Fisher Elementary School

Polished Apple Award 2019



Executive Summary

Students in the northwestern corner of Washington began their academic year in September 2017 in a brand-new school completed an entire year earlier than expected. Fisher Elementary School was built around an existing occupied school and incorporates the School District goals of advancing 21st Century Learning with flexible layouts that include shared learning spaces. This was the first school in the district to incorporate such teaching space.

Scope of Work and Budget

Provide a new (2) story, 68,000 sf replacement elementary school built on existing occupied elementary school. Work included site work for new parking lot, play area, rain gardens, and separated bus pickup/drop off.

Budget: \$15,000,000



Above: Students, parents, and staff arriving at school at the start of the school day.



Left: The School District Planning Team works with the design team to discuss the arrangement of program spaces in the new school layout.

School & Community Engagement

Lynden is a small community of 14,000, located just 5 miles from the Canadian border. At the start of the project, the Lynden School District was planning to replace its middle school first, after which the elementary students would be moved into the old middle school while the new elementary school was constructed.

Our team presented a new option: Build the new elementary school on the existing school's site. After careful evaluation of the existing site, coupled with our experience working on already occupied sites, the School District accepted this change of approach. The result allowed the development of the a new middle school and new Fisher Elementary school autonomously, which resulted in the project saving money on escalation, moving in portables, multiple moving costs, and helped deliver the new facility 1 year sooner. Although the cost savings were meaningful, the positive factor that students will not have to endure the disruption of multiple moves made this decision easy.

The district used the saved money to fund a full-sized basketball court in a 4,000 square feet gymnasium for use by both the school and the community.

In conjunction with a detailed project plan and strong team, we focused on designing for efficiencies. After touring several newer schools, and speaking with the teachers and administrators within those schools, we focused on which spaces were most successful and how best to integrate them within our design.

School & Community Engagement

The new school is constructed adjacent to the existing campus school buildings and is 20,000 square feet larger to support the growing community and School Districts goals and vision. The new school assists the District in advancing their priorities to ensure students are engaged and accountable learners, with focus on parent, family, and community involvement. For a fast-tracked project like this to work, it's imperative that key decision-makers respond quickly and cohesively. The building committee included parents, teachers, librarian, students, custodial staff, police officer, retired contractor, business owners, doctor and maintenance staff. All worked under a tight deadline to meet the district mission of creating an environment that "All students graduate college, career, and citizenship ready." Key stakeholders were brought together with the design team to make real-time decisions with sketches and plans reflecting the committee's and districts vision. This included having the district's participation in regularly scheduled design meetings, even over the Thanksgiving and Winter holiday breaks, and focusing on maximizing their time to decide on solutions to move the project forward. Superintendent Jim Frey made it clear that the building committee will do "Whatever it takes" to move the project forward. Due to the cooperative effort between the School District superintendent, community, and Fisher Elementary principal, & staff, the design team was able to complete design and put the project out to bid in June 2016, only seven months after concept design began.

With the limited budget, it was imperative that the project be efficient and simple to build. This was one of the project goals from day one. Design team and the district made it a priority to get the local building community involved in construction of the new Fisher Elementary School. The geographical region, and its vicinity to local logging industry, allowed access to numerous wood framing contractors, and favorable bidding climate. Local contractors all had a stake in getting this project and making it successful, they went to this school, their children and/or grand children went to or are going to this school.

To further fast-track efforts, design ideas, plans and processes were shared with the city and local jurisdictions early and proactively to aid in response times and minimize the wait time that comes from multiple revisions. Also crucial to helping the design team making decisions quickly and keeping the project moving forward, was the use of building information modeling (BIM) in communicating with the district. Weekly coordination meetings brought the team together to keep the entire team on the same page through design changes, and various phases of the project.

The project is an example of District's commitment to having community members, staff and students working together to ensure success.



Left: The School District Planning Team reviews comparable school layouts with the design team to discuss ideas that should be incorporated into the new school.

Left: An initial project sketch showing the siting limitations within the property line setbacks and the existing buildings which will remain in use during construction.

Below: Design Development of

the shared learning and classroom cluster.



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BUILDING SECTION





Above: Typical entry into the shared learning area with classrooms to the left and beyond. The relites and windows were designed to allow passive supervision of shared learning area and let borrowed light pass between rooms.

Below: Library space showing the reading area in the center with the book stacks and story area beyond. This space provides flexibility to the school and allows the community to hold public gatherings in this space.



Educational Environment

Fisher Elementary School is the first school in the district to incorporate the district goals of advancing 21st Century Learning with flexible layouts that include shared learning spaces and public spaces; Library and Gymnasium. Like many schools in small communities, the existing school was using narrow hallways as break out spaces and to create additional teaching spaces. While not completely successful, teachers did what they could with the spaces they had.

