



DESIGN FOR EQUITY:

FOR AN INDIVIDUAL

FOR THE CITY

WING LUKE ELEMENTARY SCHOOL

Seattle, WA

MacConnell Award, A4LE 2022

**"THIS WILL BE A MULTI-CULTURAL SCHOOL."**

— CLIENT



## EXECUTIVE SUMMARY: DESIGN FOR EQUITY

**For One and All.** At Wing Luke Elementary School, design for equity resonates on both individual and city levels. The school's exceptionally diverse student population, reflecting families speaking 17 different languages, presented educational design challenges as well as intriguing opportunities. In the existing building, teachers had worked hard to organize pedagogical activities that could “reach students where they are” and make sure no one was left behind. To that end, they devised academic practices spanning different grades and subjects to maximize positive outcomes for all the students. Critical parts of Wing Luke's educational planning then became identifying these strategies and how to amplify spatial choices to support them, along with addressing a wide variety of students' neuropsychological factors associated with childhood development and personal growth.

**Reaching Students Where They Are.** This phrase emerged as the resounding design theme. Deepening our understanding, we focused on creating an environment to help the Wing Luke teachers connect with their students according to individual needs. In the same vein, our approach incorporated a series of ways to reach school parents and families “where they are.” Community members were not expecting to be included in the planning process, so the design team and school steering committee introduced multiple options to gain feedback and input from parents and children alike. By scheduling gatherings after hours, our approach resulted in richly diverse, above-average participation, allowing us to tap directly into the local neighborhood's interests and concerns. In addition to events hosted by the school, the design team visited families who had recently immigrated from Somalia at a nearby housing complex where communal events were regularly occurring. This ready-made forum expanded access to valuable insights and enhanced the diverse community's trust that the new school truly is for them.

**New District Model for Excellence.** Located in a part of Seattle known for being underserved academically, the new Wing Luke Elementary has turned expectations around. The celebratory reception taking place at the grand opening confirmed the value and extent of the planning and design effort and prompted a district-wide discussion about investing resources to achieve the same response at other new schools. Addressing a longstanding demarcation, the question arose, “Can schools in the south end of the city be as good or better than schools in the north end?” While teachers in the previous school had dedicated themselves to learning equity, the new school allows equity to occur naturally in support of teacher and student success. Tasked with being an inclusive multi-cultural school, Wing Luke shines for manifesting an extraordinary vision for public education ensuring every child, teacher, and family knows they are welcome, valued, safe, and served.



REACHING STUDENTS WHERE THEY ARE  
REACHING COMMUNITY WHERE THEY ARE

SCOPE OF WORK AND BUDGET: KEY PROJECT STATISTICS

Design Capacity: **500 students**  
Building Area: **76,413 sf**  
Previous building was 50,720 sf total, comprised of main building (30,650 sf) and recent addition (20,720 sf).  
  
Total Project Cost: **\$47.5 Million**  
  
Construction Cost: **\$34.5 Million Total**

The new Wing Luke Elementary School replaces a building on the same site. The design began in 2016 and doors opened to students in the fall of 2021.

The school was master planned for a future 12-classroom expansion that would bring the capacity up to 650 students. Sizing the core facilities to support the larger size was the best approach for a neighborhood expecting significant growth throughout the life of the school.

THE GOAL

Architects were tasked with reflecting the school's diverse students, families, and staff, while celebrating the unique bond manifested by this collective.



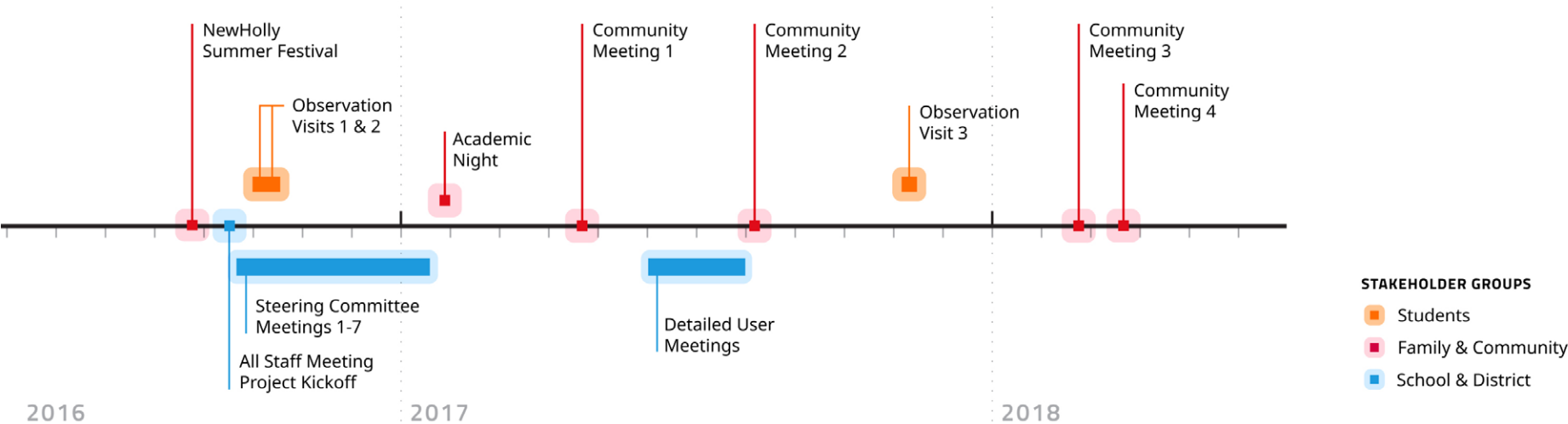
“Everybody smiles in the same language.”  
— George Carlin

A MULTICULTURAL SCHOOL

The design process investigated how communal space typologies from around the world could inform social interaction in a south Seattle elementary school.

