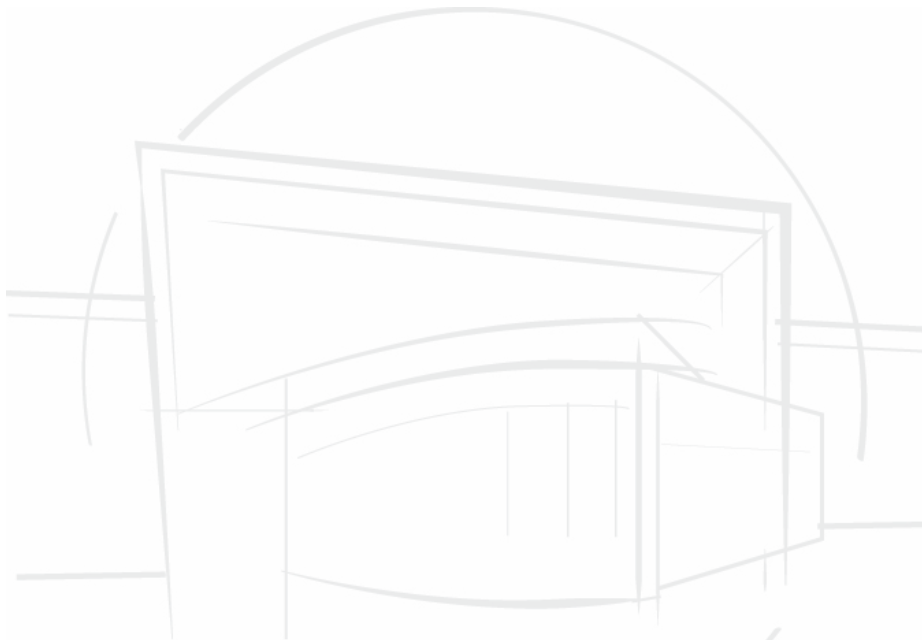


2016 Exhibition of School
Planning and Architecture



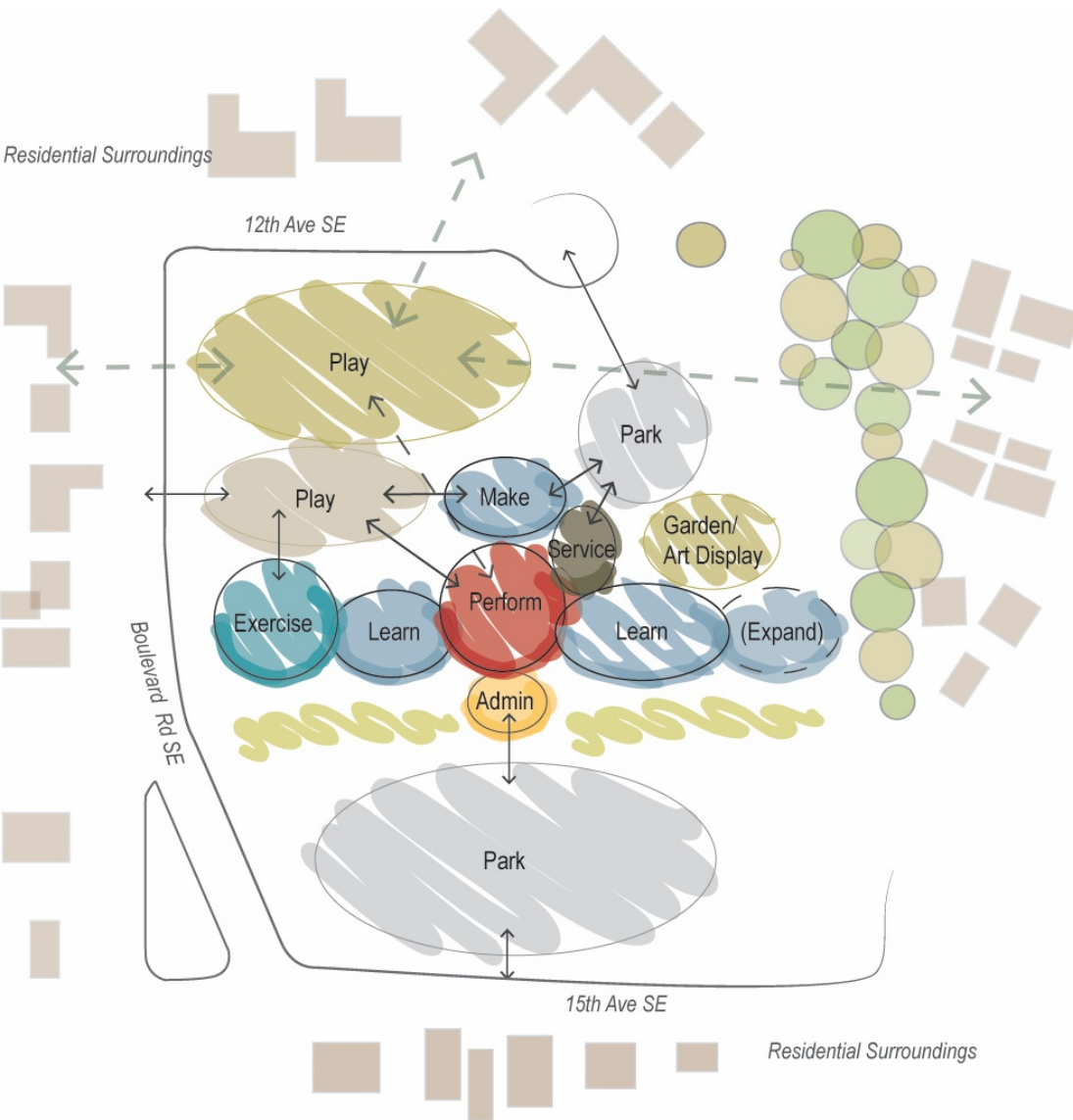
Olympia Regional Learning Academy

Category: New Construction
Olympia School District Olympia, WA



Olympia Regional Learning Academy

- + ORLA Montessori
- + hConnect
- + iConnect
- + Online Development Center



The Olympia Regional Learning Academy (ORLA) provides innovative educational alternatives to students throughout Central/ Southwest Washington. Originally founded in 2006, its specialized programs - Homeschool Connect, iConnect Academy, ORLA Montessori and the Online Development Center – have been giving students of nearly all ages choice in selecting the teaching and learning styles to suit customized needs.

Prior to the completion of its new building, ORLA occupied the former Rogers Elementary School, a District-owned facility earning the lowest building condition rating at that time. While maximizing the opportunities and making do at this former location, the growing academy faced many challenges in occupying its aging, outdated structure. Inspired by a shared dream of building new, stakeholder discussions took into consideration how the project could achieve the educational goals and objectives of both the academy and the District. It was thus determined that a new facility would better suit the school's curriculum, accommodate its growing population, and additionally, ease capacity at other schools within the District. An assessment of the District's unoccupied, former McKinley Elementary School site provided results that demonstrated how this alternative location could offer greater support of envisioned outdoor amenities, give convenient access to public transit, and better position the academy within a location more central to its users.

