

# 2014 Exhibition of School Planning and Architecture

## Secondary Learning Center

Renton School District  
Seattle, Washington



The Secondary Learning Center (SLC) is intended to elevate the educational experience for students that were not succeeding in traditional comprehensive programs by creating an environment that demonstrates their worth and potential and engages them in the educational process.





SITE PLAN



## COMMUNITY ENVIRONMENT



Improved buffer at northern edge of the site



Jogging path around the site



Combination softball/soccer field

## COMMUNITY AMENITIES

Located in an economically challenged area, community leaders and local neighbors were consulted to gain input on how the school could become an amenity and improve the area. The wooded buffer along the northern edge of the site was cleared of low brush to improve visibility (a Crime Prevention Through Environmental Design [CPTED] principle). In addition, a combination softball/soccer field and a jogging path around the site were incorporated for community use.



## COMMUNITY ENVIRONMENT

In order to engage the community and students in the goal of saving resources, the design of the SLC incorporates a column of lights at the entry as a visual representation of the building's overall energy use. The colored sequence of lights, beginning at the bottom in red up to the top in blue, are connected to the building's energy monitoring system and will activate or deactivate based on energy consumption indicating the efficiency at which occupants are conserving energy. A fully colored column indicates optimal energy performance.

The lights can be seen by the surrounding community as they pass the school to engage them, as well as the students, in thinking of conserving our resources.





# LEARNING ENVIRONMENT

Staff members and students work as a team to identify each student's unique needs and place them in an appropriate program based on not just age but maturity and optimum instructional strategy to personally empower them to grow and mature. The SLC is divided into 3 program options for students.

- **Directed Learning:** Focused on teacher led instruction
- **Guided Learning:** Focused on developing student's ability to work independently
- **Independent Learning:** Focused on allowing the student to direct their own learning

Inherent in this model is both flexibility and fluidity as the primary goal is to match each student with a learning environment that enhances their learning styles and likelihood of success.

Each learning group (Directed, Guided, and Independent) has a shared learning area located adjacent to the classroom spaces.

LED accent lighting on the feature walls display overall building energy performance





## LEARNING ENVIRONMENT

Flexibility and adaptability are essential for a school accommodating such a variety of learning levels and programs. The Science room and CTE programs incorporate technology at workstations to allow a world of information to be readily accessible in the teaching space.







## PHYSICAL ENVIRONMENT

Sustainability, visible within and outside the building, is incorporated as a key element for engaging students with the educational process.

### Energy:

- Photovoltaic panels tied into the power grid;
- Solar hot water heating;
- Daylight harvesting;
- Enhanced building envelope;

### Air:

- Ground source heat pump (GSHP);
- Displacement ventilation and radiant heat;
- Natural cooling;

### Water:

- Rainwater harvesting for gray water flushing;
- Rain gardens and pervious paving.

A 20,000 gallon cistern collects rain water for reuse. Accent LED lights on a sculptural water feature indicate the amount of water that is currently in the cistern.

Empty

1/3 full

2/3 full

Full





LED accent lighting at the shared learning area

## PHYSICAL ENVIRONMENT



LED lighting at a classroom door

### LED ACCENT LIGHTING

Accent lighting at classroom doorways corresponds to energy use in specific classroom zones, while the lights at the entry, central stairway, and shared learning area feature walls display energy use for the entire building

Excessive

Adequate

Good

Superior

Energy use is indicated by light color

# PLANNING PROCESS

The design team and District steering committee met with staff and students in all six comprehensive middle and high schools to solicit input on program components and space configurations as well as individual requirements of the student demographic to be housed in the school.

The program and design then developed to encourage at-risk students to complete their high school education. The design of the school was predicated on teaching students real life skills and therefore resulted in providing a cutting-edge career and technology education program.

By providing these students with a state-of-the-art facility, their value to the community is on display on a daily basis. The success of the building and program is evident in the care students have for the building and site, which are kept in pristine condition.