- + **17** languages spoken
- + 42% African American
- + 40% Asian
- + 6% Hispanic
- + 2% Caucasian
- + **39%** of students have limited English proficiency
- + **78%** free/discounted food program

PERSISTENT AND SUSTAINED PLANNING AND COMMUNITY ENGAGEMENT







The power of Wing Luke's exceptionally diverse community and its communal attitude were evident in the enthusiastic turnout for Academic Night at the previous school.

## SCHOOL COMMUNITY ENGAGEMENT: PLANNING PROCESS

# Reaching Community Where They Are

## COMMUNITY AND STAKEHOLDERS

Exceptional diversity: multi-cultural, highly communal attitude.

Mobilized by a shared vision:

- + Giving justice to planning a major community project.
- + Willing and ready to tackle challenges.

## CHALLENGES: COMMUNITY OUTREACH

Discovering how architecture could create a spatially communal environment to honor multi-cultural heritages.

**“Reaching community where they are”:** Expanding participation to people who were not expecting opportunities to provide input on the school's design.



Many Wing Luke families walk to school from the NewHolly community. This is a planned mixed income community that gives many families new to the United States a foundation to build on when they first arrive. Communities like NewHolly are the reason why Wing Luke Elementary's zip code (98118) is the sixth most diverse in the entire nation. The design team joined a summer festival at NewHolly at the beginning of the project to gather perspectives from stakeholders that would otherwise be left out of the planning process.





The chance to provide feedback was a new experience for Wing Luke parents and siblings. Students led the way, feeling right at home giving their ideas and drawings.

## SCHOOL COMMUNITY ENGAGEMENT: REACHING VOICES OFTEN FORGOTTEN

# Community Input

## THE JOY OF PARTICIPATION: FUN FOR STUDENTS, PARENTS, AND SIBLINGS

Many parents in this school community work two jobs and were unable to join regularly scheduled evening meetings to discuss planning and design. Understanding this situation, the design team expanded its efforts to reach community and family members at events they were already attending.

The large gathering generated by Academic Night at the existing school showed the community's strong spirit and offered the perfect opportunity to connect. Filling the stage and posting areas with drawings attracted amazing energy from all ages and created an evening to remember.

**Our lofty goal was to create a school that embodies the full power of the community's inclusive spirit.**



Sharing digital site models with students.



# School Steering Committee Input: Defining Educational Values and Goals

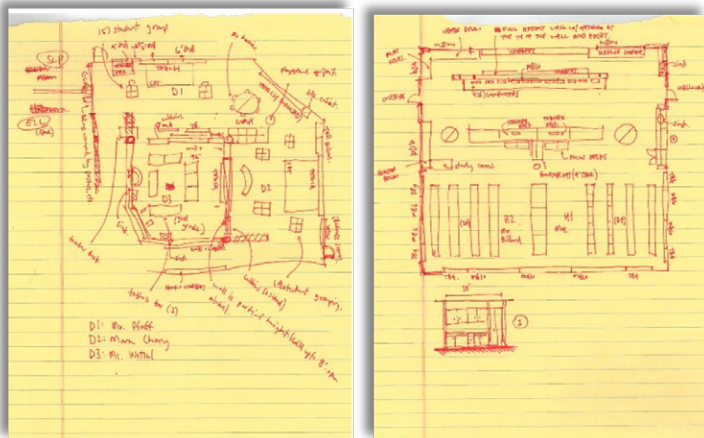
Planning process discussions held with the steering committee clarified the design team's understanding of the school's practice of and aspirations for pedagogical variety.

The previous school's open plan (shown on the right) gave students and groups the flexibility to move throughout the space. **Small, focused group lessons taught across ages, called "Dragon Blocks," were an integral part of teaching for equity.** However, acoustical challenges seriously impacted ESL students and recent immigrant children.