The inclusive, collaborative design and construction process behind the production of the Olympia Regional Learning Academy achieves goals on a variety of levels. For the District, the project is a future-planned, flexible and durable facility, serving as a regional model for sustainability; for families, the new brick-and-mortar home base welcomes on-site learners while also providing the resources and technology to support learning off campus; and for students, ORLA's enriching environment bolsters a sense of independence, creativity and individuality. Finally, for its neighborhood, the new academy offers the indoor and outdoor amenities that enrich the experience of living and working within its vibrant Olympia-area community.

+ ORLA Montessori

A K-6 Montessori school serving over 150 students, forecasting continued growth.

+ hConnect (Homeschool Connect)

A K-12 program, offering over 100 classes to supplement the education of home-schooled learners.

+ iConnect

An online distance and hybrid learning program with e-courses targeted for middle and high school students; program includes on-site learning center.

+ Online Development Center

A District-wide eLearning resource for all schools, and professional development center for teachers.

Community Environment _ Within

The Olympia Regional Learning Academy serves learners and their families desiring less traditional paths of education, and supports those requiring atypical resources due to a variety of life circumstances, including:

- Home schooled children, whose parents look to ORLA's hConnect classes to supplement the lessons provided at home.
- Children and teens struggling with medical conditions. Utilizing iConnect's electronic means for accessing education, this program also offers a brick-and-mortar location to provide in-person tutoring, mentoring and testing.
- Athletes spending daytime hours in training, who require a flexible schedule to help maintain academic progress.
- Learners enrolled in traditional schools seeking specific classes to supplement their conventional education.
- District educators, looking to obtain professional development and also utilize the online educational resources within their classrooms.

