Sartori Elementary School

» 2019 LE Solutions Awards
01 » executive summary
Sartori Elementary School is located in a rapidly evolving neighborhood along a major corridor connecting downtown Renton, Washington with burgeoning mixed-use development areas to the north and south. Currently, this neighborhood of historic single-family homes is in a state of transition guided by the City’s master plan. Designated as a Regional Growth Center, the plan envisions the neighborhood as part of downtown with a cohesive, identifiable urban center where people live, work, learn, play and visit.
Located on a full city block, the facility design serves as a model for urban school campus development. Its three-story design maximizes open space for students and allows the site to host community events. Placing the building at the west of the site establishes an urban front along Park Avenue (the connecting corridor designated by the master plan) while freeing the majority of the site for open space and recreation. Drop-off and parking are provided on the site’s north end to serve the current student populations drawing from surrounding neighborhoods. As the area densifies and the majority of students arrive by foot and transit, this space may be further developed or reclaimed as community open space.

Through a series of interactive workshops, the school program was designed to realize the District Mission Statement of Launching Learning to Last a Lifetime while providing the flexibility to support an evolving STEM-based curriculum (Science, Technology, Engineering and Mathematics). The fundamental building block for learning is a four-classroom grouping clustered around a shared area with access to outside learning terraces. Makerspaces are provided on both the second and third floors to support additional hands-on learning.

Sustainable strategies were implemented to support District goals and STEM curriculum. The building expression is a reflection of the internal organization and massing, as well as relationship to the site. Materials are comprised of brick masonry veneer, corrugated metal panel, cement board panel, and aluminum sunshades.
02 » scope of work & budget
Sartori is the first urban elementary school in Renton School District and is envisioned to be a civic and community asset to the regional city center where it is located. The building will serve approximately 650 students from kindergarten through 5th grade and has been developed as an Options school to house specialty programs within its unique neighborhood boundary while drawing students from the entire District. The site covers a full city block adjacent to the District transportation facility in a zone which is in rapid transition from a low-scale residential area to mixed use commercial/multi-family scale.

Primary objectives for the school included providing a safe and welcoming environment, a clear point of entry into the school, creating a positive urban presence, developing a community asset, and providing a variety of instructional spaces to support a specialized curriculum.

The three-story facility is 77,000 square feet with 36 teaching stations that include general instruction, specialized instruction, makerspaces, library, and stage.

An outdoor plaza is located at the southwest corner of the site. Public spaces such as the main entry, gym, commons/cafeteria and stage, as well as administration, are positioned with direct access to this plaza and the main entry.

Parent drop-off/pick-up and staff parking are located at the north side of the site, while visitor overflow parking is located to the south in two small connected lots. One portion was placed adjacent to the public plaza to be used as a parking court when needed, but it can also be closed off to vehicles as a pedestrian extension of the plaza. Material continuity expresses the connection of these community site areas. A playfield is located to the east of the building, with hard scape play areas at the central portion of the block. Bus drop-off and pick-up is located curb side on Garden Ave at the east side of the site and is connected to the commons with the cover of the freestanding covered play structure.

The project began construction in April of 2017 with occupancy in August of 2018.
1 Classrooms
2 Maker Labs
3 Community Room
4 Outdoor Learning
5 Shared Areas
6 Library
7 Music & Stage
8 Commons
9 Gymnasium
10 Administration & Staff
11 Building Support & Kitchen
12 Special Education
03 » engagement
The original Sartori School was built on this site in the early 1900s and the original structure was replaced in 1939. Over time the site was re-purposed as an alternative school, and, since then, it has been transformed and improved for a variety of District uses. The surrounding area has been a single-family neighborhood since the beginning of the 20th century, imbuing it with a strong local pride and rich history.

Community
The City of Renton has long been a desirable location for families and business, close to Seattle and Bellevue, but with its own unique character. Located on the shore of Lake Washington, Renton is connected to both the nature of the Pacific Northwest and its urban amenities. Renton is home to many industrial and technology companies which provide opportunities for growing families, and increasingly has put a focus on retail and civil assets.

