

OLYMPIC HIGH SCHOOL

BREMERTON, WASHINGTON
CENTRAL KITSAP SCHOOL DISTRICT



An outdated 70's era high school is given new life as a sustainable, light-filled, inspiring learning environment.

Executive Summary

Bremerton, Washington's Olympic High School (Oly) was originally constructed in 1977 as an unappealing series of low-slung, dark, functional boxes. The well-worn facility no longer measured up to the aspirations of its students and dedicated staff. There was a feeling at Oly that the school was failing both the students and the faculty.

The old standardized model of direct instruction was influenced by the need for mass production of uniform talent. Today's schools need to support massive shifts in

skills required to contribute to the diverse economy. Not only are there shifts in learning content, the designed environment that supports student experiences also needs to evolve to meet our diverse student needs.

Initially left off the capital projects list, through an activist effort by teachers and staff who teamed with a creative district administration, Oly began a journey of placemaking that transformed the school over two construction phases into a connected, transparent and inspiring learning environment.

ASSETS:

- Close-knit community and student body
- Staff members who advocate for themselves and their students
- School administration willing to provide equity to an overlooked population and to find out of the box funding solutions
- Community open to change



36.6
ACRES

1977
ORIGINAL
BUILDING

GRADES
9-12

STUDENTS
1,200

Community Context and Existing Building

Olympic High School is located in a low density suburban neighborhood on the Kitsap Peninsula in Washington State. Known mostly for the naval shipyard, Bremerton’s population has a large number of families that are in the military or work for the shipyard. With few amenities nearby, the high school serves as the center of many families’ social lives.

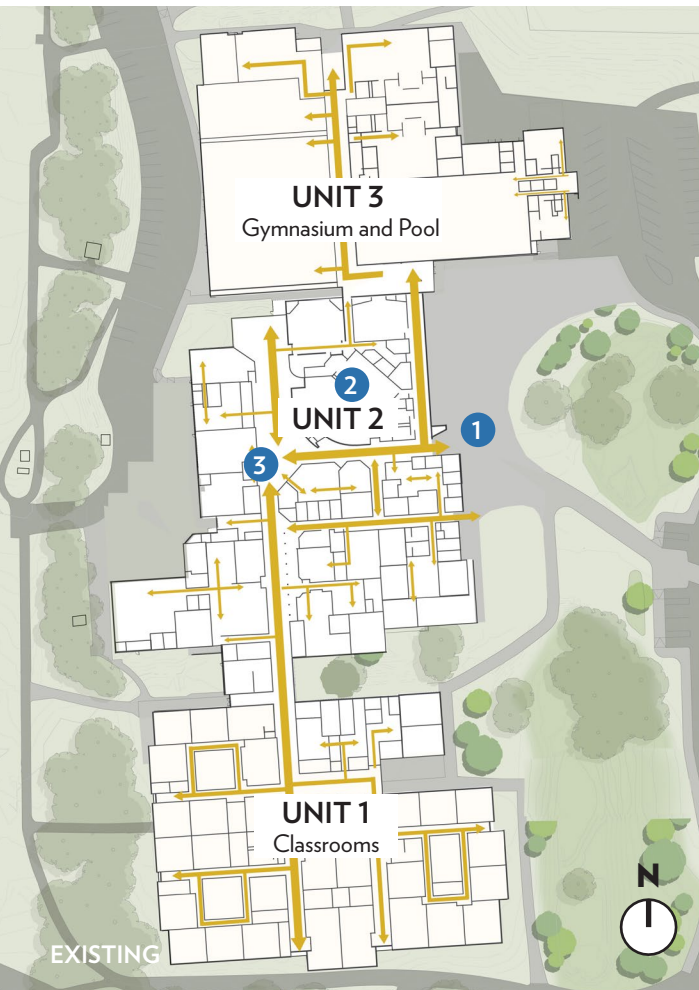
Prior to the renovation, it was difficult to even know how to enter the building. And once you entered – it was hard to know where to go. There was no place to gather as a community. The “Cafeteria/Commons”

only held around 250 people at a time, so students would often eat sitting on the floor in hallways and on the stairs. Once you entered the building, students and teachers said they lost their sense of time and place because many spaces lacked windows. The beautiful trees surrounding the campus couldn’t be seen from the inside. The theater only held 150 seats and the Principal lamented having to turn parents away from their child’s performance. They simply couldn’t host drama and music performances at the school.

