

2012 Exhibition of School Planning and Architecture

Nathan Hale High School

Seattle, Washington
High School
Modernization/Addition
Mahlum

Nathan Hale High School



Welcome Community

Community Environment

The library and arts addition at the east wing joined the shop and main school buildings, and was sited to form a new common exterior gathering plaza off of NE 110th Street. Located at the north end of the addition, the new library serves as a beacon to the community. As a glass box that develops transparency, the library reinforces the strong connection between the school and the community and invites public participation in the educational process as well as becoming a community resource after school hours. The new library becomes an icon for the building.



Connect Campus

Community Environment. Family and community involvement is integral to the culture at Nathan Hale High School and an organizational practice of the Coalition of Essential Schools. To engage the connection with the greater public community, the modernization improved community access to all public spaces where they benefit from easy, and separate exterior access to encourage continued use of shared facilities and services during non-school hours. The existing Performing Arts Center [PAC] lobby was extended into a major east-west spine and culminates in a new lobby and exterior plaza to the east, strengthening the connection between the fields and the school. The spine forms the joint between quieter academic spaces to the north, and areas of public gathering to the south; however, more than circulation, it is the physical representation of the philosophy of the Hale experience: a highly collaborative environment that supports adolescent life and learning.



Student at the Center

Learning Environment

Nathan Hale High School embodies the concept that project-based learning is about creating connections at multiple scales: school-to-community, space-to-space, and face-to-face. Socratic seminars, exhibitions of student work and teachers as coaches and students as workers are experiences all students share. Nathan Hale High School embodies the CES principles and project-based learning by creating and connecting spaces to allow educational opportunities to occur everywhere, support a range of learning styles, and blur the line between social and educational spaces.

The design re-imagines the Commons as a place for community and celebration, and charges it to become an informal presentation and academic space. Addressing the users' desire to create a strong student community on campus, a new forum and double-height student activity center were created. These student gathering spaces allow for visual interconnectivity, allow daylight to penetrate the deep building footprint and provide additional venues for performance-based learning.

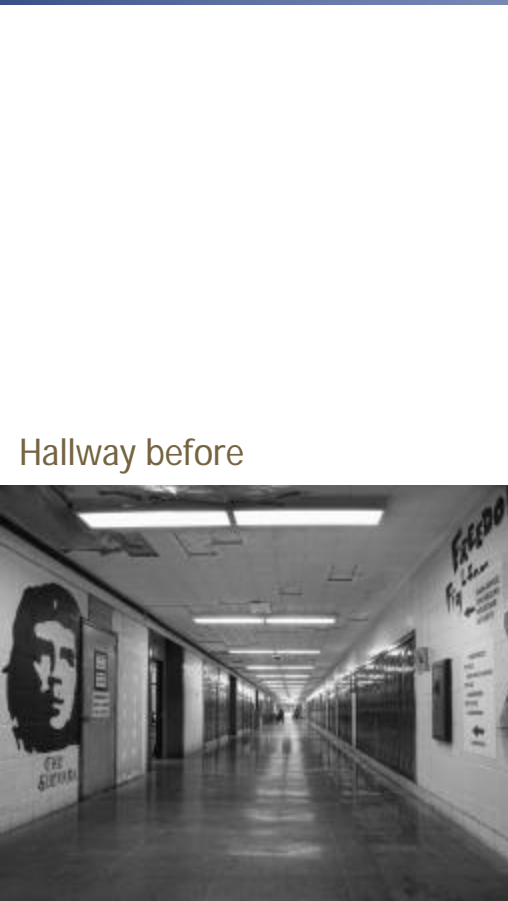


Facilitate Learning Everywhere

Learning Environment

Collaboration areas for groups of varying sizes were developed along the main circulation spines to create opportunities for independent study, one-on-one learning, and personalization. These dynamic multi-use spaces build in rich opportunities for learning, exhibition of student work, and provide flexibility for current and future educational trends.

Excitement for learning and exploration is amplified now that the environment is a part of the process and empowers the development of genuine personal relationships. Visual connections between the common spaces, classrooms, and shared learning areas reflects the strong student-staff connection, makes learning visible and reinforces the sense of a whole school working towards a common goal.