The schools within the academy operate somewhat independently, yet share common administrative functions and major program spaces. Similar to a community college, students follow customized schedules as they move from class to class. Parents are required to remain on-site, often with younger siblings in tow, and thus a variety of amenities facilitate their comfort and convenience. There is a strong sense of camaraderie amongst student peers, families, teachers and staff.



Main Entry Lobby



Balcony seating overlooking platform proscenium



Break out lounge

Community Environment _ Within

ORLA offers many space types that promote interaction and collaboration among members of its school community.

- Break-out lounges and casual seating areas dot the corridors, creating waiting areas for parents, small learning environments, and areas for casual socialization outside of the classroom.
- During the lunch hour, the large commons hosts families and students who eat together picnic-style.
- The main kitchen serves hot lunch, and a smaller, parent-use kitchen allows for basic prep and warming of food brought from home.
- Café tables line the arced window wall at the entry gallery for space to wait, mingle, eat and study within view of the commons.
- To assist parents in keeping younger siblings occupied, a play area with nearby changing amenities and infant nap room make up the space known as the "Toddler Room."
- A "stroller parking lot" reserves space for strollers and wagons, a useful means of conveying children and supplies across campus.
- The CRC (Curriculum Resource Center) is more than a library; the books, games, and teaching materials can be checked out by school staff, as well as students and parents, for use in on-site or at home.
- Use of special purpose rooms (cooking classroom, roof gardens, science labs) between school programs and other building users is encouraged; their locations within the academy provide convenient access.



Casual seating area, upper level



Commons, from balcony above

The Commons represents the physical and metaphorical “heart” of ORLA, bringing together its community through art, music, food and performance.



Commons, looking toward balcony



Gymnasium

Outdoor learning/ play

Community Environment _ The Neighborhood

Designed to weave seamlessly into the fabric of its neighborhood, the school extends invitation for use to those inside and outside of its walls. The gym and the commons, located near designated activity parking, are zoned independently from the rest of the building. ORLA's play fields, art plaza, gardens and parking lots are also offered up as resources for use by the school, neighborhood and community. During design, outreach forums were well attended, and a high level of support was built from listening and responding to the input of neighbors.

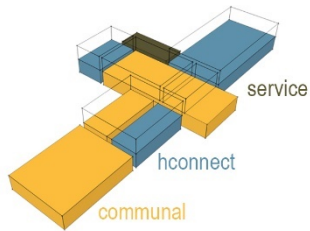


“ *It has added a lot to the Olympia area.”*

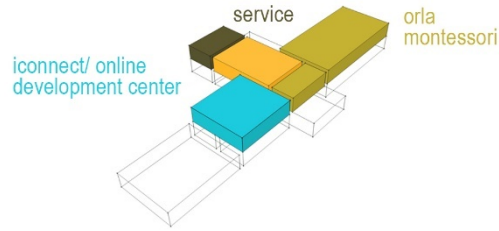
“It is nice to see the parking lot full and the kids enjoying the playground.”

Conrad and Treva Brock, Long-time Olympia Residents





ground level



upper level

Learning Environment

ORLA's programs occupy distinct building zones, bringing benefit beyond simple adjacencies.

An upper floor program element, ORLA Montessori enjoys ample daylight from high ceilings. As a means to provide direct and secure access for the school's littlest learners, a private stair is provided within the core of the building, just beyond the first floor administrative office.

Also upstairs, the iConnect program and Online Development Center (ODC) share needs related to high-tech use. Digital labs and the recording room are positioned in a largely North-facing location, where the ability to control light levels facilitates the recording and viewing of electronic media.