The Central Kitsap School District tax base is aging

and the community has difficulty passing school bonds and raising taxes, so the bond amount was kept as small as possible, excluding Oly because the building was “only” 40 years old. This exacerbated the feeling that Olympic High School, which serves a larger population of minority and low income students than other schools in the district, was being over looked.

During presentations on the upcoming bond, Oly teachers advocated for their school’s inclusion on the capital facilities list and the school district worked hard to find alternative funding.



1 MAIN ENTRY



2 THEATER



3 COMMONS

PHASE 1

Demolish and Rebuild Unit II

COST
\$41 M

SIZE
92,479 SF

PHASE 2

Remodel and Modernize Unit I and III

COST
\$25 M

SIZE
48,642 sf (Unit I)
51,000 (Unit III)

School was occupied throughout construction of Phase 1 and 2

Visioning for Olympic High School

During the process of developing the project vision and educational specifications, participation from teacher, staff, students, administration and leadership was solicited. A wide range of participants offered insights and ideas into the educational needs, programs and aesthetic direction for the modernization of this school. The primary group with the most insight and decision making efforts was the Design Review Committee (DRC). Members included teacher, staff, admin, and district leadership.

The educational vision process was broader than

defining a space. Allowing this visioning process to exist outside of space planning gave the stakeholders the ability to meet specific educational and district goals, and to find the community voice and shared wisdom. We held outreach meetings to learn the aspirational goals of the community and skills the students needed to thrive and contribute back to their community. Alternative forms of input included both survey and in person meetings with parents, students, and teachers.

The district conducted multiple meetings with industries to expand and enhance unique CTE pathways through

strategic partnerships with local and regional businesses. The design team took care to lead a two-way community engagement process. We listened, collected information, discussed our findings with the leadership team, distilled and planned based on these findings, and then reached back out to the community.

During the design phase, students from the CTE Architecture Program used Revit to design classrooms, participated in design workshops, and took a field trip to the architect's office in Seattle to learn more about the architectural practice.



Community Input

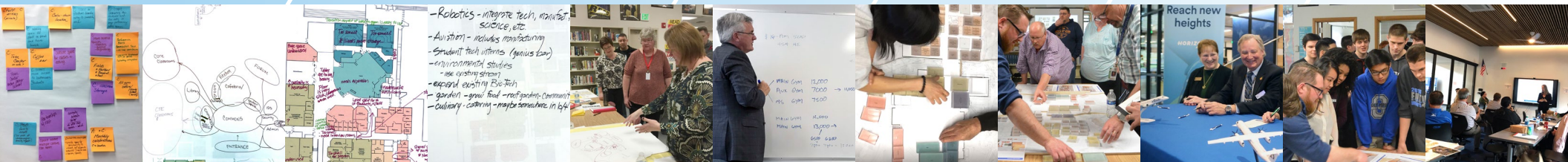
DRC Workshop

Budget Brainstorming

Eco and Design Charrette

Industry Outreach

“Reach-back” Meeting



Guiding Principles

Building on CKSD's district guiding principles from the Long Range Facility Plan, the planning team added an additional principle based on community feedback: "Identity". Students, staff, family and neighbors wanted a place where they could be welcomed into the school to participate in athletic, arts and cultural events. Stakeholders recognized that sharing these events with the wider community and seeing themselves reflected in their school, reinforces a positive identity and a sense of pride in students.