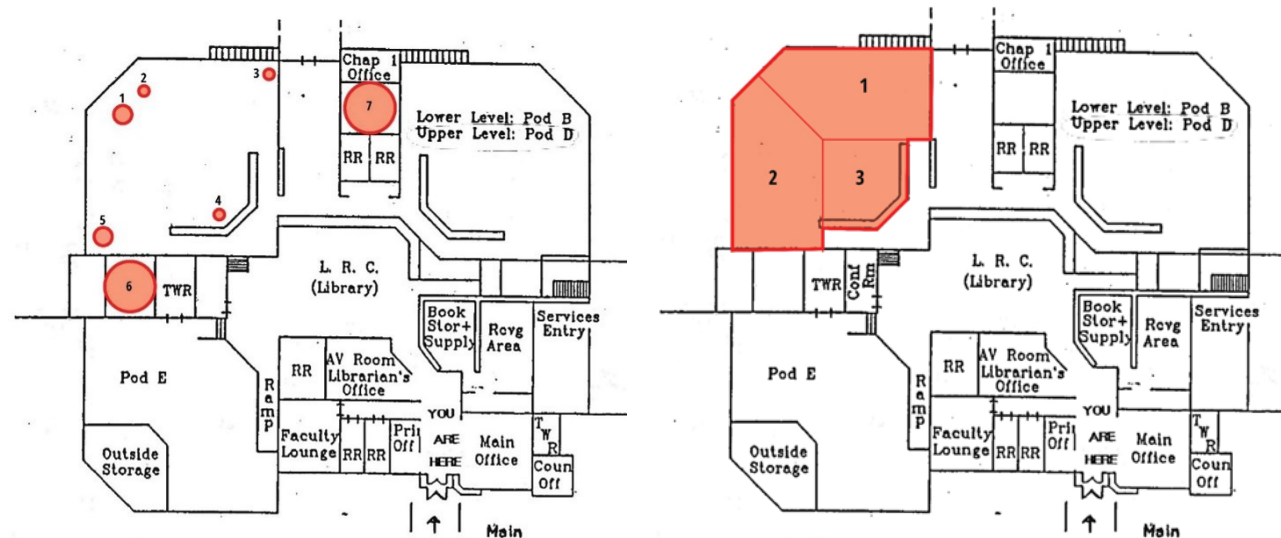
The new school's design supports even greater pedagogical variety, providing openness and transparency and increasing options for teachers and educational specialists to address students' individual needs.



## SEEING IS UNDERSTANDING



Documentation of the design team's shadowing of school activities in the Dragon Blocks.



Red areas document the Dragon Blocks' exercise places.



On-site observations by the design team over several days established a foundation for detailed planning and investigation of how the learning environment can support social, communal, and educational goals.

- + Honor Wing Luke's legacy of diversity; honor different/multiple cultures.
- + Holistically support teaching for equity.
- + Support the communal spirit of Wing Luke.
- + Provide multiple spatial choices to address the needs of all students.
- + Establish a civic presence that enriches the surrounding neighborhood.

- + Safe and secure grounds

- + Venue for community connections and partnerships

Documentation of school shadowing—site observations by the design team.

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## Social

## Communal

## Pedagogical

The school's diverse community, social culture, and pedagogical intentions to teach for equity inspired the design team to research communal human behavior, traditions, and spaces across several continents and cultures. The strong need for communal use was woven into every type of space, both the academic neighborhoods as well as throughout the entire project.

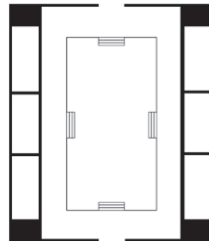
### COMMUNAL SPACE STUDIES

#### CENTRAL ORGANIZATION

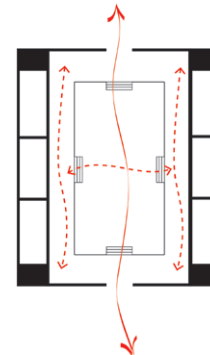


Planning process discussions with the steering committee made it clear that a central spatial organization would best serve the school's desire for close connectivity across different classrooms, shared break-out spaces, and specialists' conference rooms.

