

> High Goals. High Achievement. **High Tech.**

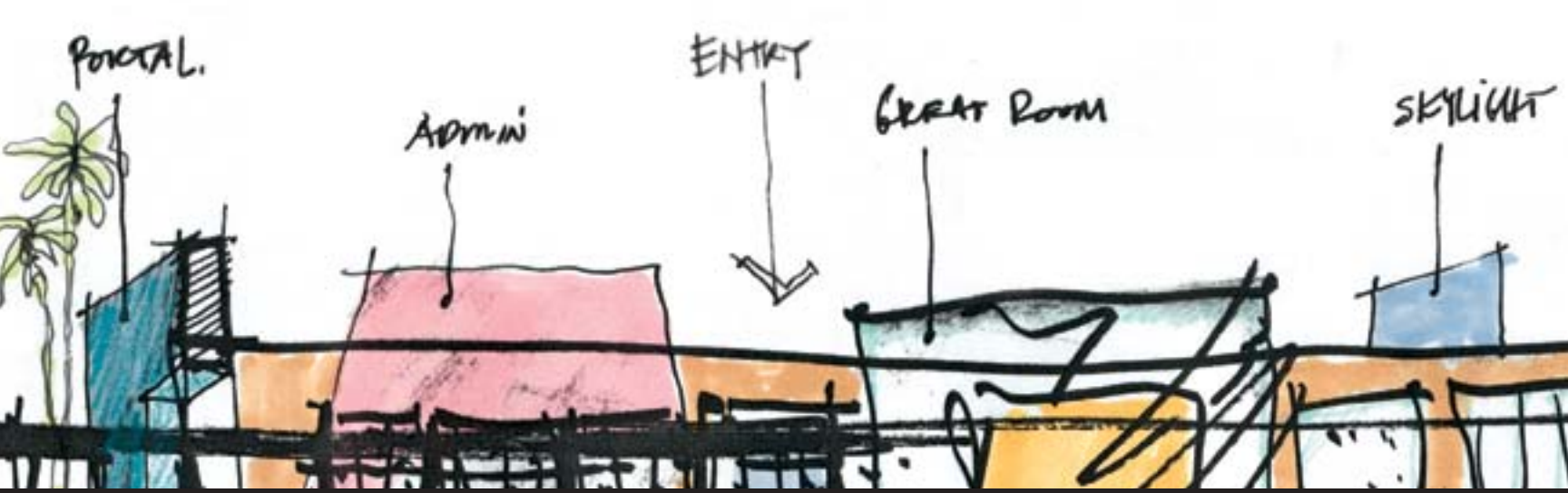


HighTechHigh Los Angeles

*A Community of Learning*

## > Mission Statement

HighTechHigh-Los Angeles (HTH-LA) empowers students and teachers with understanding and skills through an advanced, technology-rich education. Graduates of HTH-LA will be the future leaders and knowledge workers in the 21st century digital world.