The eight guiding principles for the development of the Oly campus are, in a prioritized order:

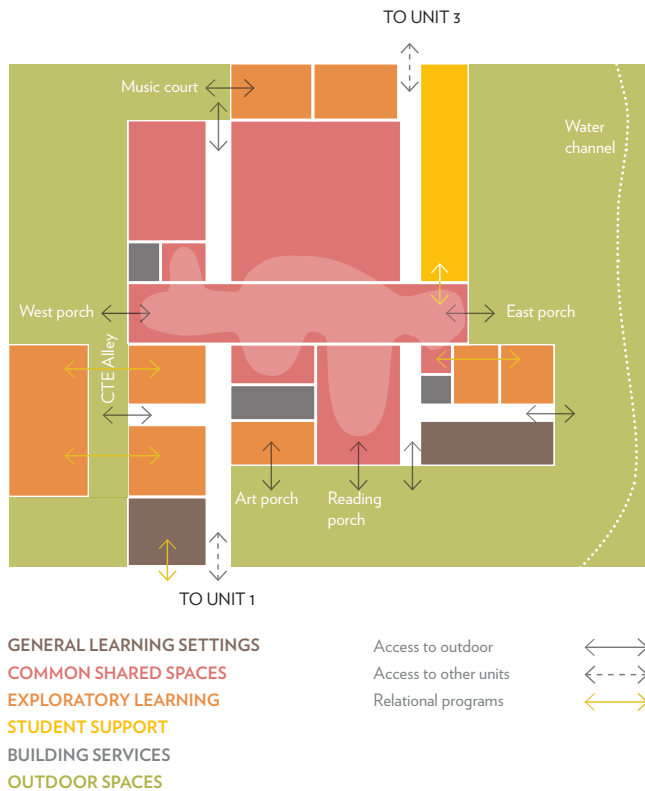
1. Identity
2. Relationship Driven Design
3. Safety and Security
4. Welcoming and Inviting
5. Flexible and Adaptable
6. Integrated Technology
7. Sustainable and Durable
8. Minimize School to School Transitions

The planning strategy aligned with the educational goals of CKSD mission to equip students with the knowledge and skills to succeed and prosper in an ever-changing global society. Specific goals included:

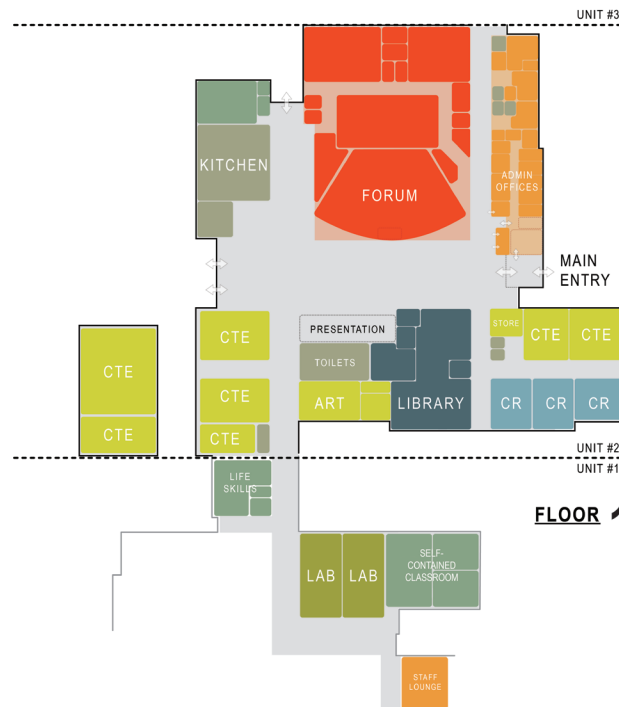
- All students engaged and learning
- Safe and supportive schools
- A well-developed, highly skilled and effective staff
- Family and community engagement
- Fiscal responsibility

The following pages describe how the Guiding Principles are implemented to the new and updated spaces.

Creating a responsive school environment isn't rigidly defined by square-footage or a construction budget; more importantly, it's about making thoughtful connections between learning and facilities.



