *Tile:* Dal-Tile. *Students' desks, teacher's desks, administrative desks, files:* Virco. *Students' seating, teacher's seating:* KI. *Administrative seating:* United Chair. *Lounge seating:* Haworth. *Seating upholstery:* Knoll. *Administrative conference room table:* Davis. *Outdoor courtyard dining, seating:* Wausau. *Cafeteria, dining, training tables, other tables:* KI. *Cabinetmaking:* Taslimi Construction. *Accessories:* Wausau. *Signage:* CA Signs. *HVAC:* Carrier, ACCO. *Fire safety:* COSCO, Notifier with Gentex devices. *Underfloor duct:* Wiremold.

where

*Location:* Los Angeles. *Total floor area:* 27,000 sq. ft. *No. of floors:* 1. *Student capacity:* 325. *Cost/sq. ft.:* \$400.