The largest of the schools, hConnect, occupies the ground level for many reasons: functions within the resource center, science, cooking, and art rooms rely on a continual flow of supplies, and thus benefit from their proximity to the kitchen, entrance doors and service drive. hConnect also sees the coming and going of building users more frequently throughout the day, thus a direct relationship to the main entry and parking supports this continuous flow, within a clear view of the administrative office.





hConnect classroom

Learning Environment

A variety of indoor and outdoor spaces provide venues for play, performance, experimentation, creativity and social interaction. Flexible classrooms are suited for use by all ages. Spaces which hold classes for primary grades in the morning, may house high-schoolers later in the afternoon; the furniture, equipment and storage facilitate this fluctuation.

Science lab





Cooking classroom



Break out lounge at upper level corridor

+ Floor pattern

The intrusion of basaltic magma into oceanic ridges creates a sea floor banding effect, a geologic concept represented in the linear floor patterning at the corridors (above).

+ Sound cloud

Inspired by a sound wave, the configuration of acoustic panels brings color and playfulness to the main entry and upper gallery (right).



Sound Cloud at Gallery

Learning Environment

ORLA's design is forward thinking, placing emphasis on wholistic wellness, multiple intelligences, project-based learning and connections with nature.

- Digital labs can host lectures on-site, and utilize technology to transmit and receive lessons, making information available to students throughout the region.
- The culinary education classroom (pictured at left), is a venue for teaching an important life skill and the value of nutrition; lessons bridge the connection to the produce grown in the on-site student gardens.
- Gardens, science labs, the gymnasium and outdoor play areas support lessons in horticulture, science, and physical education.
- Art/project labs are spaces that also allow students to get wet and messy, to encourage "hands on" learning.



Teen Room



Key Cafe/ school store

Learning Environment

"The Safe" is ORLA's designated teen hangout. Located near the school store (Key Café), it provides a zone of semi-privacy away from parents and younger students, for adolescents to study and socialize.

Physical Environment

"What is it?"

This question was posed by ORLA's Administrator as a means of conveying her community's desire for a design aesthetic far removed from the predictable vernacular of standard educational architecture. As if these words were to come from a casual passer-by, this question served to challenge the designers to seek a fresh interpretation for the design of the site and school.

The building's position on the site, color and finish palette, and artistic landscape connect ORLA to its surrounding residential neighborhood. Neutral, natural materials support a confident massing, while the schoolhouse red accent paint - selected in part to acknowledge its predecessor, McKinley Elementary - boldly announces the Academy's presence within the community.





*On many occasions community members,
parents and staff have said,
“This building feels different; it is so welcoming.”*