CONCEPTUAL ADJACENCIES AND RELATIONSHIP DIAGRAM



FACILITY SPACE PROGRAM DIAGRAM



PLAN SPACES KEY

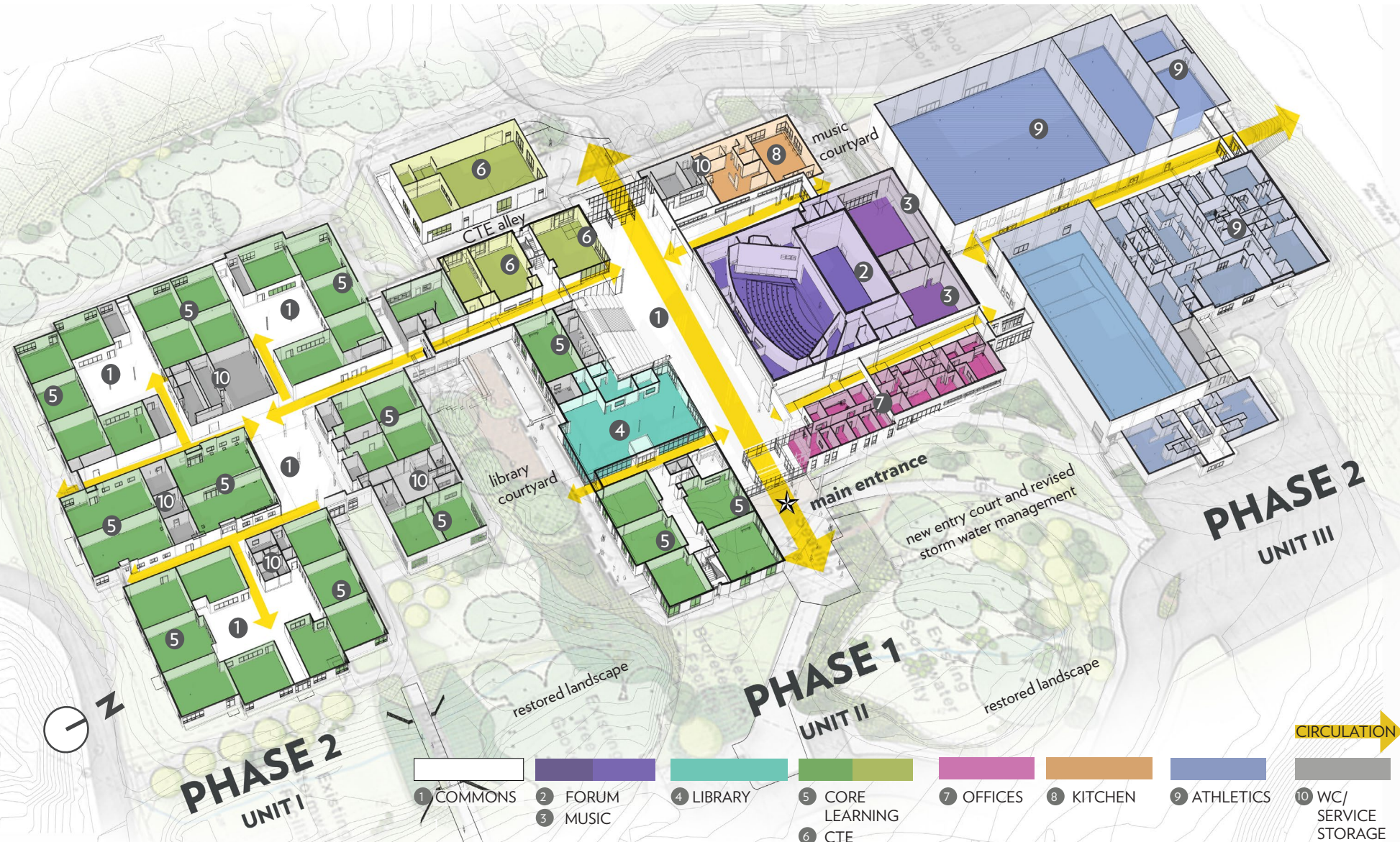
Site Plan & Phasing

During Phase 1 only a third of the school could be rebuilt and modernized. At the time, there were no funding available for a “Phase 2,” so it was important that the new building allow space for every department and be accessible to every student daily so that the benefits of a new space could be spread throughout the school.

The final Phase 1 scope included a new Commons, Kitchen, CTE labs, Library, Entry, Administration Offices, Theater, Music Rooms and Classrooms.

Phase 2 for Olympic High School included modernization of existing classroom and athletic wings.

The improvements to the classroom wing included reconfiguring existing classrooms to improve circulation and access to daylight. By removing the center classrooms that had no daylight, we created a series of mini-commons. The shared areas contribute to a variety of learning and teaching spaces that are adaptable and flexible.



