



# HEALTH SCIENCES BUILDING

puget sound skills center

Charged with the responsibility of preparing high school students for their future career paths, the Puget Sound Skills Center (PSSC) recognized that their existing facility was negatively impacting the learning experience of their students in their healthcare programs. With a constant wait-list of eager students, the Dental and Nursing programs were well-established and in high demand, but their classrooms were limited, worn, and makeshift, providing inadequate and substandard training spaces. To correct this, the vision for a new Health Sciences Building was developed to house PSSC's Dental Assistant and Nursing Assistant-Certified programs, and provide space for a brand new addition: the Biomedical Research and Global Health program.

## SECTION 1

# EXECUTIVE SUMMARY

Located on a 5-acre site in Burien, WA, the Puget Sound Skills Center has been preparing high school students to be career-ready or college-bound upon graduation since 1966. The first skills center in Washington State, it is hosted by Highline Public Schools and partners with three other districts, Federal Way, Tahoma, and Tukwila, to offer 18 distinct career programs with certifications or college credits. In 2016, students from 22 partner high schools taking classes at PSSC earned more than 2,000 college credits and almost 1,700 industry certifications in 18 different programs, including aerospace manufacturing, animation, automotive technology, information technology, culinary arts and more.

The new Health Sciences Building is a two-story, 26,500 sf addition to a campus that opened its doors to students in September of 2017. The new building is located in the heart of campus, just south of the original main building.

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**This facility welcomes current attendees, attracts prospective students, and provides an inspiring space to encourage students to adopt a professional attitude and outlook as they transition to healthcare professionals.**

This project was proposed to replace inadequate and aging program areas and critical infrastructure to support program expansion and set the foundation for future program additions. The 40+ year old main campus facility was showing its age and lacked features and systems common in contemporary educational facilities. Beyond that, the facility was crowded, and the Skill Center's enrollment was constrained by available space.

This new Health Sciences Building provides students the opportunity to learn in contemporary classrooms with cutting edge equipment, in place of their past ad hoc and makeshift installations. Students are able to observe and intern in a state-of-the-art dental clinic, and the new building, dedicated to the pursuit of careers centered in the medical industry, has attracted the attention of new industry partners such as the Seattle Children's Research Institute. Lacking within their current campus, the administration also desired an indoor and outdoor 'student commons' for studying, collaboration, activities, informal gathering, and waiting between class sessions. With the transition of three programs and the SeaMar Dental Clinic integrated into the new building, space has been freed up within the existing facility for surge classrooms during future modernizations of the main campus building.

**"This is about community, and our economy.** These are professionals that are going to come out of here serving our community. That's huge. As the Superintendent, my job is bigger than just educating children and standing on the shoulders of visionaries like Dr. Yormark (PSSC founder) who came before me, but it's also about being committed to strengthening our economy and our community. **That's truly what public schools are, the heart and soul of the community."**

-- Dr. Susan Enfield, Superintendent



SECTION 2

# SCOPE + BUDGET



11-12

GRADES SERVED

26,460

SQUARE FEET

\$15.3

MILLION TOTAL  
PROJECT COST

22

HIGH SCHOOLS  
SERVED

2017

OCCUPANCY DATE





## SECTION 3

# SCHOOL + COMMUNITY ENGAGEMENT

A key success of this project was the extensive programming with industry partners and professional experts, who provided valuable input from the beginning stages of the design process. Their feedback provided insight into the professional needs of each of the programs and the work environments found in their industries.

Invested in “inspiring and educating future scientists, biomedical researchers, and healthcare workers” the Science Education Department at Seattle Children’s was a natural partner for PSSC as they worked to develop their new Biomedical Research and Global Health program. Not only did the Seattle Children’s Research Institute help to develop the curriculum, but their own staff teach the classes.

Industry apprentices built more than 17% of the new building. Apprentices worked with glass, sheet metal, electronic technology, carpentry, acoustics, taping and electrical systems. One of PSSC’s own carpentry students, 2015 graduate Pedro Montoya, helped to build the new facility.