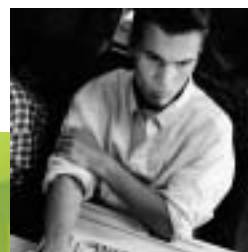
## > A High Tech Bridge to the Future

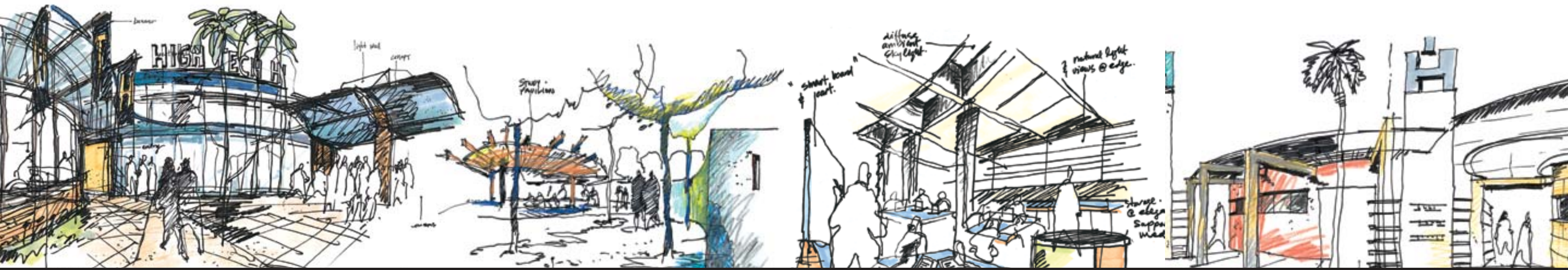
Scheduled to open for classes in September 2002, HTH-LA is the city's first and only public high school designed to integrate a rigorous college-prep curriculum with intensive high-technology training. Located on the site of Birmingham High School in the San Fernando Valley, HTH-LA is a self-contained, state-of-the-art facility hosting

400 students in grades 9-12, as well as a full roster of experienced teachers, teachers-in-training, industry mentors, industry leaders, and high-tech experts. Students and teachers will emerge from this California Charter School as ambassadors for the skilled use of technology in classrooms and communities far beyond the HTH-LA campus.

*"Modeled after the teamwork environment, embracing the spirit of successful high technology industries, and incorporating the best practices of higher education, HTH-LA represents an extraordinary opportunity for us to ensure an active leadership role for our children in the high technology world that awaits them."*

—Margaret A. Klee  
Chief Information Officer,  
Information Technology  
Los Angeles Unified  
School District





## > Aiming High: The HTH-LA Vision

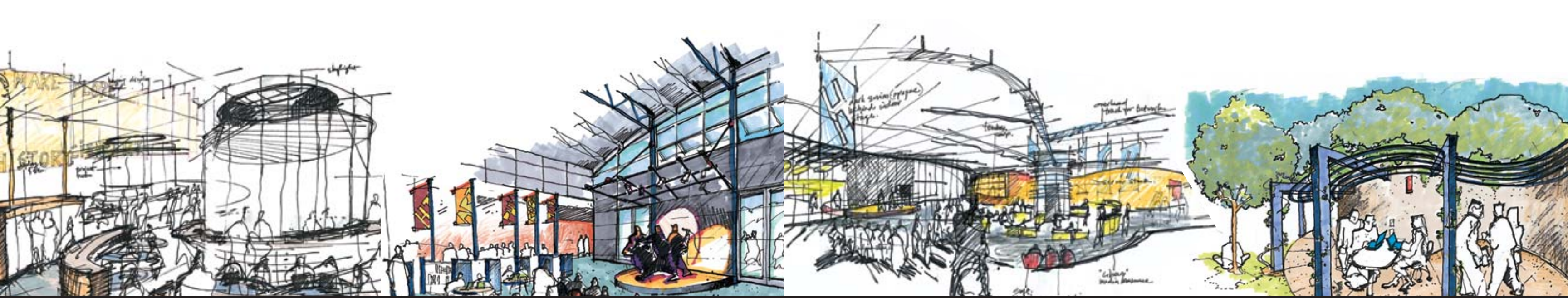
**I**n support of a strong and optimistic vision of the future, HTH-LA will:

- Provide a unique educational experience for poor and minority students that integrates technology throughout a challenging college-prep curriculum and provides training and certification in high technology fields.
- Create a small, diverse learning community that engages each student in a rigorous academic program with an emphasis on math, science and engineering, to prepare them to succeed in college and to be the innovative knowledge workers of tomorrow.
- Offer real-world experience through relationships with technology partners who provide mentors, internships and professional feedback on student work.
- Serve as a model school demonstrating best practices in the integration of technology into secondary education.
- Act as a dynamic and leading-edge training program for Los Angeles Unified School District teachers in innovative teaching methods and the effective use of technology in the classroom.