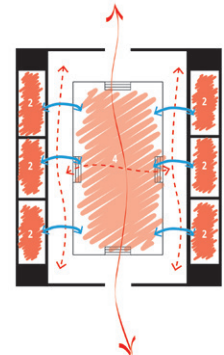
#### FIGURE GROUND



#### PROGRESSION



#### SOCIAL INTERACTION







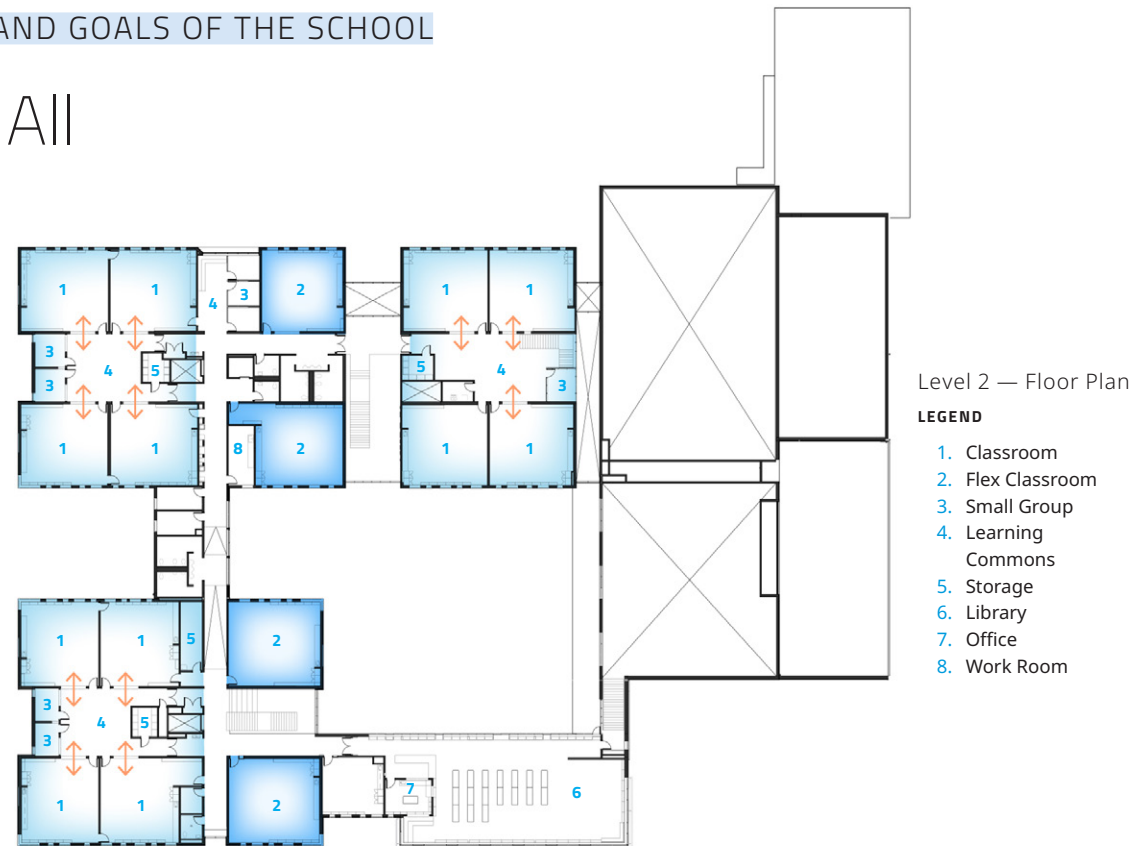
Transparency and spatial connectivity were at the heart of space planning.

## EDUCATIONAL ENVIRONMENT: EDUCATIONAL VISION AND GOALS OF THE SCHOOL

# Teaching For Equity: Reaching All Students Where They Are

Over the past couple of years, Covid regulations put planning strategies for Wing Luke's flexible spaces to the test. The assistant principal noted that the areas between classrooms worked well for intervention opportunities with specialists. As restrictions eased, they smoothly transitioned to Dragon Block activities serving a variety of groups in smaller zones that did not interrupt each other.

Looking ahead, the assistant principal anticipates the classrooms and their shared spaces operating like a grade-level Montessori school where students flow through them according to interests and aptitude. The school's design will naturally support pedagogical change over time, strengthening the progress now being made with teaching for equity.



Second floor plan shows multi-grade neighborhoods reflecting central spatial organization.





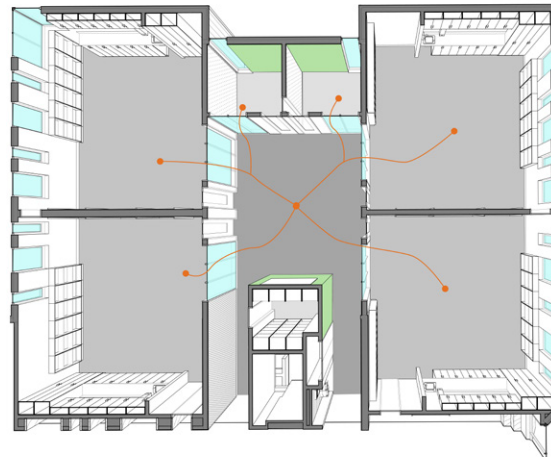
Inner and exterior transparency brings nature in and provides ample connections and choices for pedagogical activities with small groups or individual tutoring.

## EDUCATIONAL ENVIRONMENT: ADAPTABLE AND FLEXIBLE LEARNING

# Teaching for Equity: Activity Choices Neighborhoods Work Like a Montessori School

From planning discussions through Covid restrictions, and currently emerging to a hopeful future, teachers and students are using the academic spaces in three main ways:

- + Individual classrooms complemented by shared areas for separate instruction.
- + Shared areas serving as extensions to the classrooms.
- + Classrooms serving as extensions to the shared areas—reflecting a natural progression toward education influenced by student agency.



Spatial connectivity was at the heart of educational planning.



Visual connectivity: Students can see each other in different classroom neighborhoods, reinforcing an overall sense of community.





## EDUCATIONAL ENVIRONMENT: SUPPORTING VARIOUS LEARNING AND TEACHING STYLES

# Teaching for Equity: Reaching All Students Where They Are

Inclusive teaching and learning permeated the school's educational vision, based on its history of using many small groups and individual tutoring across grades to reach all students **"where they are."** The new school design responds to this approach by placing shared areas of various sizes near classroom neighborhoods and throughout the school. Ranging from individual to large group use, activities can take place outside the classrooms or in tandem with in-classroom teaching and learning.



2nd Floor Plan Example of Academic Neighborhood and Adjacent Flexible Areas





## EDUCATIONAL ENVIRONMENT: SUPPORTING VARIOUS LEARNING AND TEACHING STYLES

# Teaching for Equity: Activity Choices Inside and Outside



The courtyard provides a protected environment serving many educational purposes, as well as social, performative, and communal functions.