## SECTION 4

# EDUCATIONAL ENVIRONMENT

From very early on in the design process, it was important to provide realistic, professional settings for the students to learn and develop potential career paths. The classroom and lab spaces were designed to enhance and facilitate the teaching methodologies for the students and staff alike. Materials, colors, and finishes were all carefully selected to portray a professional medical atmosphere, while still providing a warm, comfortable environment for students to grow and learn.

By juxtaposing the lab and classroom spaces, the teaching and learning process allows a seamless transition from lecture to hands-on experience. The idea of merging a professional, hands-on practice within an educational environment was a major influence on how the building functions and feels.

Located approximately 1,000 feet west of the southernmost extent of the new 'third' runway at SeaTac International Airport, acoustical performance was paramount to the design. Special care was taken not only to control the transfer of sound from the exterior environment, but also between interior spaces to achieve the optimal acoustic climate.

## SECTION 2 | EDUCATIONAL ENVIRONMENT



**“This is a great opportunity for students to get training in a growing career field. We want to thank lawmakers for expanding opportunities for students to enter healthcare careers.”**

-- Dr. Thomas Mosby,  
Director, Puget Sound Skills Center

While the school administration recognized that they were asking for a highly specialized facility, they were not willing to compromise on future flexibility and adaptability.

Knowing that all PSSC programs must meet criteria for “high demand careers,” the design team recognized that while the programs planned for the Heath Sciences Building certainly meet this criteria today, they may need to make way for new programs in the future. In order to make these learning environments resilient to changing industry needs, the infrastructure of these labs were robustly designed to support any changing curriculum and equipment. The abundance of natural daylighting, state-of-the-art technology, attention to acoustics, and

professional atmosphere make these the ideal setting for any instructional program.

The mix of lecture-style classrooms and open lab spaces on the southern half of the building, with the large lecture hall, multipurpose room and small group conference room on the northern half of the building allow for instructors and students to choose their preferred educational setting depending on their specific curriculum needs. The move to furnish the common spaces with a variety of large tables, comfortable soft seating, and high cafe tables only augments this desire to allow learning to happen anywhere.





## SECTION 4 | EDUCATIONAL ENVIRONMENT

# DENTAL ASSISTANT LAB

The new dental lab doubles the capacity of the dental assistant program for students interested in the dental industry. The lab simulates the environment of a working dental clinic with operatories and a reception desk for students to practice the process of patient interaction. The adjoining classroom allows students to flow seamlessly from lecture to practical experience.

The lab is equipped with four dedicated teaching operatories, and one operatory that is used in conjunction with the SeaMar Dental Clinic. This shared operatory is sized for group learning, and includes viewing windows directly into the Dental Assistant Lab. Direct connection to the dental clinic ensures that the instructional program keeps current with methodologies, regulations, and best practices within the industry.



FIRST FLOOR





## SECTION 4 | EDUCATIONAL ENVIRONMENT

# SEAMAR DENTAL CLINIC

For the last 12 years the SeaMar Dental Clinic has leased space from the skills center and operates as a not-for-profit organization, providing dental care to low-income patients and families. The connection of the clinic and instructional areas allow students to work side-by-side with professional dental assistants and observe actual dental treatment.

The clinic's past location was internal to the campus, making it difficult for public patients to access, and its location and limited security made it almost impossible to determine school visitors from clients. The new layout has clear and direct access from dedicated client parking, and exterior access allows for public access when the school is closed, limiting the likelihood of patients wandering into student areas.



FIRST FLOOR





## SECTION 4 | EDUCATIONAL ENVIRONMENT

# NURSING ASSISTANT LAB

Located on the second floor of the facility, the Nursing Assistant Lab doubles the capacity for the program. As students enter the lab, they utilize a changing room where they transition from their street clothes into scrubs.

Similar to the Dental Assistant Lab, the Nursing Assistant Lab is directly adjacent to a classroom allowing students to move easily between lecture and the practical learning environment.

The lab is set up to simulate the environment of a working hospital. Eight hospital beds circle the perimeter, with a nursing head wall. Adjacent to the main lab is an instructional bathroom for the students to train when learning the proper way to assist a disabled or injured patient.