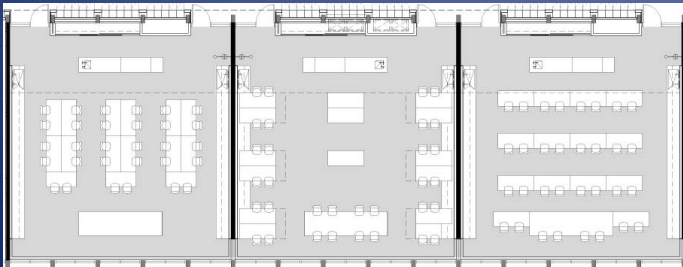
Hallway before

Foster Creativity and Inquiry

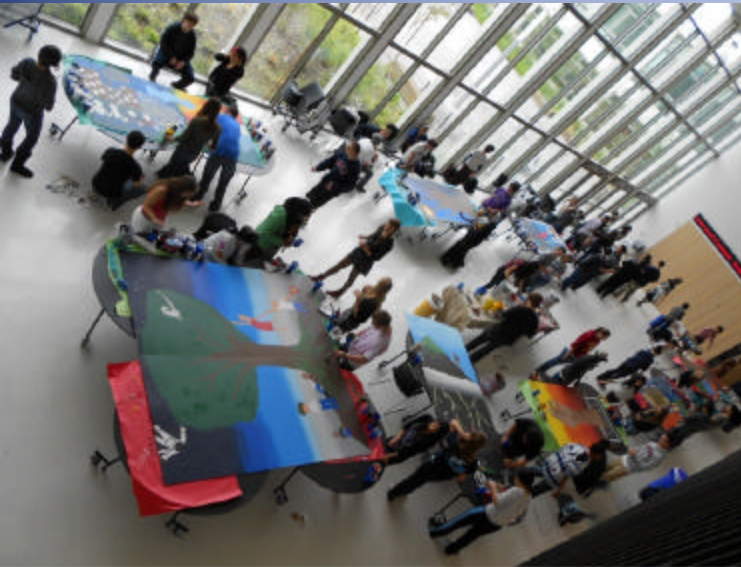
Learning Environment

The science department challenged the design team to create innovative spaces that support collaborative, hands-on, inquiry-based learning and support a curriculum that varies from semester to semester. The science labs are designed to be multi-purpose spaces that allow for involved lab experiments, projects, presentations and lectures, small and large group seminars, etc.

Custom designed mobile worktops and storage units with epoxy countertops and casters allow **staff and students** to re-configure their labs daily, if desired, to support varying projects and create an environment conducive to group and individual learning, without sacrificing the function for each.



Maximize Flexibility



Integrated Studies Mural Painting in the Student Activity Center



ASB in the Student Activity Center



Physics in the Forum



Integrated Studies World Language Event in the Commons



Africa Night in the Commons



Annual Bite of Hale Community Event

Respect existing structure

Physical Environment

Prior to the modernization, the 1960's high school pre-cast and cast-in-place concrete structure was inwardly focused, dark, and did little to support the educational philosophy built on the Coalition of Essential Schools principles of decency, trust, personalization, collaboration, equity and democracy.

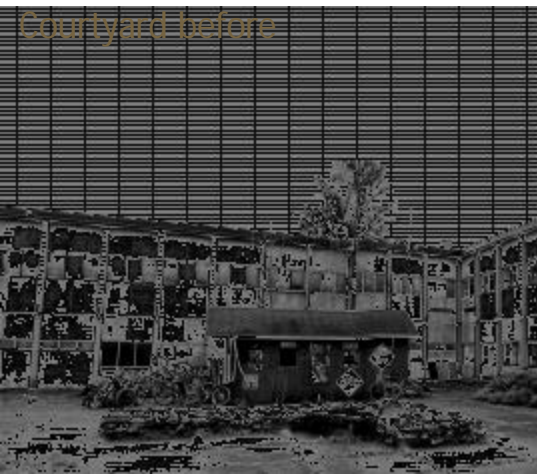
The existing building is clearly organized and has a strong structural rhythm, both foundations of design the modernization sought to build upon without significantly increasing the overall building footprint. Low ceilings and some floor plates were removed to express the structure and bring added volume to teaching and common spaces. Exterior precast concrete panels were carved away to allow the building to breathe fresh air and daylight.



Allow Building to Breathe Air and Daylight

Physical Environment

Where the courtyards were previously overgrown and unused, now they provide integral visual and physical connection to the outdoors and clarify wayfinding. Transparency between the building and site infuses the building, both visually and experientially, with the surrounding natural environment. Landscape design of the once underutilized courtyards brings Thornton Creek, a riparian corridor bisecting the site, to the heart of the school and reconnects awareness of this natural resource and habitat. The design of inner courtyards provides balance between areas for larger community gatherings, with areas for quiet educational pursuit.



Reinforce Positive Relationships

Physical Environment

For the users, equal importance was to be placed on functionality and beauty to reinforce positive relationships between students, staff and community and to encourage student ownership and pride. 'Clean lines and planes,' 'lightness,' 'bold grace,' 'flowing,' 'simple,' 'connection to nature' and 'ability to see the sky' describe the users desired feeling of the school spaces.

In response to the dark, dim existing facility, the new color palette reflects light and highlights the vibrancy of the students and their work.