*"Think about the young minds that will bring us the technology of tomorrow. Our future depends on them—and they, in turn, depend on us. To invest in their education. To fire their imaginations. To make sure they are able to fulfill their enormous potential. This is our mission: To open up the possibilities—and then to stand aside."*

—Roberta Weintraub  
HTH-LA Founder and  
Executive Director





## > Thinking Outside the Box: The HTH-LA Curriculum

### **P**roject-Based Curriculum

HTH-LA students are engaged in a rigorous college preparatory curriculum in which abstract academic principles are applied to solving real-world problems. Students learn how to communicate ideas and collaborate with others; develop the capability to analyze, synthesize and evaluate information; and acquire the capacity to organize and manage their time and projects. Projects of increasing complexity are designed to incorporate HTH-LA academic strands, including math, science, engineering, language arts/humanities and design. Collaborations between HTH-LA teachers and university-level faculty, as well as technology partners, assure that the curriculum articulates with college-level and real-world standards.



### **T**echnology Industry Links

Teachers collaborate with industry partners on curriculum that meets state academic standards and is aligned to current workplace practices. Certification programs, such as A+, network design, and software support, give students hands-on experience and marketable skills. A key component is the opportunity for 11th and 12th grade students to work off-site through industry internships with HTH-LA technology partners. These internships give students crucial workplace experience, an understanding of real-world problem-solving and the opportunity to work on projects that affect the communities in which they live. While HTH-LA expects graduates to continue in higher education, the certification program and internships give students a path to technology careers.

### **M**ath/Science/Engineering Emphasis

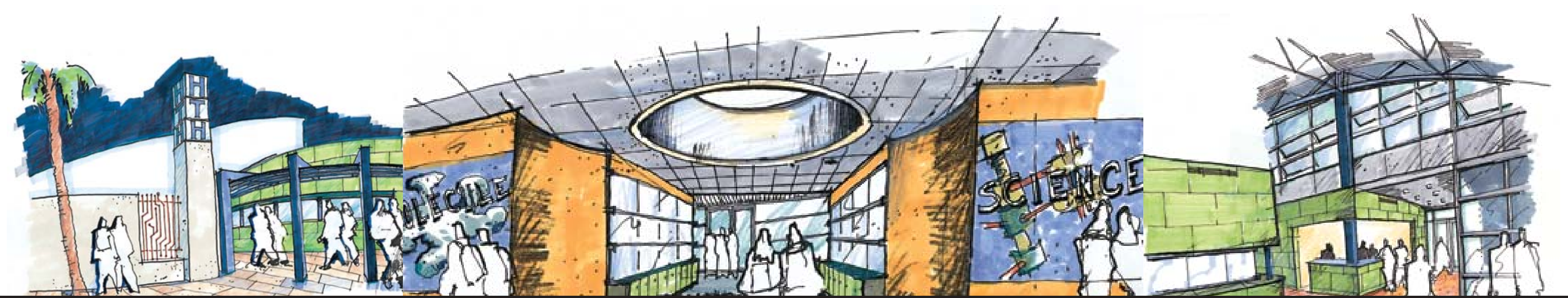
HTH-LA will enable poor and minority students to gain skills in the critical disciplines of math, science and engineering that will prepare them to succeed in post-secondary education and to become leaders in high technology industries. Students may solve engineering problems by building functional robots or computers; learn the practical applications of science and math by designing new, more energy efficient school buildings; and explore product and automobile design in the prototype engineering lab. HTH-LA building systems are designed to be integrated into an environmental science and engineering curriculum.

### **P**erformance-Based Assessment

Beyond standardized tests, evaluation and assessment at HTH-LA is based on student performance and projects. Culminating student-project exhibitions and presentations for teachers and technology professionals provide for authentic performance-assessment grounded in academic and professional standards. Graduates are required to complete a senior internship and project presentation, to create and exhibit a digital portfolio, and to have achieved certification in at least one area of technology.