Top Image: Math class taking measurements;  
Bottom Image: Math class following up with calculations.





Students walk along the dragon trail as a way of transitioning from recreation to academic activities.

Wing Luke's central courtyard serves as the heart of the school community. Capturing the spirit of a gathering place founded in diversity and inviting a wide range of events and activities, the school's mascot comes to life as an interactive feature in the paving. The symbol of the flowing dragon, both poetic and powerful, reinforces students' pride of place—knowing that they too are dragons with the power to overcome obstacles and achieve anything.



# Individual Experience with a Sense of Community

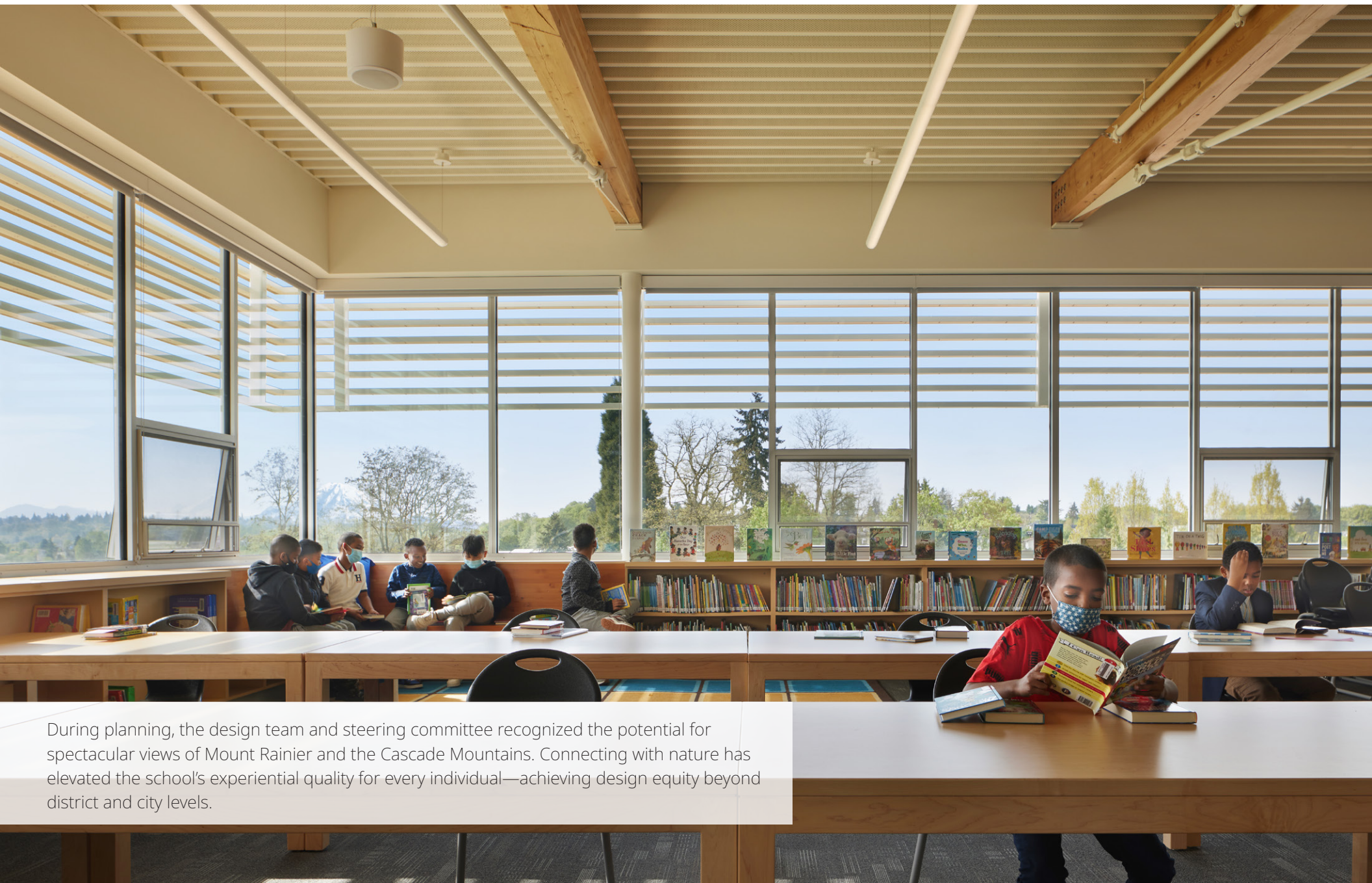




# Design Equity for the Individual and City

*"This will be the library with the best view"*

— Librarian, during design planning



During planning, the design team and steering committee recognized the potential for spectacular views of Mount Rainier and the Cascade Mountains. Connecting with nature has elevated the school's experiential quality for every individual—achieving design equity beyond district and city levels.





Sakura cherry trees (visible through the window) give a nod to Japanese gardens. When they bloomed this spring, several teachers and school administrators commented on their beauty. Including them in the landscape reminds students of Seattle's long connection with Japan and underscores the school's respect for multicultural experiences. ►



## EDUCATIONAL ENVIRONMENT: SUPPORTING THE CURRICULUM

# Teaching For Equity: Sparking Students' Interests

The school is designed to allow Dragon Blocks to occur throughout the building, including several spots in the library. Advancing educational equity further, the librarian has pursued a new collection of books to spark even broader interests in the students.