Pride and Identity

Reinforcing pride and identity begins at the exterior of the building, with the main entrance visible and prominent from the drive entrance. School colors are displayed throughout along with art representing the Oly community. The Library entrance graphic is formed of little O's, representing all the students as individuals. Together they form a big O—Together Oly kids will make a big impact.

An enlarged theater (Forum) is sized to have enough space for family and community to attend

performances, allowing students to show off their music and acting skills.

The new facilities mature material palette of wood, glass and textured concrete give the space a sense of maturity and permanence.

Image Left: New Library and "Perch" above Commons

Image Right: New, larger theater space with seating for 400+

The kids deserve in a place that makes them feel good. They take pride in their school now...They are in a place that reflects – hey, we belong in a place like this....As a teacher in makes us feel proud to be here too.

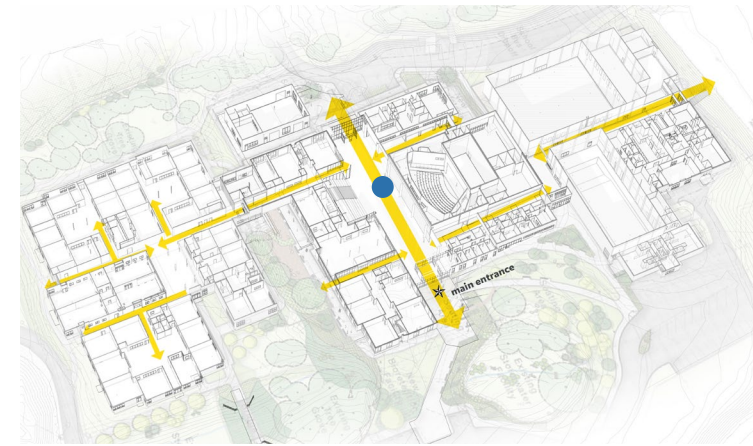
Debbie Park – Teacher



Relationship-Driven Design: Improved Circulation

OHS's existing building had narrow, dark, maze-like circulation paths that were disorienting and isolating, preventing students, teachers and families from connecting. Reorganizing and clarifying the circulation increases safety and strengthens relationships between students and their school by creating common paths punctuated by gathering places. The design also prioritized reconnecting students and teachers to the natural environment by giving them visual access to the

outside. This connection facilitates wayfinding for new students and community members while also allowing users to rest their eyes and relax for a moment or two.



■ Reorganized Circulation

● Commons (Image below)



Welcoming and Safe Gathering Spaces

A new transparent, light filled entry gives students and visitors a sense of arrival and “welcome.” Replacing multiple entrances with a single secure entry increased security, as does the openness and increased visibility throughout the hallways.

To expand the sense of community within the school and create a space where all students can feel comfortable, the Commons was designed with multiple types of gathering places including occupiable stairs where large groups study and talk, the “perch” where smaller groups look out over the main circulation path

and the “boxes” where individuals can be in the main space while feeling protected.

The large Commons space has also allowed the school to expand outreach opportunities to families by utilizing the Commons for meetings and family movie nights, thereby reinforcing community connections and pride in the school.

Image Left: New Entrance and signage

Image Right: Small scale gathering “boxes” in the Commons

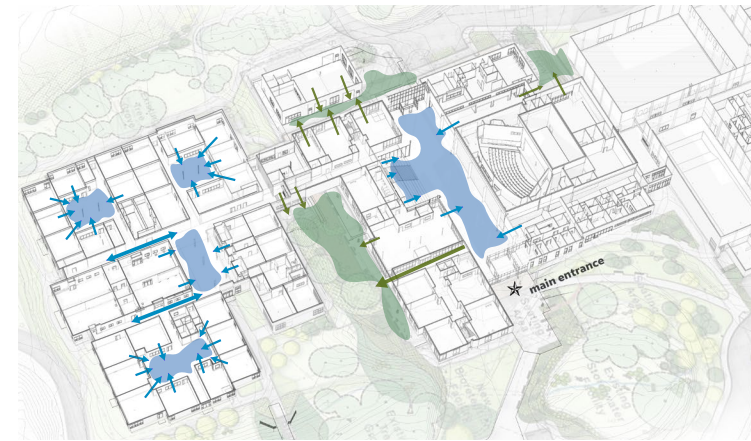


Flexible and Adaptable Learning Environments

The school envisions the whole campus being a learning environment. English students use courtyards to talk about a book or act out a play. Biology students use the reinvigorated drainage area to study the local ecosystem. The central common spaces and smaller “pod” flex areas are used for teaching, presentations, cheer practice, teacher meetings and many other schools uses. Maximizing the flexibility of spaces allows for teachers to engage students in multiple ways and facilitates learning opportunities.