Renton’s master plan includes a 20-year vision for a downtown core that looks very different than the current neighborhood. At the same time, Renton School District continues to experience growing student population. Responding to this growth, the new city master plan, and a desire to best serve the students in downtown Renton, the Sartori project provided an opportunity to look at urban elementary school design through a different lens. Blending City development with District capital construction created a vision for the new facility to function as a school by day, and community center afterhours.
3 school and community engagement

Master plan street designation

Portals visually connect school to neighborhood

Intermediate height structures bridge to current residential condition
Stakeholders
An advisory committee comprised of district leadership worked closely with the design team and School District staff to create a direction for the new Sartori Elementary School. New Educational Specifications, which provide guidelines for planning the new facility, were developed through a collaborative process that integrated District administration, a planning principal, facilities staff, architects, and feedback from the school board.

The process to develop these specifications included interactive workshops, review and assessment of existing facilities, and review of best practices in educational design. As the advisory committee explored site opportunities, educational best practices, and development needs for the elementary school students, the program for the new facility was developed, including the selection of STEM curriculum focus. The site-specific needs are balanced with current District standards to develop a school that will support elementary educational environments for many years.

Challenges and Value to Community
Multiple site configurations were explored to address the current character of the neighborhood while meeting the vision the City has planned for this urban corridor. Merging school needs with City development goals resulted in a three-story elementary school with site and building programming to support the dual zoning of the facility.

The new Sartori Elementary School is now an anchor for future development for the City along the Park Avenue corridor. Part of the site explorations focused on placement of community-focused spaces and how the building and grounds would become an asset to the local community while addressing safety and security concerns along a busy urban street. Various public amenities were discussed and vetted to consider their value to different user groups. The solution combines site and building elements that will support both education and recreation for students, parent groups, farmers markets, health clinics, and more.
» educational environment
This site was developed to integrate into the City of Renton’s downtown development plan, to support the school district’s growing enrollment numbers, and be a welcoming place for the entire community. Sartori is a neighborhood school, with capacity to support families living within one mile of the school. It is also an Options school, giving additional Renton School District students an opportunity to apply through a lottery process and become part of the Sartori community.

**Building Organization**

The orientation of the building developed as a response to the urban context and anticipation of future neighborhood growth, while considering the adjacent smaller-scale existing residential neighborhood. The building form was also simplified in order to maximize site utilization and observation/safety. The new elementary school is organized as a bar-shaped, three-story classroom wing with large commons spaces and building service in an intersecting volume.

The community plaza is currently well used and will only grow more significant as the neighborhood densifies.
The entry lobby is flanked by administration and the gymnasium and commons space, which also includes a stage. The gymnasium and commons are open to each other, providing maximum flexibility in the stage/commons/gym adjacency. A family support room is located adjacent to the administration area; music rooms are just beyond the family room. The remainder of the first floor includes special education and OT/PT rooms, as well as Kindergarten classrooms that are configured for flexibility as the enrollment at this age level changes over time.

On the second and third levels, makerspaces greet students and staff near the grand stair – making the STEM curriculum and program areas more visible and accessible to all users with an enlarged landing that overlooks the commons and cafeteria. The library has views to the neighborhood context beyond and the public plaza below. The second-floor makerspace opens directly to the library allowing for cooperative activities and research for students in these spaces.
Makerspace adjacent to library doubles as a community project room.
Supporting Variety of Teaching Styles
Classrooms are organized in a simple double-loaded arrangement off the single corridor, which opens to flexible, shared learning areas. The flex areas allow for informal gathering and group learning with access to light, exterior views, and outdoor learning terraces on the second floor. Coupled with large glazed areas between, shared areas offer a varied set of experiences along the main corridor, creating a rich circulation rhythm with views to interesting elements inside and out. The outdoor learning terraces at the shared areas become “portals” designed to enhance connection to the community and surrounding landscape. Each of the portals frames a view of one of the hills of Renton: Renton Highlands, Benson Hill and West Hill.