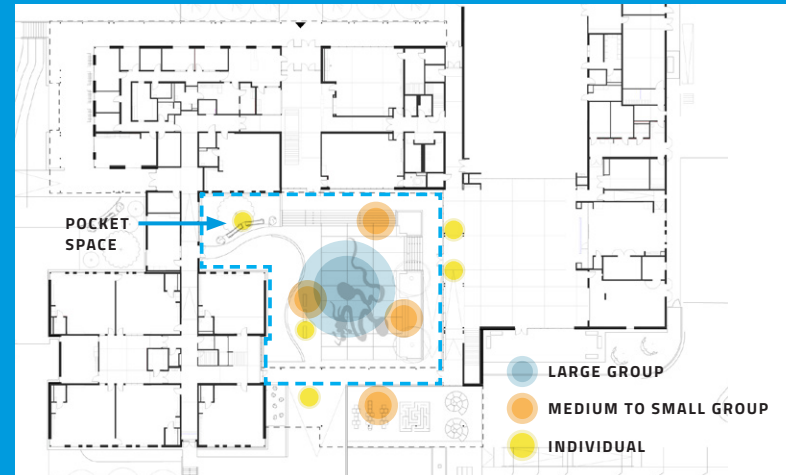
Sakura cherry trees are visible from Library and Commons.



## EDUCATIONAL ENVIRONMENT AND PHYSICAL ENVIRONMENT: THE INFLUENCE OF RESEARCH

### Social Communal Pedagogical

The school community's exceptional diversity and sense of family heightened the design impetus to provide spatially rich environments—quintessential communal spaces. Wing Luke offers multiple interpretations of spatial inclusivity for all purposes, from individual use to large gatherings.



Serving as a quintessential communal space, the courtyard has ample spaces for a variety of activities.

## COMMUNAL SPACE STUDIES

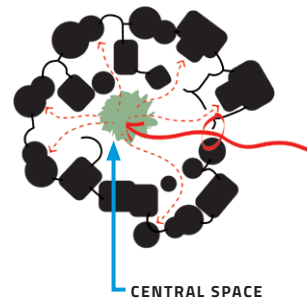
### VILLAGE ORGANIZATION



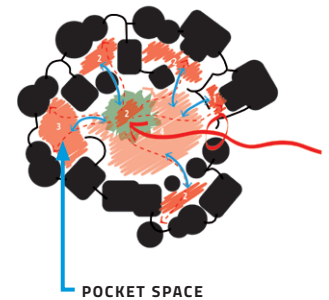
### FIGURE GROUND



### PROGRESSION



### SOCIAL INTERACTION



Serving the school's broadly diverse population, communal gathering spaces include a variety of formal and informal areas.

The large central space is complemented by smaller, informal "pocket" spaces where introverted students can relax and recharge, or where new students can be close to the action while gaining the confidence to venture into the center.





## Teaching for Equity: Inside and Outside



A garden "pocket" space offers respite and serves as an outdoor learning area. It can also provide a sense of privacy to help introverts and newly arrived students feel more comfortable interacting. Larger gatherings and performances take place in the open space beyond.



## Neighborhood Context And Topography



Breaking down the school's massing creates a friendly scale suited to its residential context.

### SITE FLOW: WORKING WITH RECESSED TOPOGRAPHY

While the school brings the scale of a major public building to the neighborhood, the rhythm of its elements creates a friendly juxtaposition to the surrounding residences.

The building is recessed in the site's topography to further reduce its impact.



**PHYSICAL ENVIRONMENT:** FITTING IN THE LARGER CONTEXT OF THE COMMUNITY

The community porch wraps around the entry plaza and west side for welcoming arrivals.





**PHYSICAL ENVIRONMENT:** PHYSICAL ATTRIBUTES OF THE ENVIRONMENT

# Engaging The Site And Nature Near And Far



Site flow through the building terminates at the playground on the south side of the building.



Site Flow with topography – from descended entry to play areas on lower levels.



# Honoring Cultural Heritages: Tactile — Physical — Educational



Major circulation nodes are highlighted with a “dragon skin” wall texture and red baffles on the ceilings.

Wing Luke arrived in the United States from Hong Kong at age 6. After years of public service, at age 37, he was the first person of color elected to Seattle’s city council. The historic image at left captures Wing Luke signing official documents in English as well as Chinese while he served as acting mayor of the city. Wing Luke’s seal on that document, the same seal that is featured prominently on the lobby wall, is a symbol to students of the school with life stories similar to Wing Luke that this school is here to serve them.



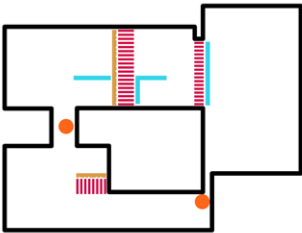
**PHYSICAL ENVIRONMENT: INSPIRING AND MOTIVATING—**  
**WAYFINDING**

Honoring Cultural Heritages:  
Tactile — Physical — Educational



Abstracted mountains and trees in a wall mural honor the Pacific Northwest landscape, while including 10 hidden dragons to engage students in an educational opportunity.