## SECTION 4 | EDUCATIONAL ENVIRONMENT

# BIOMEDICAL LAB

The Biomedical Lab houses a new program for PSSC, built in partnership with the Seattle Children's Research Institute. Immersed in a professional laboratory setting, students learn lab safety and practice essential lab skills, use state-of-the-art equipment to conduct experiments and review case studies related to the prevention and elimination of disease.

In collaboration with Seattle Children's, the lab was designed to house a multitude of professional lab equipment such as carbon dioxide incubators to grow cultured cells, a minus-20-degrees-Celsius freezer for storing enzymes and chemicals, an incubator for bacterial plates, and a refrigerated centrifuge to separate fluids, solids and gases.



SECOND FLOOR





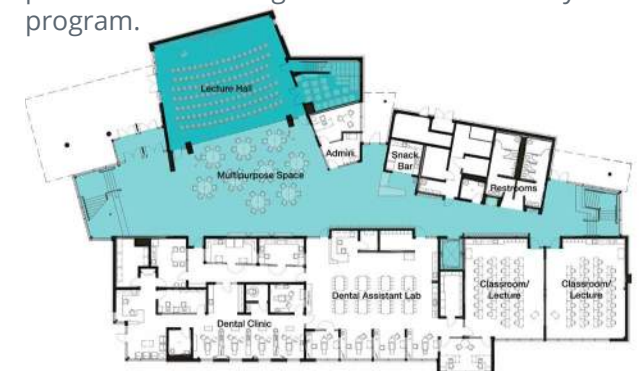
## SECTION 4 | EDUCATIONAL ENVIRONMENT

# LECTURE HALL

Beyond the addition of much-needed educational labs, PSSC recognized the lack of community space for the students. Through this project, the facility wished to include a centralized space for their students to study, collaborate and socialize.

The Lecture Hall comfortably seats 250 as a dedicated space, but when opened to the adjacent multipurpose room by way of the vertical folding, operable glass wall, it can accommodate an additional 200 people. Located at the heart of the building, it visually connects to the second-floor walkway - allowing for even greater flexibility during community lectures or events.

Beyond just a collaborate learning space where the various programs at PSSC can come together, this space also enriches the culinary arts program. Located adjacent to SeaTac International Airport, this convenient conference space is frequently booked by community groups that utilize the professional catering services of the culinary program.



FIRST FLOOR



## SECTION 5

# PHYSICAL ENVIRONMENT

The new Health Sciences Building was carefully sited on the existing Puget Sound Skills Center campus to connect the old and new portions of campus. The central courtyard between the buildings serves as a gathering space for students and the community, and augments the existing programs by creating an outdoor training area.

Although contemporary in design, the Health Sciences Building gives homage to the original building in its use of color and materials - connecting the two buildings into a cohesive campus. Interior materials, colors, and finishes are consistent with those found in current medical and health care facilities - helping to establish the atmosphere of a professional work environment. The new facility provides the campus with a presence from Des Moines Memorial Drive, creating an identity for the school.

Nestled against a large wetland, environmental responsibility was a necessity - especially in the site design. A large rain garden was incorporated running through the center of the parking lot, and concrete debris found on site during the construction process was recycled into fill for the new building.





# SUSTAINABILITY



▲ All learning spaces are supplied with ample diffused daylight both through the use of Okalux exterior vision glazing and acoustically high-performing skylights where feasible.



▲ Planting areas were developed as rain gardens. As part of the project a small trail across the rain garden and into the wetlands was developed for outdoor learning opportunities.

◀ Material choices were picked for their durability and low maintenance, and daylighting was enhanced throughout the space with LED light fixtures.



# CAMPUS IDENTITY



**A** The existing campus was tucked back, hidden from the main arterial street, and did not inspire the professional atmosphere that PSSC works so hard to encourage. The new design gives the facility a memorable presence as seen from Des Moines Memorial Drive.