The Culinary Arts Lab teaches a variety of commercial cooking skills in a space designed to help students feel comfortable in a professional food services environment. Students have real life experiences by preparing lunch time desserts and catering services for District events. The lab is also flexible to share program space with the Student Café and Nutritional Services.







Diagram of Fez-Medina market, Morocco

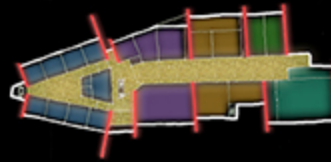
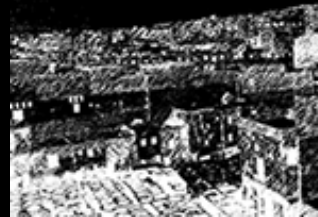


Diagram of SLC plan



Clustering of "Villages" within The Medina



Street connector of the Medina















## PLANNING PROCESS

The design of the SLC was inspired by the concept of "Medina" or marketplace for learning.

The project was modeled around the concept of village clusters, with each village represented as a particular program offered at the school. In this sense, the "main street" corridor acts as a connector between the various "villages", accommodates social interaction, and utilizes transparency to advertise opportunities for career development.

















## First Floor

 Flex Classrooms	 Career Center	 CTE	 Science
 Direct Classrooms	 Admin	 Kitchen	 Library
 Guided Classrooms	 Gymnasium	 Computer/Media Lab	 Building Services
 Independent Classrooms	 Commons		





## Second Floor

 Flex Classrooms	 Career Center	 CTE	 Science
 Direct Classrooms	 Admin	 Kitchen	 Library
 Guided Classrooms	 Gymnasium	 Computer/Media Lab	 Building Services
 Independent Classrooms	 Commons		

# Exhibition of School Planning and Architecture

## Project Data

Submitting Firm :	NAC Architecture
Project Role	Architect
Project Contact	Guy Overman, AIA, LEED AP BD+C
Title	Project Designer
Address	2025 First Avenue, Suite 300
City, State or Province, Country	Seattle, WA 98121, USA
Phone	206.441.4522
Joint Partner Firm:	
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:	Neeley Construction
Project Role	General Contractor
Project Contact	Mitch Neeley
Title	Project Manager
Address	111 23 <sup>rd</sup> Street SE, Bldg B
City, State or Province, Country	Puyallup, WA 98372, USA
Phone	253.845.8838



# Exhibition of School Planning and Architecture

## Project Details

<b>Project Name</b>	Secondary Learning Center
<b>City</b>	Renton
<b>State</b>	Washington
<b>District Name</b>	Renton School District
<b>Supt/President</b>	Dr. Merri Rieger
<b>Occupancy Date</b>	9/4/2012
<b>Grades Housed</b>	7-12

<b>Capacity(Students)</b>	400
<b>Site Size (acres)</b>	11.82
<b>Gross Area (sq. ft.)</b>	69,061
<b>Per Occupant(pupil)</b>	172 GSF/pupil
<b>gross/net please indicate</b>	Gross

<b>Design and Build?</b>	No
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If yes, Total Cost:

Includes:

If no,

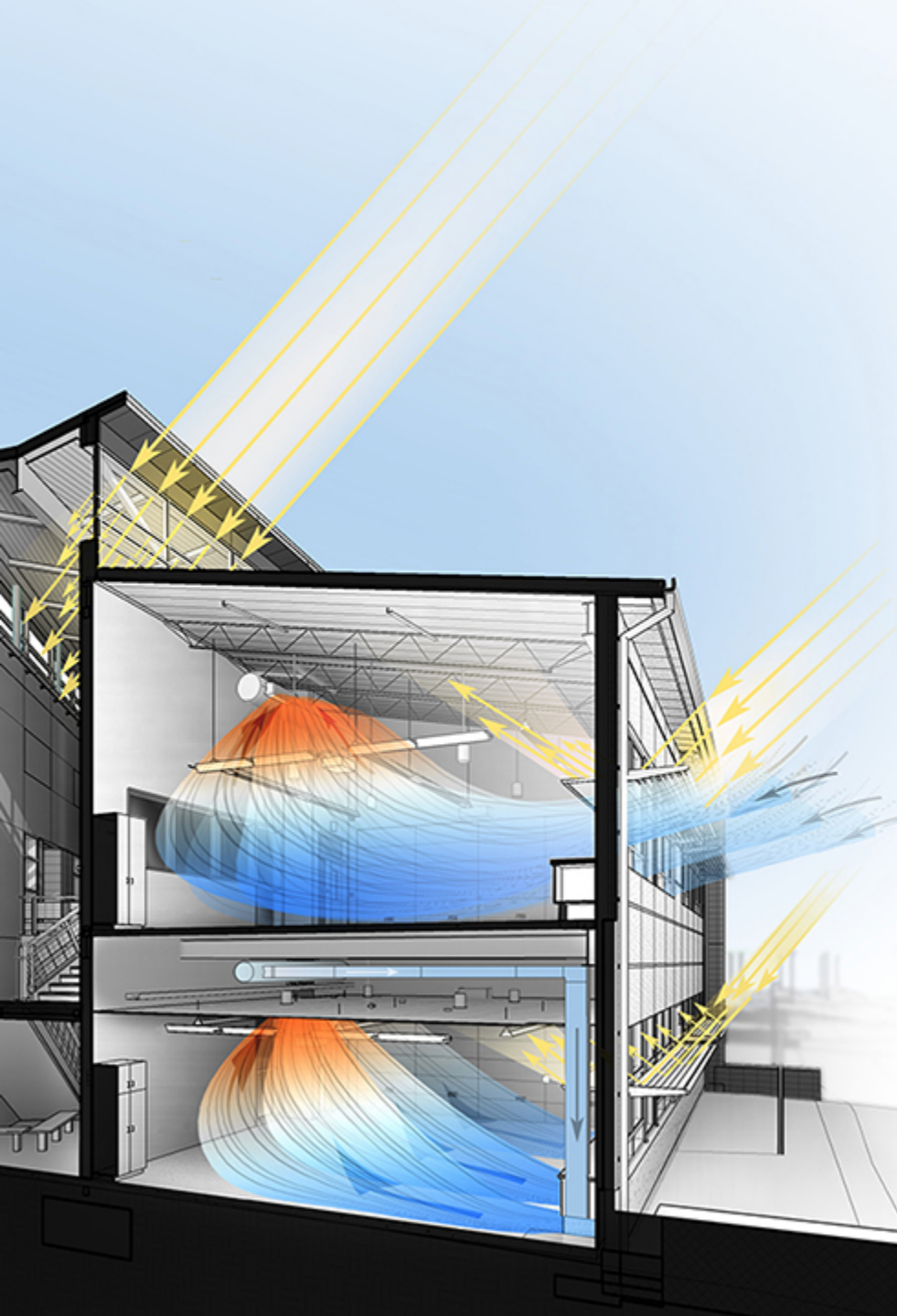
<b>Site Development:</b>	\$4,367,334
<b>Building Construction:</b>	\$18,081,549
<b>Fixed Equipment:</b>	\$534,964
<b>Other:</b>	\$9,155,860

<b>Total:</b>	\$32,139,707
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Color is also used for way-finding throughout the school in the form of colored glass insets at windows and railings. Warm reds to yellows denote the south side of the building while cooler blues and greens indicate the north side.