The world map on the right connects flora and fauna around the globe with students' widely diverse backgrounds.



- RED BAFFLES
- DRAGON SKIN WALL TEXTURE
- WALL GRAPHICS
- LEGACY OBJECTS





## RESULTS: THE INFLUENCE OF RESEARCH

Social

Communal

Pedagogical

School community input and planning conversations revealed the importance of performance, attendance, and gathering in an informal setting. Extensions to outdoor spaces with potential for outdoor performances and large gatherings was a key part of the design thinking.

**ACHIEVING DISTRICT GOALS: "THIS WILL BE A MULTI-CULTURAL SCHOOL!"**

## COMMUNAL SPACE STUDIES

### PLAZA ORGANIZATION



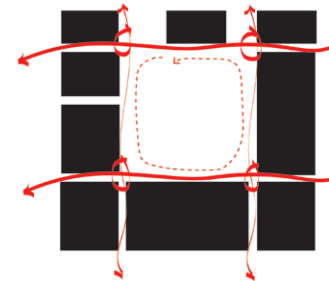
Zocalo, the central square in Mexico City, serves as the ultimate gathering space for public performances, communal improvisations, and informal activities.

Zocalo provided an example and inspiration for a communal space for Wing Luke with varying zones and connections.

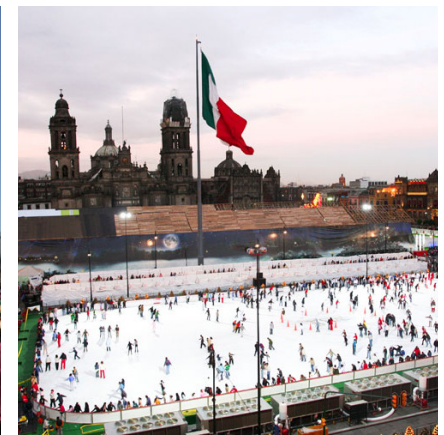
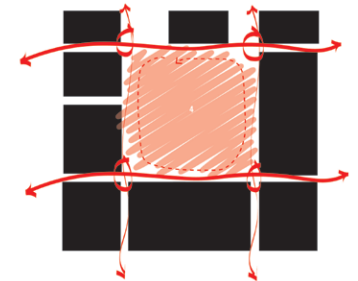
### FIGURE GROUND



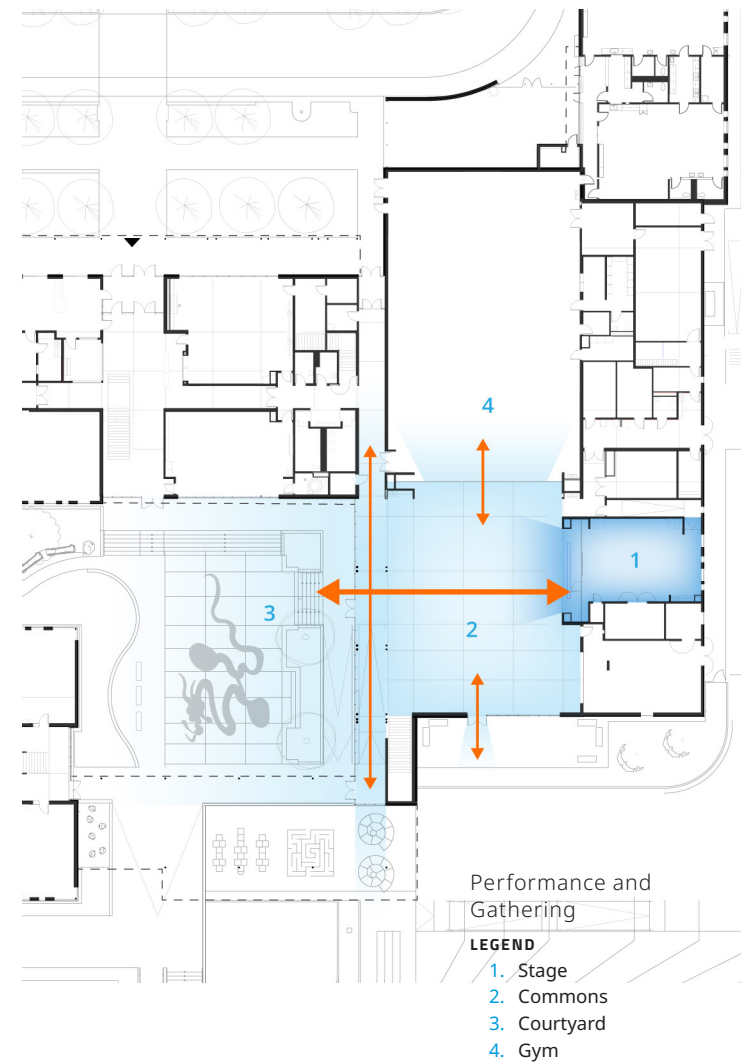
### PROGRESSION



### SOCIAL INTERACTION







Student cafeteria doubles as a main performance stage, and extends to the courtyard to allow more flexible options for performances and gatherings, inside and outside.