Image Left: Cheer practice in the commons

Image Right: Library Courtyard with sculpture and seating



■ Interior Gathering/ Flex Spaces ■ Exterior Gathering/ Flex Spaces



Technology and Post-Secondary Opportunities for Students

Olympic High School has broadened their curriculum to include technical CTE programs such as robotics, architecture and aeronautics. Transparency in these classrooms allows the whole school to engage in projects under construction (a frisbee throwing robot was a big hit) and inspires students to take classes they might not have considered before.

The Career Center moved to the top of the stairs in a high traffic area, a symbolic and practical choice that encourages students to strive for a future beyond high

school and makes access to career and college research accessible.

The school district reached out to local industry and businesses to better understand the skill set needed for regionally specific careers. A Manufacturing Lab with a curriculum co-created with Boeing and a Flight Simulation Lab partnered with Alaska/Horizon Airlines, provides pathways into the aviation industry.

Image Above: Windows creating sight lines into the Robotics Lab.

Image Below: Representatives from Alaska/Horizon Air signing partnership agreement with Olympic High School.

Image at Left: CTE labs and CTE Alley beyond.



Daylighting

“Many possible mechanisms for daylight effects on human behavior have been suggested. For the schools study, these can generally be summarized by improved vision, improved morale, and improved health.”

-Heschong, Wright, Okura “Daylighting Impacts on Human Performance in School”

Studies by Heschong (1999) have shown that students in classrooms with the most daylighting were found to have 7% to 18% higher scores than those with the least. Incorporating daylight into the design is now an

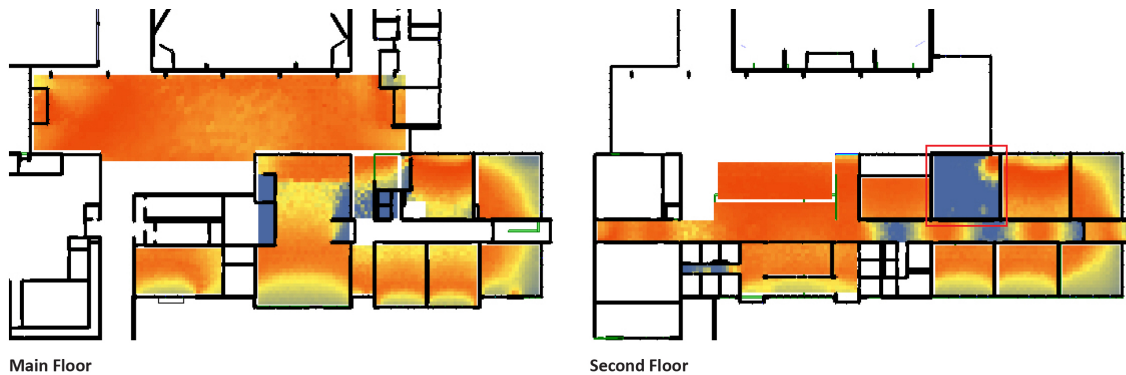
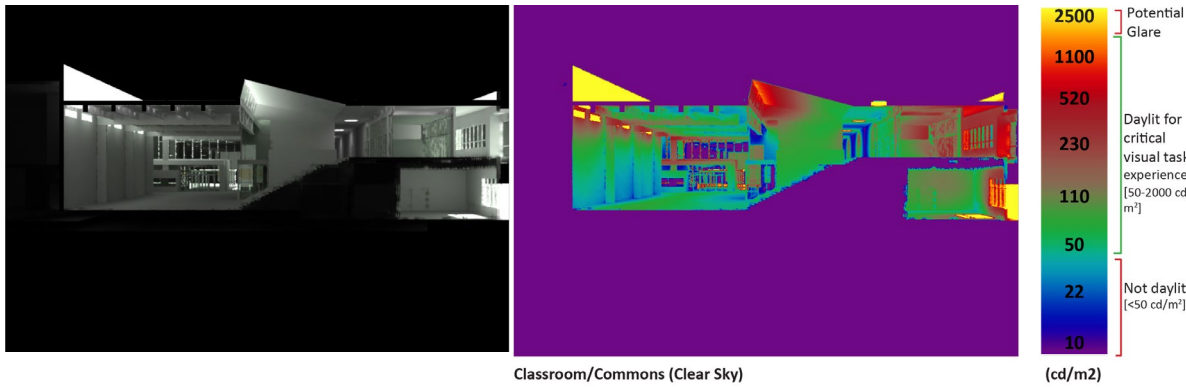
imperative for a 21st century learning environment. It can impact whole-child awareness, professional development, and a stronger school culture in powerful ways.