**“The building is expressive, and will establish a strong, and much needed, street presence for the Puget Sound Skills Center.”**

-- Budget Evaluation Study Team (BEST)  
Study Report, Page 7

**<** The site plan strengthens the foundation of the campus, and allows for future construction in a coordinated manner.



# LEARNING ENVIRONMENTS



Both inside and outside the classroom the interior finishes are made up of simple, quality, and durable materials, meant to bolster the illusion of a practicing clinic or hospital.



Learning spills out onto the courtyard where the Culinary Arts program has utilized the central courtyard to develop an herb garden.

Each lab mimics the professional atmosphere of a real practicing lab - allowing for a deeper study of professional practice.





## SECTION 6

# RESULTS OF THE PROCESS + PROJECT

In preparation for this submission, the architects returned to the district to request feedback on how the Health Sciences Building is functioning and whether it was meeting the district and community needs. The response was exactly as hoped, with the administration quick to praise the facility's flexibility and its impact upon the programs that the Puget Sound Skills Center offers.

Since occupancy in September of 2017, the influence on the entire campus has been overwhelmingly positive; however, even during construction the benefits were apparent. A clear economic benefit to the community were the estimated 280 jobs that were created or sustained through construction of the project. Opportunities provided to the student community at PSSC during construction included added revenue to Class Act, the student-run restaurant on campus, as crews provided real-world experience for the students preparing and serving meals. In addition, the restaurant provided a meeting space for the design and construction teams. As the new Health Sciences Building was built, the construction trade students were able to observe the entire construction process from dirt preparation to final completion.



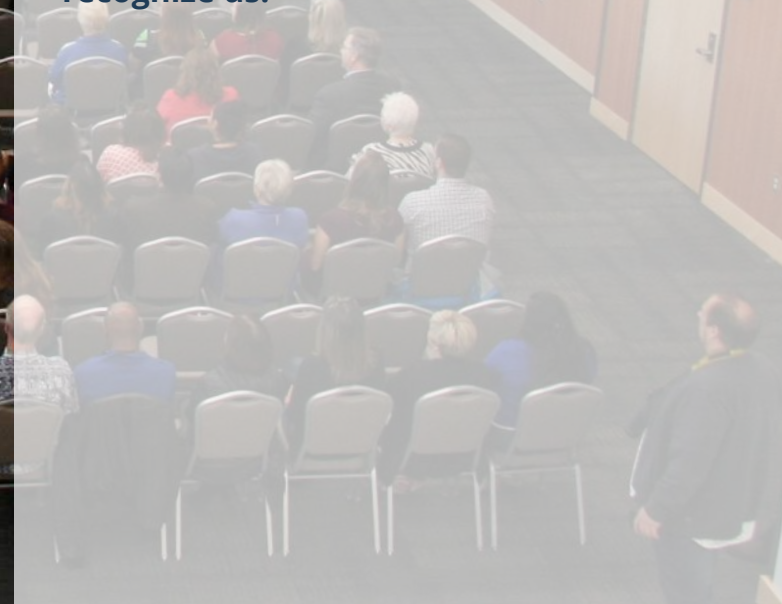


## SECTION 6 | RESULTS OF THE PROJECT

# ✓ ACHIEVES COMMUNITY GOALS

Beyond supplying local businesses and industries with entry-level workers, the new meeting spaces have greatly increased public use and access to PSSC.

The addition of the Health Sciences Building has **“increased national recognition of what we do here,”** said Dave Estes, Assistant Principal at Puget Sound Skills Center, **“People recognize us.”**