Classroom before

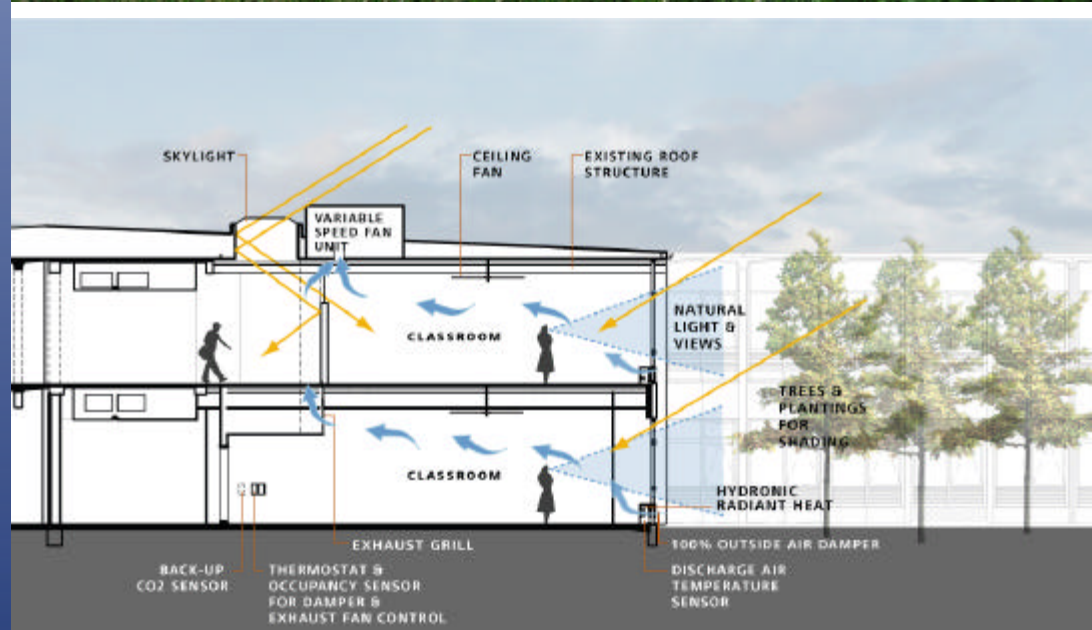


Embrace the Site

Physical Environment

Nathan Hale benefits from an integrated design following principles of resource management and sustainability established by the entire project team, including workshops with the student led Nathan Hale Sustainability Committee.

Re-use of existing building shell and structure minimized demolition material to landfills, reduced site disturbance, and limited consumption of new materials. The fan assisted natural ventilation system, a first for the District, is an energy-efficient solution with increased fresh air, reduced mechanical noise, and user control. Ground source heat exchange piping loops through vertical wells to heat and cool the addition. With Thornton Creek as an essential aspect of the local ecosystem, the design decreased 10,000 sf of impervious surface in the riparian management area to create greater access for educational opportunities and community enjoyment. Increased daylighting fills the halls and classrooms, expresses the school's values and provides a healthy inspirational environment.



Listen and Connect

Planning Process

The architects initially teamed with the school on the award-winning Performing Arts Center Addition completed in 2005. The partnership continued for the modernization of the remaining campus which was guided by goals established collectively with all stakeholders, including **students**, staff, families, community, school district, and design team through collaborative, interactive meetings and workshops.

The primary objectives were to create a design that supports adolescent life and learning; puts the student at the center; is welcoming, safe, and accessible; is flexible; reflects environmental stewardship; and improves surrounding community connections.



Collaborate

Planning Process

Working with the users we reallocated bond funding from a major facelift with minor interior improvements to a complete modernization and reorganization by stripping the building back to structure and prioritizing impacts to the educational program. This strategy allowed the team to fulfill budget and programmatic parity requirements, and also educators' dreams.

Though a complex, multi-phased project, the continuity of staff throughout the design and construction process allowed the **entire** project team to work collaboratively toward a consistent vision. Goals and objectives established with all stakeholders early in the process served as a consistent standard to inform decisions impacting quality, cost and schedule.

"Our new school is a perfect example of how well the architect listened to the users."

Tina Tudor, Nathan Hale High School, Educator



Exhibition of School Planning and Architecture

Project Data

Submitting Firm :	Mahlum
Project Role	Architect
Project Contact	Gerald (Butch) Reifert
Title	Principal
Address	71 Columbia, Floor 4
City, State or Province, Country	Seattle, Washington 98117 USA
Phone	206.441.4151

Joint Partner Firm:	Not Applicable
Project Role	
Project Contact	
Title	
Address	
City, State or Province, Country	
Phone	

Other Firm:	
Project Role	
Project Contact	
Title	
Address	
City, State or Province, Country	
Phone	

Construction Firm:	Absher Construction
Project Role	General Contractor Construction Manager
Project Contact	Curt Gimmestad
Title	Director – Educational Services Group
Address	1001 Shaw Road
City, State or Province, Country	Puyallup, Washington 98372 USA
Phone	253.845.9544

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Project Details

Project Name	Nathan Hale High School
City	Seattle
State	Washington
District Name	Seattle Public Schools
Supt/President	Maria Goodloe-Johnson, PhD.
Occupancy Date	Occupied Site (Substantial Completion: 29 July 2011)
Grades Housed	9-12
Capacity(Students)	1400
Site Size (acres)	18.8
Gross Area (sq. ft.)	218,500
Per Occupant(pupil)	156
gross/net please indicate	218,500/157,000
Design and Build?	
If yes, Total Cost:	
Includes:	
If no,	
Site Development:	1,450,000
Building Construction:	52,250,000
Fixed Equipment:	
Other:	
Total:	53,700,000