At Olympic, in addition to an improved learning environment, the natural light makes the space feel welcoming and reinforces a positive attitude in the students. North facing light monitors, combined with glass entrances at each end, balance the light to minimize glare. The design was developed with the Integrated Design Lab at the University of Washington

to ensure the spaces were lit properly throughout the year and that the envelope glazing was sized correctly.

“It boosts the morale around the school, letting more light in just makes people happier. It’s not dark and gloomy.”

- Katey (Student)



Data- Mean Illuminance levels for the entire analysis surface are between 100-2000 lux 65% of occupied hours. Main floor illuminance levels are between 100-2000 lux 64.5% of occupied hours.

Data- Mean Illuminance levels for the entire analysis surface are between 100-2000 lux 65% of occupied hours. Second floor illuminance levels are between 100-2000 lux 70% of occupied hours. There would be daylight and visual connection benefits to increasing the vertical glazing on the north wall of the highlighted classroom (red box).



Resilience and Sustainability

Environmentally responsible choices were made with stewardship and long term facility maintenance costs in mind. According to predictive energy modeling, the school will use 70% less energy than code. The design team engaged Puget Sound Energy and received a custom \$112,000 conservation grant. An existing drainage conveyance channel in front of the school was reinvigorated with biologically restorative plants and traversed with a new footbridge as a highlight of coming to school. This restored area has become a teaching tool for writing, biology, and architecture classes.

Durable and Healthy Materials

Non-toxic and natural materials were used throughout the school. Usage of wood materials in the Theater and Commons creates a sense of warmth and maturity. Rib-split concrete blocks, wrapping the outside of the theater, is a durable, cost effective finish. Skylights wash these walls, highlighting the rough texture. The carpet uses nylon from discarded fishing nets that provided a source of income for small fishing villages in another part of the world while cleaning up their waters. This connects OHS to our world and one another.

“It’s been an immense teaching tool. On Tuesday, we were talking about site development, going into waste and storm water management, to be able to walk around the school to see the swales, buffers, and detention pond out back. Before even talking about it we could look at all these things and then I will talk about it.

-Brandon Brown (Teacher)

Efficient HVAC:
Dedicated Outdoor Air
Systems & Energy Recovery
Ventilators
Ceiling fans with no active
cooling