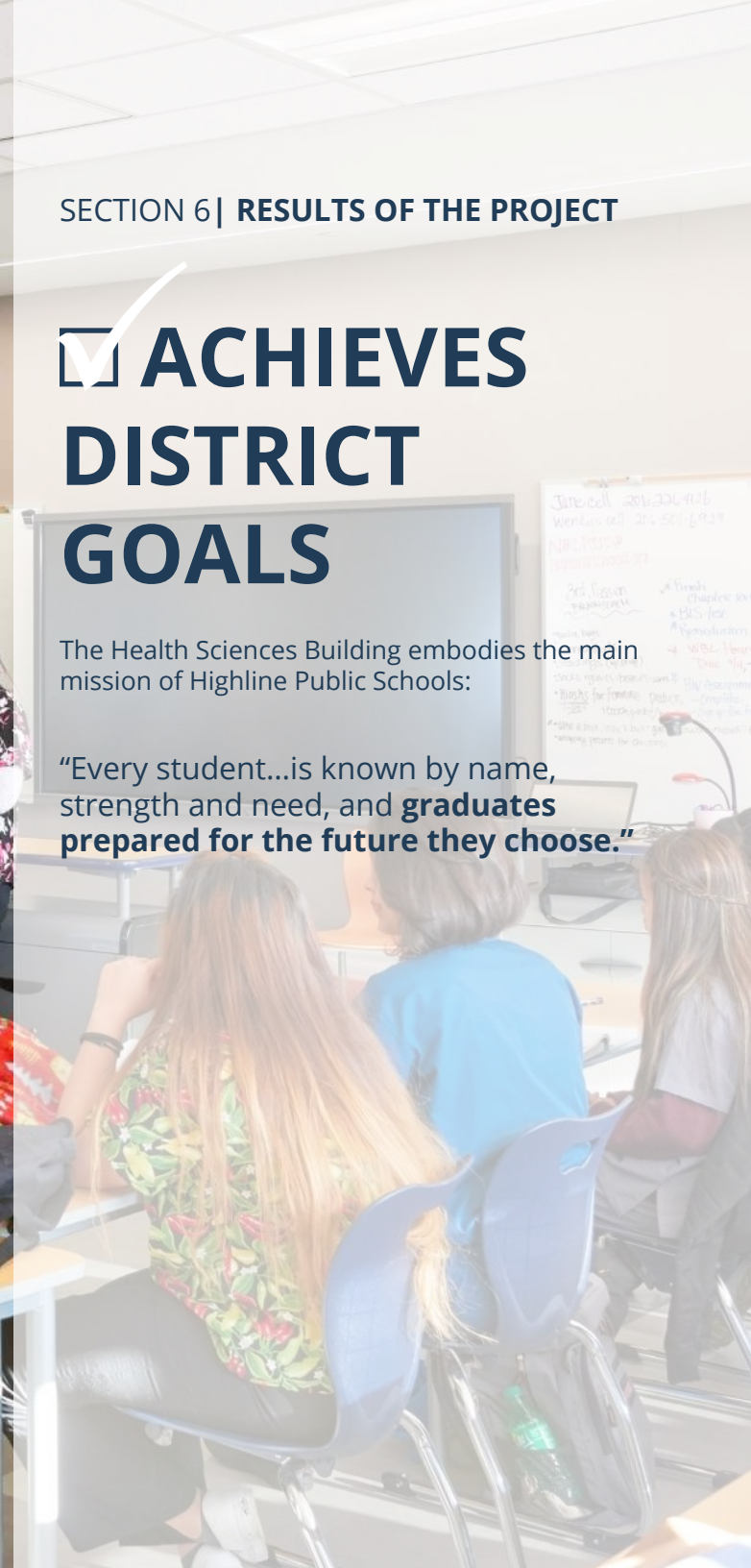


SECTION 6 | RESULTS OF THE PROJECT

# ✓ ACHIEVES DISTRICT GOALS

The Health Sciences Building embodies the main mission of Highline Public Schools:

“Every student...is known by name, strength and need, and **graduates prepared for the future they choose.**”







## SECTION 6 | RESULTS OF THE PROJECT

# ✓ ACHIEVES EDUCATIONAL GOALS

The additional capacity within the Nursing Assistant-Certified program has **allowed for a significant improvement in the skills development.**

There has been a **huge increase in the Nursing Assistant Certification pass rate - with an admirable 83% in 2018!**



I think [PSSC] represents community. **We are all here for a reason and we all want to be the best we can possibly be.** I feel like PSSC can do that for everybody. As long as you really want it, you'll get it. You just have to work hard for it."

-- Samantha Johnson, High School Senior aiming at a career in Nursing, planning to enroll at Northwest University