*"In the future, teachers will be in more of a coaching role, a guide on the side, not a sage on the stage."*

—Linda Darling-Hammond  
Professor of Education,  
Stanford University



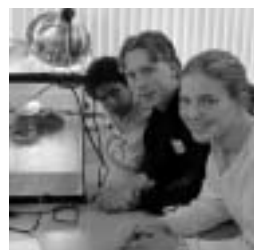
## > An Extraordinary Opportunity for Students

*"Education, then, beyond all other devices of human origin, is the great equalizer of the conditions of men—the balance-wheel of the social machinery."*

—Horace Mann

**E**nrollment in HTH-LA is open to all LAUSD students, regardless of prior grades or academic performance. Student demographics reflect LAUSD's enrollment, consisting primarily of minority and inner-city youth from low-income families and neighborhoods. Following application, the school's enrollment is decided by lottery. Follow-up admission interviews identify motivated students

and parents who are willing to sign a contract outlining specific academic goals and expectations. Teachers, administrators and counselors work with students to develop individualized learning plans to ensure that each student has the opportunity to succeed.



## > An Extraordinary Opportunity for Teachers

**H**TH-LA serves as a technology training site for teachers throughout LAUSD. It offers training programs in the effective use of technology in the classroom and workshops that explore how using technology as a teaching tool can change and improve instruction. Classes for teachers are offered after school, in the evenings and on weekends. For those teachers unable to access HTH-LA physically, distance-learning classes on effective technology use are available on the HTH-LA WEB site. Teachers and educators have the option to access selected HTH-LA classroom practice directly through streaming video on the WEB and to view recorded classes through HTH-LA's Video-on-Demand class library.

HTH-LA is a model program for teacher education. Through HTH-LA's state-of-the-art computer network and broadband internet access, teachers

are able to maintain an ongoing dialogue with peers and technology professionals around the world. They are able to present their curriculum designs, teaching methods and evidence of student work to colleagues for assessment and feedback and to develop a professional community of practice through regular dialogue. What works and what does not work at HTH-LA is shared equally. In this way, HTH-LA serves as a research center on new methods of teaching and learning.

Since teachers who work at HTH-LA cycle through the site every 3-5 years, the school directly replicates its best practices by sharing what has been learned, thereby creating a ripple effect that will improve instruction throughout LAUSD.



*"In the HTH-LA model, teachers collaborate in communities of practice that challenge them to do their best, to extend themselves, and to reach out to embrace new methods, new disciplines, and new technologies. This can only have a stimulating effect on every student, teacher, and school they come into contact with from that time forward."*

—Doris Lasiter  
Ed.D and Principal,  
Birmingham High School



> Buildings That Teach and Inspire

**H**TH-LA's buildings serve as an important teaching tool for the curriculum. Using cutting-edge mechanical, lighting, electrical, and energy conservation systems, the school buildings are a hands-on, demonstration laboratory for students studying basic physics and environmental design. The photovoltaic panels on the roof of the commons building and the mechanical and lighting systems are digitally monitored and controlled. The systems respond and adjust to the changing environment

throughout the day. All data on energy-use and conservation is available for student analysis through the school LAN. HTH-LA is a "green" school that meets and exceeds the highest current standards set by the California Energy Commission. Through the use of cool-roof technologies and highly efficient mechanical and lighting systems, the consumption of electricity is significantly less than in traditional school buildings.

High performance glass, used in all windows, maximizes the amount of natural light while reducing heat gain and glare.

**Thermal Comfort:** All spaces in the school are maintained in the 'Comfort Zone' for temperature and humidity to optimize teachers' and students' performance.