# Community Spirit Observed: Students' Camaraderie Opportunities to honor Wing Luke's diverse heritages



Designed in 2016-17, new school planned multiple exterior spaces for various degrees of community welcoming and gathering. The school opened in fall 2021 and then operated a good part of the year with Covid measures in place. The entry plaza, designed for informal gatherings and socializing, served the school well for events honoring their students' diverse heritages.

**"The school design has worked very well for us during Covid. The outdoor spaces were put to so many good uses."**

— Assistant Principal



## SERENDIPITOUS DISCOVERIES: STUDENTS HELPING STUDENTS

During recent observation visits, we encountered multiple instances of students informally helping other students.

In the picture directly to the left, one student was reading to another student.

In the far left picture, we were leaving the playground when two girls came out of the school and selected this outdoor spot for their task.





Doing the "Dragon train": Students returning from recess to the classroom walk along the abstract dragon pattern as a way of transitioning from outdoor play to academic activities.



Entry plaza was a perfect place to celebrate Chinese New Year in 2022.

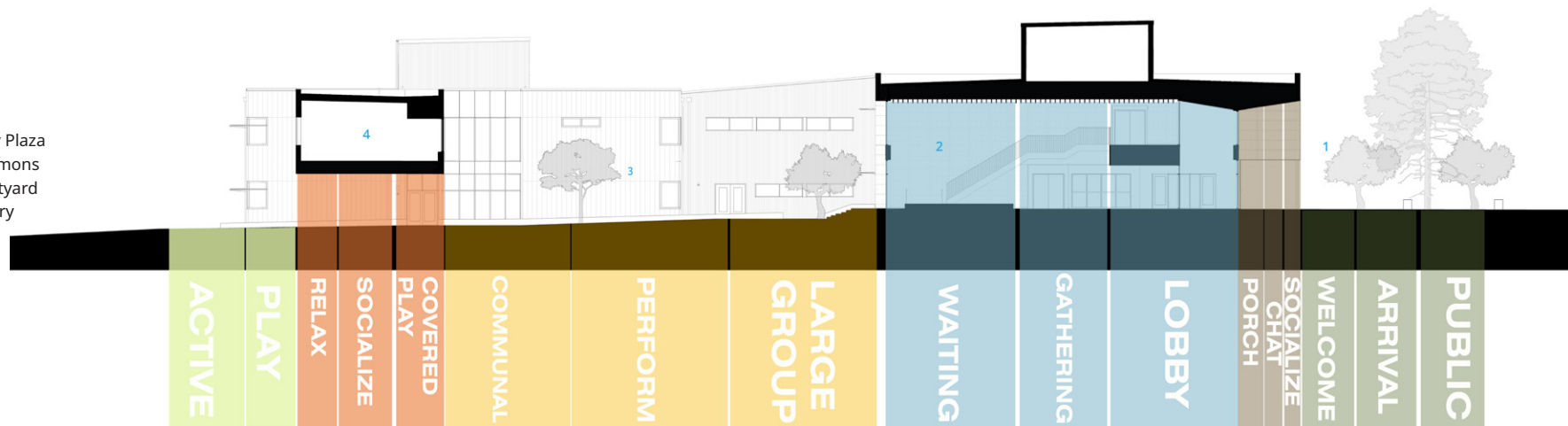
## RESULTS: SCHOOL AND COMMUNITY GOALS

# Honor School's Heritage, Support Communal Spirit

Section

### LEGEND

- 1. Entry Plaza
- 2. Commons
- 3. Courtyard
- 4. Library







## RESULTS: INSPIRING AND MOTIVATING

# Subtle Honoring of Different Cultures — Honoring Human Craft

The courtyard's significance as the heart of a diverse community merited capturing the larger-than-life spirit of the school's mascot, the dragon. The brushstroke quality of the traditional painted dragon felt achievable through the use of hand-placed stones.

Exposed black Mexican river rocks are set in a form with spacing in certain areas giving the illusion of a 3-dimensional form. The installation process required a CNC'd plywood template to ensure every stone was placed accurately.





## RESULTS:

# Design Matters: A Student-Centered Environment

## UNEXPECTED ACHIEVEMENTS

### 3RD GRADERS' MISCHIEF: APPRECIATING VIEWS AND BIOPHILIC DESIGN

Through the project's planning and design, the steering committee recognized the potential for extraordinary views from the library, showcasing Lake Washington, the Cascade Mountains, and Mount Rainier.

During a recent site visit, the librarian shared a story confirming the impact of the design on learning experiences. She was pleased to have solved a mystery involving her after-hours reading class. Typically, they would meet in a room without views. For several days, the space was locked, so she and the students gathered in the library instead. Initially thinking the issue was a custodial error, she discovered that a 3rd grader was the culprit. He explained that he and the others wanted to be in the library where they could see the "ocean," actually Lake Washington. His mischief demonstrates how design matters even at younger grades and confirms the power of biophilic design principles to inspire student engagement.

**Design equity for the city: South-end school has a library with the best view in the District.**





# Wing Luke: Embodiment of a Truly Inclusive Public School