The new school provides the "light filled, safe, warm and inviting" learning environment that the design committee saw as a priority. The design assisted the School District in advancing their priorities to ensure students are engaged and accountable learners, with focus on parent, family, and community involvement. New shared learning spaces give the school flexibility of incorporating assistance from the community to daily curriculum. The school can still maintain a great teacher to student ratio, 1:17 in the classroom and allow volunteers from the community to assist in the shared spaces while still maintaining connection through the large windows. The classrooms are sized to accommodate up to 1:24 teacher to student ratio for future growth when needed.

Passive sustainable methods, including the building's orientation, clerestory windows, operable windows and displacement ventilation, provided a well-lit and healthy environment for learning, and all flooring and paint finished are low-VOC. The common areas and cafeteria are oriented to take advantage of the greenbelt located behind the school, and provide a visual connection to nature that the existing building was lacking.

Quote:

"In my previous classroom, I only had one window. In the wintertime, my room was cold, dark, and uninviting. In the new Fisher, my classroom is filled with light. My students love it, and we often leave the lights off for most of the day"

Megan, 1st grade teacher at Fisher Elementary School

The project is a successful example of District's commitment to having community members, staff and students work together to ensure success.



Left: Typical classroom with views to the adjacent greenbelt and neighboring homes



Above: The previous approach at the existing Administration and Classroom buildings

Above: The existing bus barns and bus maintenance buildings were incorporated into the new design



Physical Environment

The new Fisher Elementary School has 30 classrooms, includes 6 secured groups of 4 classrooms each clustered around shared learning spaces. Each grouping of classroom looks out on to fields and green space via large expanses of windows. The shared learning spaces also benefit from operable clerestory windows that bring in additional daylighting and ventilation.

Extra wide hallways were incorporated into the design to allow ease of circulation and to allow smaller breakout spaces in the future.

Each classroom clusters for grades 1 through 5 are identical in size and stack, allowing flexibility in the future to move grades around as needed.

Although the new school is 20,000 SF larger than the school it replaced, the students and staff says it feels more intimate and inviting.

"This school is everything a school should be. I was just telling my superintendent the other day, we need to have everyone touring this school! We have all that we need, and room to grow. I couldn't be more pleased with the way design team designed our school"

Courtney Ross, Principal at Fisher Elementary School

The orientation of the classroom clusters and extra wide hallways, created great site lines from all spaces in the school. This is a direct result of design team working with the local law enforcement agency allowing us to see from a different perspective.

Care was taken during the siting of the school to preserve the large oak tree, which was incorporated into the Kindergarten play area. The tree provides shade to the Kindergarteners and a reminder to all the student of the changing seasons.



Results of the Process & Project

The new Fisher Elementary School was completed just 22 months after the design began. The existing K-5 school was a 550-student facility located just 5 miles from the Canadian border in the town of Lynden. The new school was constructed around a fully occupied existing campus school buildings and is 20,000 square feet larger to support the growing community and districts goal and vision.

The new school includes 30 classrooms spread across two floors with shared learning and project areas as well as a library, maker space, commons and administration offices. The building has been designed to Washington Sustainable Schools Protocol standards and incorporates variety of energy efficient strategies. Its new placement on the site highlights views to an existing greenbelt.

Delivering construction documents for the 68,000squarefoot facility in seven months is the result of a well thought out and executed project plan, a strong and supportive team of experts and stakeholders, and a commitment to designing warm, light filled, safe, and efficient schools. The District used the saved money to fund a full-size 4,000 square feet large gymnasium with a full-sized basketball court for use by both the school and the community. During construction, the School District was able to add in two classrooms at each level which initially planned for a future phase.

The school broke ground in July 2016 and opened for classes in September 2017. Design, Construction and Occupancy of the school occurred in just 22 months.

The project bid under budget at \$221 per square foot.





Above: The new main entrance provide a intuitive entry point with high visibility through the administration windows.

Below: The upper floor shared learning area teaching wall with flexible seating arrangements for small projects.







Above: The kindergarten shared learning area allows for flexible space use and provides space for itinerant teachers to work with kids near their classroom.

Left: A breakout space at the center of the hallway being used as a student reading area, shared desk, or collaboration space. The breakout space allows natural daylighting and views from in the hallway.

Right: The full-size gymnasium with hardwood floors for after school sporting events and practice. An operable wall, to the left ,allows the gym to act as additional seating for the music platform and commons.





Above: The upper floor shared learning area fill with natural light. Flexible furniture allows the spaces to be used in small groups or for individual study. The acoustical wall panels, tapered side walls and wood slat ceiling provide acoustical benefits for student learning.