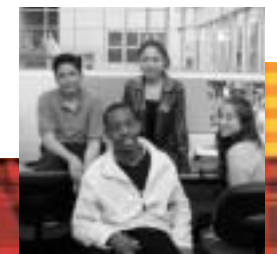
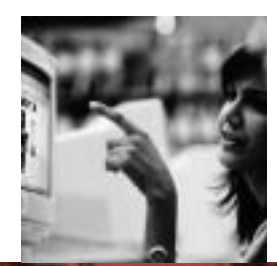
**Visual Comfort:** The interior provides uniform and flexible lighting, integration of daylight and electric light, and windows that offer views of the school gardens.

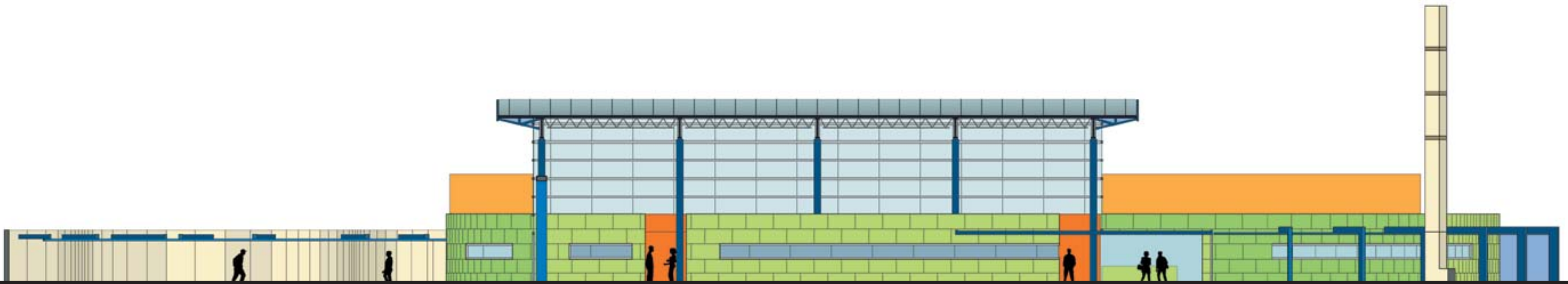
**Acoustic Comfort:** Sound reverberation is controlled through the use of absorbant materials, and noise from HVAC systems is minimized through acoustical treatment of ducts and equipment.

**Safe and Secure:** Entry and exit from the campus are regulated through biometric controls, and buildings are secured by monitored alarm and closed-circuit video systems.

*"Everytime a student walks past a really urgent, expressive piece of architecture... it can help reassure him that he does have that mind, does have that soul."*