The third floor has a similar arrangement to the second but includes larger program area for makerspace in a volume which looks into the double height library space. Restrooms and building support areas are distributed throughout each level. Enclosed exit stairs are located at the north end of the classroom wing and at the midpoint on the west façade.

Adaptability to Changes in Educational Delivery
The District Mission Statement is Launching Learning to Last a Lifetime. This new facility is not only supporting the specific curriculum educators are using today, but it is also ready to respond to changing educational models and user needs in the future. Beyond simply providing the required teaching stations and community rooms, the whole building can be adapted over time to support the growing local population or as curriculum evolves. Some examples:

» Utilizing a moment frame structural system increases the flexibility of the interior spaces and will allow for expanding classroom sizes or community spaces as program offerings are developed.

» Designers explored configurations for the shared areas within the simple bar form of the classroom wing. Classroom clusters can adjust to include the four spaces that open directly into shared areas, or to larger or smaller clusters as needed to support age groups, curriculum focus, etc.

» Location of the Kindergarten classrooms and associated facilities was explored for adaptability. Keeping toilet rooms out of the classroom and accessible from the corridor considers future equity of the kindergarten spaces—if other classrooms are converted for a larger kindergarten enrollment, the teacher and students will have the same amenities and access as the current classrooms.

» The three makerspaces include differing amenities for a variety of STEM curriculum. One is designed to be tech/robotics focused, one for electronics, and one as a wet lab which also supports STEAM/Art curriculum.
Shared Learning Areas

Four-classrooms are grouped around cooperative flexible learning space. On the second floor, these include outdoor terraces for specialized learning activities.
05 » physical environment
The exterior building development is a reflection of the building’s internal organization and massing, and relationship to the site. Its material expression is comprised principally of brick masonry veneer, corrugated metal panel, cement board rainscreen panel, and storefront or curtain wall glazing assemblies with aluminum sunshades.

The classroom wing is a simple form where the upper two stories clad in metal panel sit upon a brick masonry veneer pedestal base. The metal panel is trimmed with cement board accent panel material in order to express the depth of wall assembly elements and develop levity in the façade.

The project team worked to balance the City’s planning desire for an urban streetscape along Park Avenue, with elevated floor-to-floor heights, while considering comfort for a school facility with younger student group. Incorporating landscape elements, such as tall grasses, and articulated sunshades at classroom windows mitigate the urban scale while achieving the modulation and aesthetic that satisfy City design guidelines and development goals. Also, the metal panel that expresses the upper form recedes at large balcony recesses, allowing light into flanking classrooms and shared flexible learning areas.

Both the pedestal base and upper stories are articulated with a repeating series of fenestration; at the upper stories cement board accent panels and sunshades create additional rhythm along the façade. The north end is anchored by a brick masonry volume that extends full height to express and enclosed exit stair.

At the south end of the classroom wing, the library emerges in a glass cube which cantilevers over the main entry and public plaza, highlighting the library’s symbolic and physical importance as a community asset. Curtainwall at this location is broken down in scale with a mullion and glazing pattern that includes tinted glazing and a large solar shade at the south facade. At the library volume, the roof form deepens and is clad in cement board accent panel in a cantilevered form to express the intersection of the gym.
The volume which contains the gymnasium, commons/cafeteria, stage, and building support emerges from the southeast corner of the classroom bar. The east end of building support and gymnasium is capped with brick masonry veneer. A covered trash, generator, and transformer enclosure uses the same brick vocabulary for a seamless integration, while acting on the north side as a back stop for play activities. As the volume speaks to the public plaza, the envelope opens with translucent and transparent glazing. Tall curtainwall expresses the openness of the commons to the play area.

A detached covered play is anchored by a storage element which is clad in brick masonry veneer. The covered play structure is expressed structural steel to maintain a light imprint on the site.