Julie Randich, ORLA Program Manager



Front entry canopy

Physical Environment

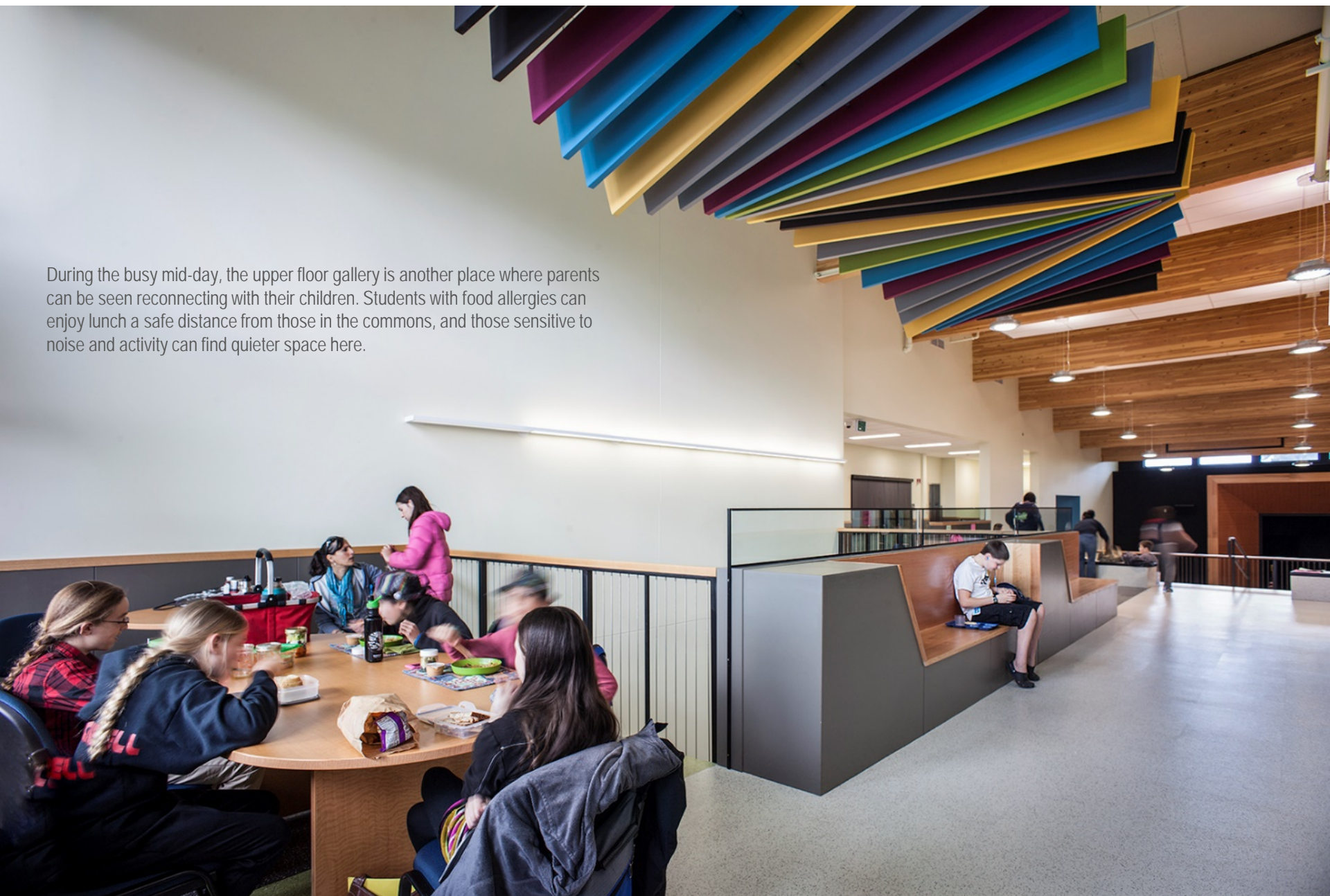
ORLA's double-height main entry greets visitors with color, daylight, texture and vibrancy. The sense of welcome is paired with a means of security from supervision. Positioned adjacent to the main entrance, transparency at the administration office gives individuals the ability to survey the main parking area, front door, teen room, entrance to the commons and access to the stairs and corridors. Each of the three schools maintains an independent schedule - with pre-schoolers, primary/secondary students, and parents accessing the building throughout the day - and separate zoning of the programs maintains security and order amongst the various user groups.

To achieve a “home-like” feel within the large public facility, the interior finishes provide interplay among textures, tones and patterns. A palette of light and medium grays is punctuated by vibrant-but-earthly hues. One of the project's few “premium” materials, clear sealed oak is used as a quasi-residential detail, capping the wainscot and wrapping the key features in public spaces.



Main entry lobby

During the busy mid-day, the upper floor gallery is another place where parents can be seen reconnecting with their children. Students with food allergies can enjoy lunch a safe distance from those in the commons, and those sensitive to noise and activity can find quieter space here.





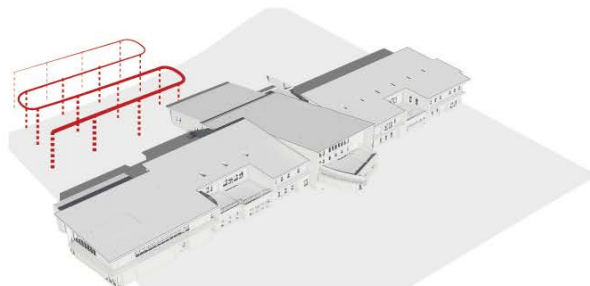
rooftop infrastructure readies the building to receive photovoltaic panels in the pursuit of net-zero energy status