—Louis Kahn





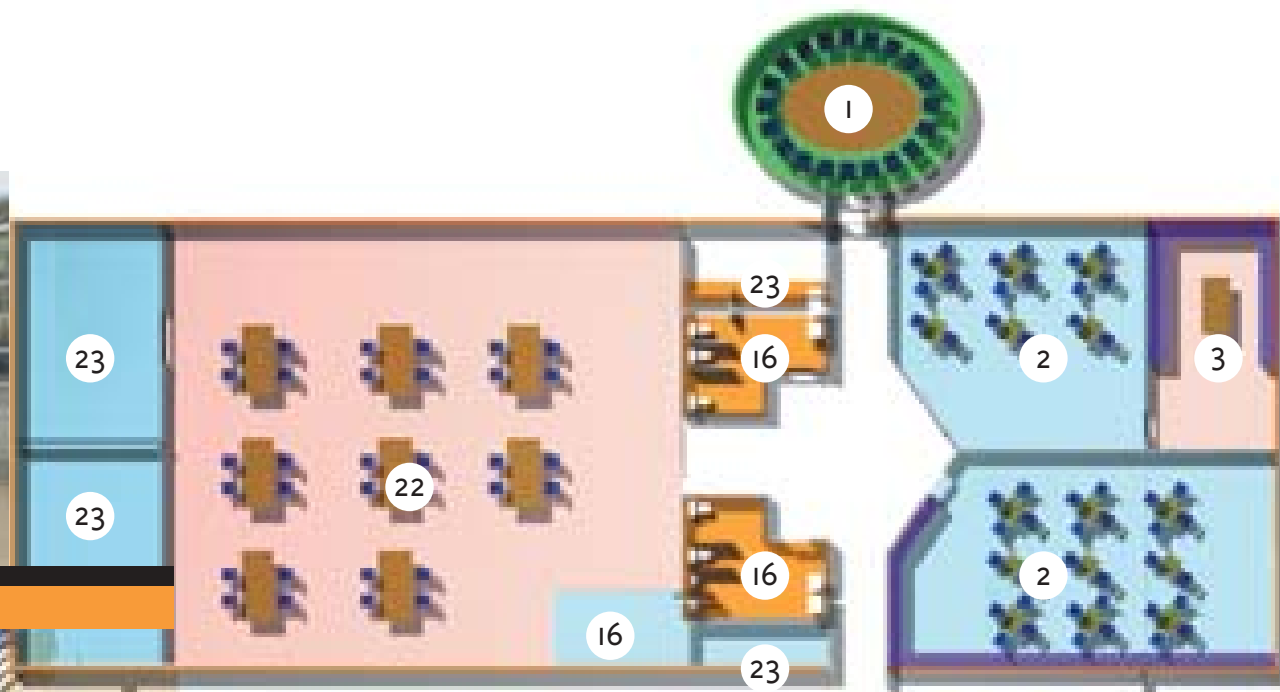
## > Innovative Architecture for an Innovative School

**T**he architectural design of HTH-LA is a dramatic expression of the school's innovative curriculum, teaching methods and technology. HTH-LA is a small learning community organized around a central town square, the "commons," that is surrounded by staff, faculty and classroom spaces. The school is divided into a lower school, for 9th and 10th grades, with flexible classrooms that include adjacent project rooms for collaborative team-work. The upper school includes a project-based "great room," designed to model a workplace environment, for independent study projects. Technology and science labs are adjacent

to the state-of-the-art prototype lab where students can build what they have designed on computers. Outside the classrooms and commons are shaded study gardens that provide a gathering place for individual work or discussions. The courtyard entrance serves as a casual meeting environment for students and visitors. All of the architectural elements of HTH-LA are brought together under the vaulted roof of the commons. Natural light fills the building, and bright colors are used throughout the school interior to create an uplifting and inspiring environment for students and teachers.







>Creating a Community:  
The HTH-LA Site Plan

- 1 Faculty conference room
- 2 Classroom (math, science, engineering)
- 3 Project room
- 4 Conference/Orientation mentor office
- 5 Student/Teacher copy center
- 6 Office support
- 7 Reception
- 8 Server
- 9 Administration
- 10 Teacher lounge
- 11 Commons/Library
- 12 Great room
- 13 Informal meeting area
- 14 Student lockers
- 15 Teacher offices
- 16 Restroom
- 17 Entry/Courtyard
- 18 Outdoor amphitheater
- 19 Treehouse
- 20 Outdoor classroom
- 21 Study garden
- 22 Prototype lab
- 23 Utility



*"Training high school students in technology is vital to their professional success in the 21st century. HighTechHigh will provide cutting edge skills and knowledge to students, and train teachers throughout the city to replicate the program within their own classrooms. I strongly support this extremely worthwhile project."*

**James K. Hahn**  
Mayor, City of Los Angeles

*"HighTechHigh will be a 'Flagship' school which demonstrates the power of technology utilization in the instructional programs in the State of California. The students within the Los Angeles community will benefit greatly from this endeavor."*

**Governor Roy Romer**  
Superintendent,  
Los Angeles Unified School District

*"We fully support this high school, the first of its kind in the Los Angeles Unified School District, and one that we believe will make a major contribution to our next generation of science educators and technology leaders. We at Cal State Northridge look forward to a successful collaboration with HighTechHigh."*