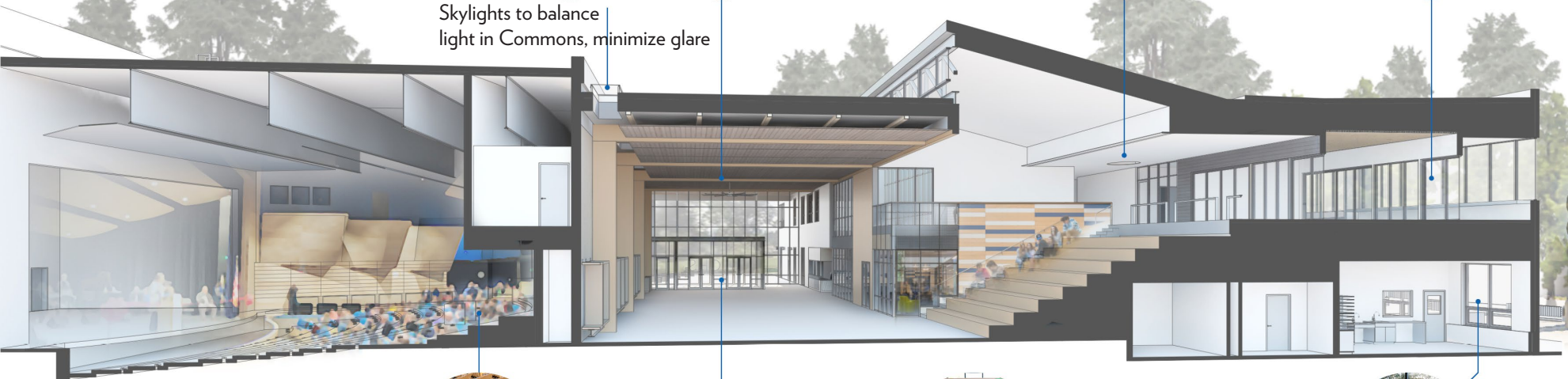


Skylights to balance
light in Commons, minimize glare

Hallway skylights provide
balanced daylight
distribution



Perimeter windows
provide views and
daylight



Under-floor displacement ventilation
provides fresh air quietly where the
audience sits



Transparent and welcoming entry



Operable windows provide
comfort and connections to the
outdoors



Community Impact

The “new” Olympic High School welcomes the community inside and gives all people a place to participate and see themselves and their futures reflected in the building and the curriculum. The educational opportunities reflect the real life needs of the local economy and community, ensuring the kids are better equipped for post-graduation life.

The school’s impact in the Central Kitsap Area is better articulated by the local community:

“This monumental undertaking created an absolute state of the art post-secondary educational facility...Olympic High’s rebuilt campus facilities, and its cutting edge curriculum incorporates all the elements, tangible and intangible, required to inspire, educate and well prepare our community’s next-gen workforce and citizenry.”

-John Powers, Kitsap Economic Development Alliance in the Kitsap Business Journal March 2019

“Students will feel community support when they look at this big, beautiful place they have. The expectations will be higher of them, and their expectations will be higher of themselves.”

- Rebecca Johnson, Former Principal

OHS NEW PROGRAMS AND ENROLLMENT

Manufacturing Technology: **27**

Industrial Manufacturing Core Plus/Aerospace: **27**

High School Robotics A & B: **48**

Intro to Drones: **12**

Human Body Systems: **35**

Medical Interventions: **35**

Ground School I & II: **42**

226 students experiencing new CTE courses in 2021-22 school year

RECOGNIZING EXCELLENCE

DECA: **7** to state; **1** advanced to Nationals

HOSA: **5** finished top 10 in a state competition; **1** to Nationals

SKILLS USA: **32** to state; some looking to Nationals

Boeing Manufacturing Fellowship: **3** to the Washington State Boeing/Skills USA Assembler Championship.

CompTIA A+ Certification: **4** achieved certification

KEY PARTNERSHIPS

ALASKA/HORIZON PARTNERSHIP: Guest speakers, paid summer internships, field experiences, flight training for instructors

BOEING PARTNER SCHOOLS: Tool donations, sponsorship of competitive events and guaranteed interviews for our students who complete Core Plus

Favorite Part?

“Definitely gotta be those – the boxes. You can sit there and do your homework because they put tables there, eat lunch, have friends drop by and hang out.”

Malcolm (Student)



The kids deserve in a place that makes them feel good. They take pride in their school now....They are in a place that reflects – hey, we belong in a place like this....As a teacher in makes us feel proud to be here too.

Debbie Park – (Teacher)



“I just like the library because it just nice to hang out and just chill. Usually every day I go to one of those chairs by the window. That’s what I do after school.”

Sophomore Student

“We use the garage almost every day for many reasons: from a kid sprayed some stinky cologne or someone has body odor – pop, we open that up. No, seriously, my sixth period class is in here and we are doing things in the shop, we open it up and have access to the shop and have visual on the computers. We can go back and forth, print it out, make changes to a design, collaborate. We could do it with regular doors, but it is so much cooler with the garage doors.”

Brandon Brown (Teacher)