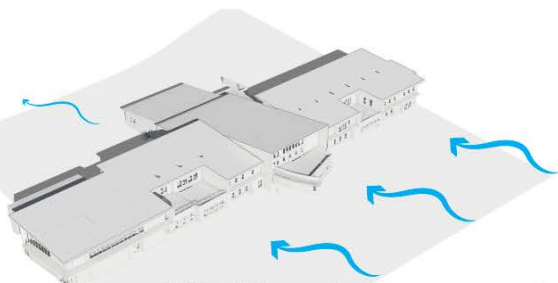
rain gardens collect and naturally filter site run-off



elevated planting plazas for future green roofs give upper floor programs access to green space. Green screens wrap exterior surfaces of the gymnasium to humanize the scale



a ground loop heat exchanger utilizes the earth's near constant subterranean temperature, providing thermal comfort for building occupants



a tight building envelope paired with highly efficient systems, is designed to consume 50% less energy than current State Energy Code Requirements



building orientation and window placement capture natural daylighting

SUSTAINABLE STRATEGIES

Beyond the baseline considerations of orientation, exposure, and energy efficient infrastructure, ORLA's sustainable strategies include:

- Rooftop infrastructure;
- A ground loop heat exchanger;
- A tight building envelope, for which at last calculation, the EUI (Energy Use Intensity) resulted in a figure of 19.27;
- Rain gardens;
- Elevated planting plazas and living walls, that emphasize the District's commitment to environmentally responsible design.

Physical Environment

Creativity and teamwork contributed toward bringing the high performance building into range of achieving a cost-efficient, net-zero energy ready status, resulting in one of the top sustainable facilities in the State.

With a design that far exceeds the WSSP-required 45 points, and with plans to further increase its sustainability through the addition of photovoltaic panels to the PV-ready roof, ORLA provides an elegant example of beauty melded with sustainability.



Upper level roof plaza, overlooking rain gardens

Physical Environment

There are a number of ways that the school helps students connect to the outdoors:

1. Rain gardens, weaving throughout the main front lot, break up the paved surface and buffer the building from parking. Once matured, the rain gardens will serve as an area for outdoor exploration.
2. The vertical trellis at the gymnasium façade is structured for climbing plants, a detail that assists in visually softening the activities wing's large mass near the intersection of adjacent streets.
3. Mature vegetation at the site's northeastern quadrant screens the property from nearby residences, and partially envelopes space reserved for an outdoor art plaza or gathering space.
4. A planting area is reserved at the North of the site for the cultivation of student-managed gardens.
5. Roof garden patios provide easy access to nature for upper level programs.
6. Areas of roof envelope are designed and detailed for the future planting of "green roofs." Once installed, second floor classrooms and corridors will benefit from the close proximity of green space.
7. Due in part to its centralized position on the site, the building offers many vantage points as overlooks to the vegetated site and surrounding neighborhood.



Planning Process

In early 2012, supporters of the Olympia School District shared collective enthusiasm over its early spring bond passage, approving \$97.8 million in construction funding. Following a year+ long analysis that involved assessment of current facility needs, population growth, housing trends, enrollment data, and a community input survey involving more than 900 local citizens, this event assured that a series of new construction, expansion and remodel projects would materialize, improving a number of locations across the District.

In its most basic form, the work scope for ORLA included three major expectations; the completed educational facility project would:

1. Create a quality learning environment for an academy shared by three schools /four user groups;
2. Strive for net-zero energy use readiness, a significant step for the District toward increased sustainability of its facilities; and
3. Convey a design aesthetic to prompt the question *"What is it?"*

Soon after start-up, two large issues began to emerge: the budget and educational specifications, both developed through an earlier process prior to A/E selection, did not account for a couple of key components. Upon confirming the square footage requirements from the educational specification, an inadequate area allocation was discovered, leaving the budget developed for a building smaller than what was required. Additionally, the MACC did not take into account the up-charge for pursuing net-zero energy readiness.