**Jolene Koester**  
President, Cal State Northridge

## > Inspiration and Endorsements

*"Teachers will be at the epicenter. I would trade all of my technology for an afternoon with Socrates."*

**Steven Jobs**  
CEO, Apple

*"The HTH-LA program is a major addition to the Los Angeles community, a gateway to opportunity for low income and minority youth, a global example of a cutting-edge education program and a proof of concept, which will spawn clones. It is a beacon that shows the way to opportunity and success in new technologies."*

**Bernard J. Luskin**  
Chairman & CEO, Luskin International

*"The principle goal of education in the schools should be creating men and women who are capable of doing new things, not simply repeating what other generations have done; men and women who are creative, inventive and discoverers, who can be critical and verify, and not simply accept, everything they are offered."*

**Jean Piaget**

*"As a senior manager in the world's largest executive search firm, I am well aware of the high demand for trained technology experts everywhere. The unprecedented growth of new technologies and technology-based services ensures high demand and rewarding career opportunities for many young people in years to come."*

**Dan Demeter**  
Senior VP & CIO,  
Korn/Ferry International

*"We live in a society dependent on science and technology in which hardly anyone knows anything about science and technology."*

**Carl Sagan**

*"We are excited about the opportunity to work as partners in the education of our young people, our teachers, our administrators and the community at large."*

**Angelina Galiteva**  
Executive Director,  
Strategic Planning, DWP

*"We believe that the soundness of its plans and sensitivity to the urgent educational and economic needs it intends to address will make HighTechHigh-LA an outstanding and widely emulated resource for Los Angeles."*

**Robert Lapiner, Ph.D.**  
Dean, Continuing Education  
and UCLA Extension

*"The computer-literate generation won't look at education as distance learning. They'll look at it as immediate access."*

**Herb Allen**  
Global Education Network

*"Schools are about realizing how much more there is to learn. It's the habits of the mind that are critical."*

**Deborah Meier**  
Education Reformer

*"When you get this sense of involvement, there's no boundary. There's connective learning."*

**Bill Gates**  
Chairman, Microsoft





## > The HTH-LA Development Team

*"The final component is to be set to learn for life on your own, to be a functioning citizen in the information economy."*

— John Doerr  
Venture Philanthropist

**T**he creation and development of HTH-LA is led by educational entrepreneur, Roberta Weintraub, past President of the Los Angeles School Board. Over the last 20 years, she has raised millions of dollars from foundations, corporations, government grants and individuals for the development and operation of 25 Magnet/Academy schools.

Partners in creating HTH-LA include:

- The Los Angeles Unified School District
- HighTechHigh-San Diego
- Leading corporations in the technology industry
- Art Center of Pasadena, Otis College of Art and Design, Pierce and Mission Colleges, CSUN, UCLA and USC

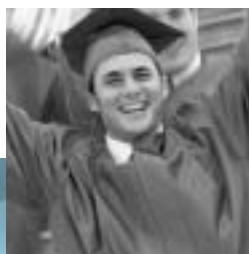
The technology partners contribute design expertise and equipment, mentor students and teachers, collaborate on technology projects, and

provide internships for 11th and 12th grade students. Education partners consult on curriculum design and program articulation with college-level standards.

Award-winning Los Angeles architect, Richard Berliner, of *Berliner and Associates* leads the design team for HTH-LA. Berliner and Associates has designed projects for major entertainment studios in Los Angeles as well as seven multimedia learning environments for New Media Academies throughout LAUSD.

Berliner and Associates is collaborating with:

- The Los Angeles Department of Water and Power, which is providing state-of-the-art energy efficient products and design consultation.
- The California Energy Commission, which is providing environmental and energy efficiency design consultation.
- The National Tooling and Manufacturing Association (NTMA), which is consulting on the design of the HTH-LA production studio.



Ikkanda Design Group  
Design Firm

Typecraft  
Printer

For more information, contact:

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