**Sustainability**
Sustainable strategies implemented at the new Sartori Elementary School include:

» high efficiency mechanical systems, including DOAS and chilled beam units
» enhanced building envelope
» color tunable LED lighting
» functional landscaping
» daylighting and sun control
» low-flow fixtures
» minimal building footprint

Architectural elements were salvaged from the existing building on the site and have been incorporated into landscape and plaza amenities, celebrating and extending the life of historic structures on site.
Massing + Materials

A masonry base rises to create mediating lower-scale elements of gym/commons, kitchen, and outdoor play. Massing and material composition express permeable and revelatory nature of building.
The District imagined the gym to be in use almost all hours of the day, with programs activating the space during and after school hours. Incorporating a glass storefront, even with the frosted area to address safety and security concerns, generates excitement and curiosity for the community. The District was open to thinking differently about their elementary school gym, enabling the design team to incorporate vibrant colors that visually connect it to the commons/cafeteria space. With bold flooring colors and unique striping patterns, the gym is a stimulating place of activity for students at this age level.
Integrating History + Industry

Stories about the history of the area were as important to the community as plans for the future and were incorporated into the final design.
Influences from the local context have been infused throughout the building. Renton had a long history as an important salmon fishing area for native people until the 1860s, when mining, timber, and other manufacturing industries began to expand. In the early 20th century, aerospace developed as an important business to support the war effort and continued to a regional employment center. Today the area is still known for innovation and the new Sartori Elementary School reflects this rich history in shapes, materials, and colors throughout the building.

Along the classroom wing corridors, the influence of First Peoples in the Renton area is represented by canoe imagery and shapes, becoming baffles in the ceiling that help to identify the shared areas along the corridor. Blue carpet intersects these areas as well, reflecting the “water” under the “canoes” in the flex spaces. A graphic motif developed for the school is also comprised of canoe paddles radiating around a central core. In the library, aluminum panels emulate airplane wings, and in the commons, the main stair is inspired by the mining industry.
results
The STEM culture has thrived at Sartori beyond a curriculum and has become an intentional integration of content with critical thinking and problem-solving skills. Principal Angela Sheffey-Bogan has fully embraced it as a way of life, sharing:

“We will be using a STEM focused approach to instruction in order to prepare our students to be contributing citizens in our community.”

“We do share with families that STEM is a culture, not a curriculum. I think for a lot of families that since it is still new that their thinking it’s something different that you teach. It’s actually a different approach that we teach in.”

**Curriculum Incubator:**
STEM curriculum is not only being enjoyed by all Sartori students on a daily basis, it is being developed and tested onsite at the District level, including analysis on how the makerspaces perform and amount of utilization in support of the STEM curriculum. The school will have a large influence on how STEM educational programming evolves for the entire District.

**Renton Innovation Zone (RIZ)**
In partnership with the Gates Foundation, Renton School District has established an initiative of improvement strategies for schools within the District. Through the RIZ, the District has committed to do more, now, to dramatically improve the quality of education in schools, and thus the outlook and hope for a better future for children.

Sartori is the fifth elementary school to join the Renton Innovation Zone (RIZ). RIZ improvement strategies support educators in increasing student engagement, designing instruction that is based on conceptual understanding, and building classroom and school communities that support all learners in meeting standard. Sartori ES offers the RIZ program specialized support in expanding STEM curriculum and training to support their mission.
In addition to setting a precedent for elevating the importance of STEM education at the elementary level, the new facility is being activated by hosting various community events and educational programs:

» **UW EduTalks Program**: Sartori hosted a fast-paced series of talks by University of Washington College of Education faculty members working to unlock the potential of all students. The commons and gym area were opened up to welcome visitors to enjoy a variety of discussions focused on education.

» **Clinics**: The District is partnering with health organizations to offer social and medical services for families.

» **Training Site**: The District is using Sartori as a location for teacher education and training across district departments.

» **Book Fair**: Annual book fairs are now hosted in the Community Room.

» **Multicultural Night**: Students and families come together in the commons to share elements of their culture and ethnicity through food, arts and fames to celebrate the diversity of the Sartori community.

» **Makerspace**: Available for community activities and events, makerspaces are serving as a training ground for teachers and educators on how to use spaces designed to support creativity and collaboration.

Maintaining and enhancing the identity of this part of Renton as it changes is vital to the community. The North Renton residents have responded favorably to how the new facility integrates into their neighborhood now, and the potential it offers to future generations.