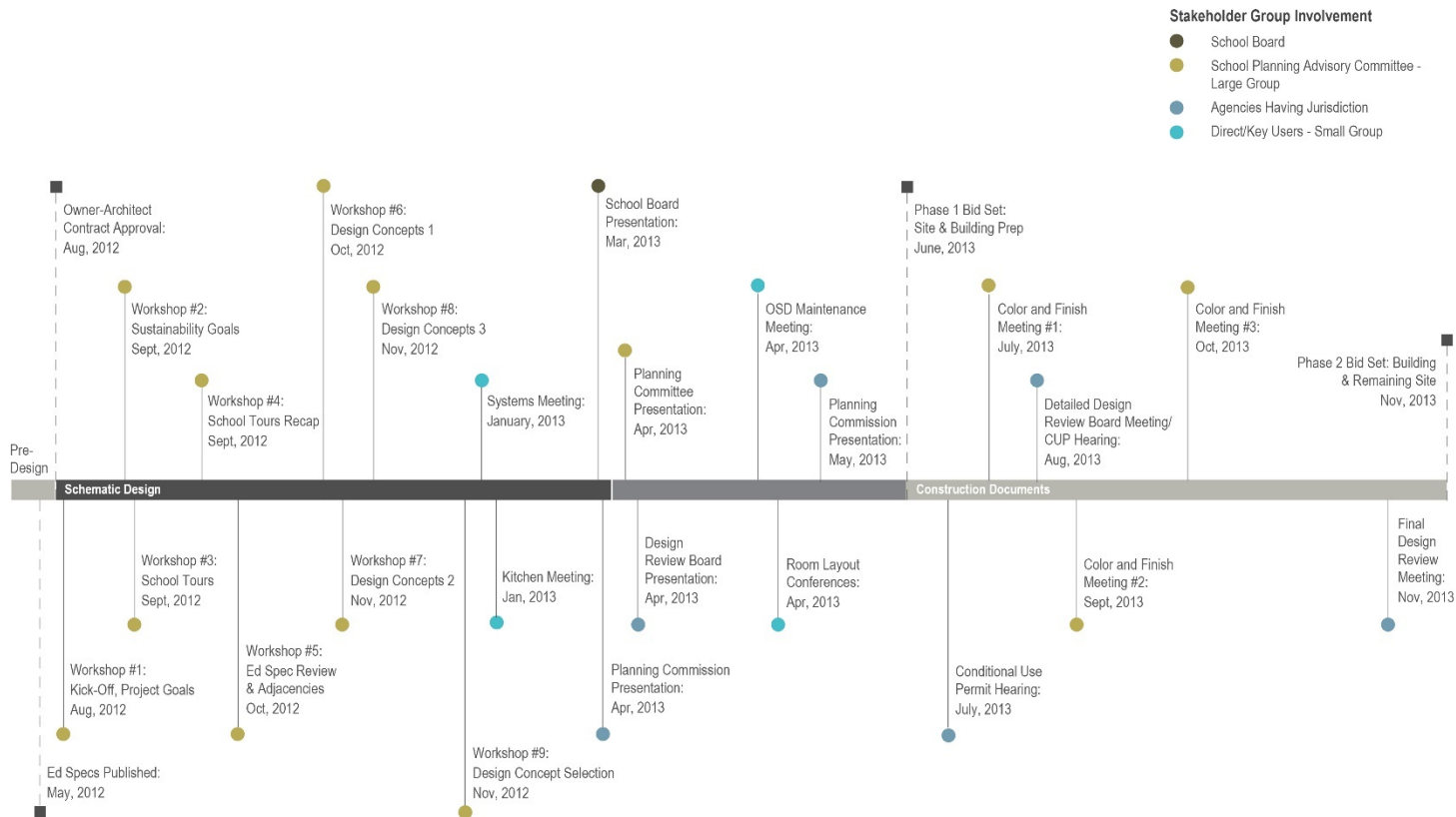
During early Schematic Design, the District submitted its application to the State of Washington for GC/CM delivery, receiving approval at a time when the added input was integral in making confident strides in the right direction. Hurdles were overcome through an environment of teamwork and creative thinking, and the project benefited from the blend of expertise shared amongst the District, school staff, design team, and the general contractor. Decisions big and small were thoroughly vetted and assessed for their contribution toward goal achievement, by a cooperative determined to move the project forward given the shift in parameters.



ORLA site, prior to design and development

Planning Process

Input and involvement was sought from a variety of stakeholders throughout the duration of the project. The timeline illustrates the milestone meetings, workshops and presentations, which involved a diverse array of participants.



SCHOOL PLANNING ADVISORY COMMITTEE

District Representation:

Director of Planning and Construction
Project Manager
Project Coordinator
Resource Conservation Manager

School Staff Representation:

ORLA Administrator
Program Manager
School Secretary
Family Consultant/Staff Support
Custodian
hConnect Teachers
ORLA Montessori Teachers
iConnect Teachers
Paraeducators

Student Representative

Parents

The kick-off workshop allowed the variety of representatives from the District and school community (teachers, support staff, parents representing students of all programs) to become reacquainted with one another, and describe to the Design Team the attributes which make the Olympia Regional Learning Academy special. From this first gathering, detailed project goals were established.