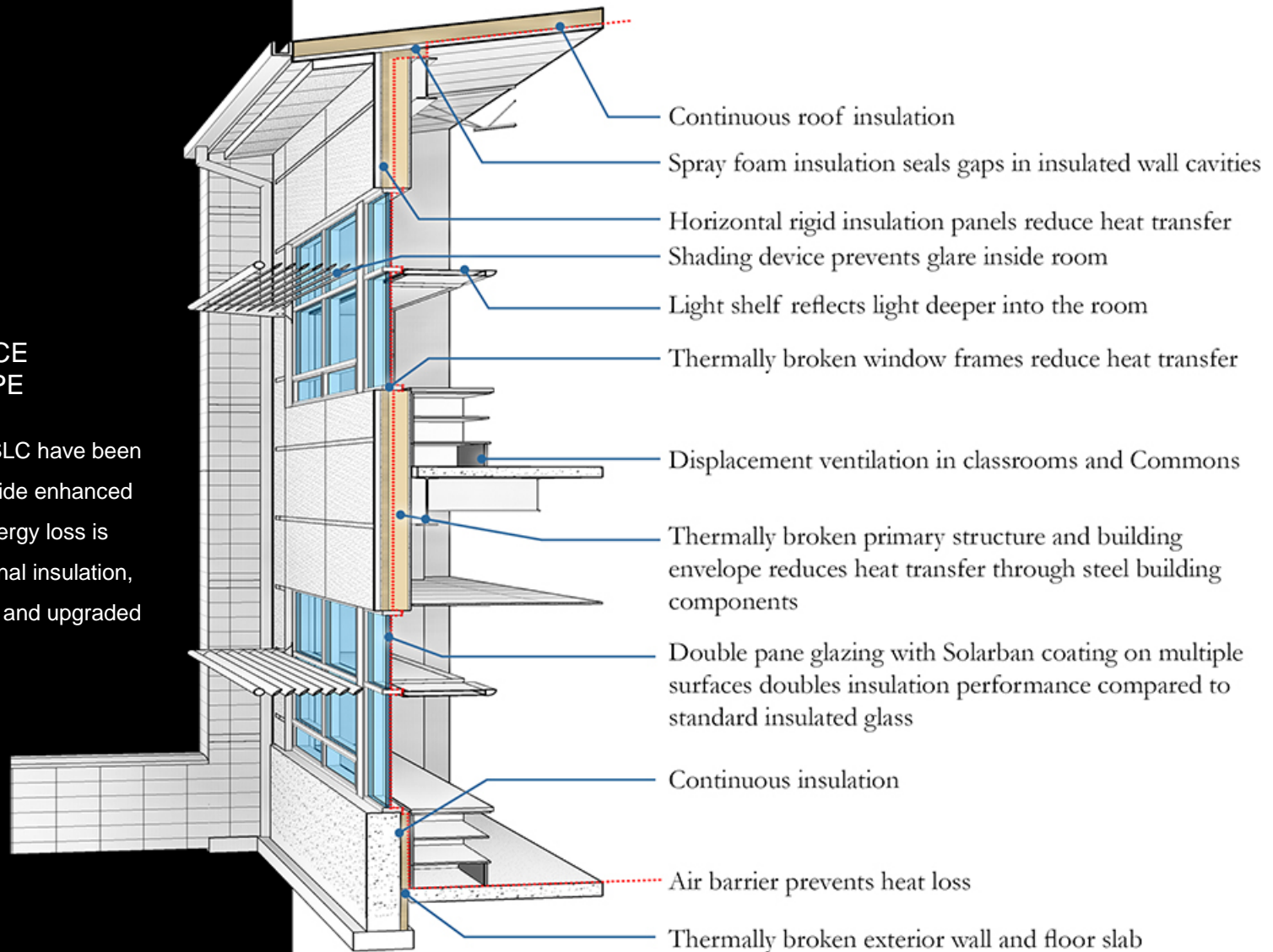
## INTEGRATED BUILDING SYSTEMS

Natural and displacement ventilation systems work in conjunction to provide occupants with exceptional indoor air quality while large clerestory windows and light shelves bring natural daylight deep into interior spaces



## HIGH PERFORMANCE BUILDING ENVELOPE

The exterior walls of the SLC have been carefully designed to provide enhanced thermal performance. Energy loss is prevented through additional insulation, reduced thermal bridging, and upgraded window glass.





A vertically folding wall at the Gymnasium allows space for larger assemblies and events. The Commons is designed as a connecting, multi-functional space.







The Secondary Learning Center strives to re-engage kids with the learning process, and instill the skills needed to succeed in life.