Goals: To create a school that is...

... welcoming.

Allow students, their families, staff, visitors and the community to know that they are welcome to enter inside, wait in comfort, and utilize and enjoy the building, amenities and grounds.

... family oriented.

Provide a variety of spaces (quiet study, shared gathering, eating, etc.) to help make parents, siblings and other relatives feel at ease, regardless of length of stay.

... accommodating.

Reflect a design that is sensitive to the special needs of visitors (developmental, special, sensory, anxiety, and others.) Provide spaces for quiet contemplation (for introverts) and social interaction (for extroverts). Accommodate large families, infant care, physical challenges of users, and others.

... safe and secure.

Design a safe, secure facility with transparency, visibility and supervision as key components. Locate support spaces (such as toilet rooms) to allow safe travel and return for young children. Create an identifiable "main entry" with a recognizable area for each program while taking into consideration the overall site and building security.

... multi-use, flexible and adaptable.

The layout of the school building and its infrastructure systems, furniture, equipment, and resources, shared among three distinct programs and attended by students of varied ages, should easily adapt to accommodate instruction of a wide variety of topics and programs, to a variety of age groups – from creative writing to art and science; from pre-schoolers to high-schoolers – often within the same day.

... connected to the outdoors.

Connect the building with its outdoor environment. Incorporate design strategies to minimize the visual and spatial separation between indoors and out.

... filled with natural light and fresh air.

Provide ample glazing, strategically-located to create well daylit spaces. Design ventilation systems that incorporate the natural circulation of fresh air throughout the building.

... sustainable.

With the goal of achieving net-zero (or being net-zero ready), design a school that makes responsible and best use of natural resources, while helping educate students about sustainability.

... technologically advanced.

Incorporate a computer-rich environment integrated with advanced A/V and building systems technology, (communications, lighting, heating and cooling) that is user friendly and adaptable to change through future upgrades.

... beautiful, warm and comfortable.

Use design features, materials, proportion, scale and color to create beautiful spaces that are less traditionally school-like and more comfortably home-like.

... expandable.

Position and design a structure that logically accommodates future expansion.

... supportive of a self-sustaining program.

To properly sustain the school as a business entity, the design of the school and its programs must draw interest from area students – both within and outside of the District. Incorporate features to attract families and support external alliances through community volunteerism and local business partnerships.

... conducive to brain development.

Through color and texture, student art display, "building as a 3-D textbook," group and individualized/personalized spaces, designated "nooks" for social interaction among peer groups, and other strategies, create a learning-rich physical environment that supports the development of multiple intelligences, stimulates innovation and encourages life-long learning.

... reflective of "community."

The school should represent various levels of community: the communities of each of the three individual programs; the ORLA school; and the neighborhood, district and city at-large.

Early concept





Adjacency planning workshop (above);
Presentation of schematic design concepts (below)

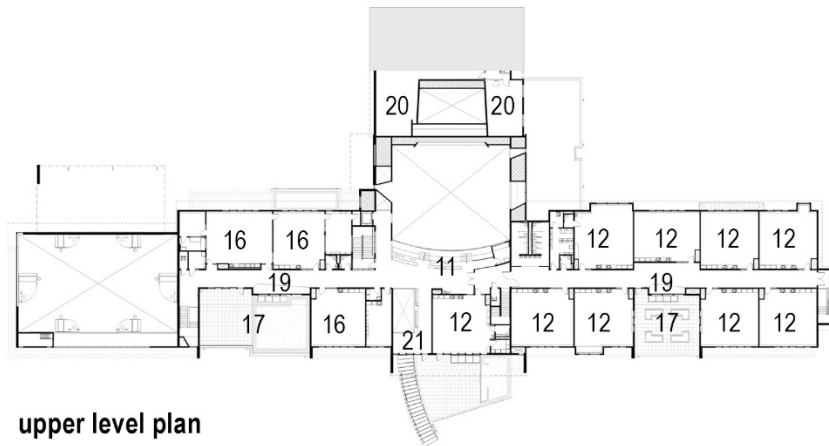
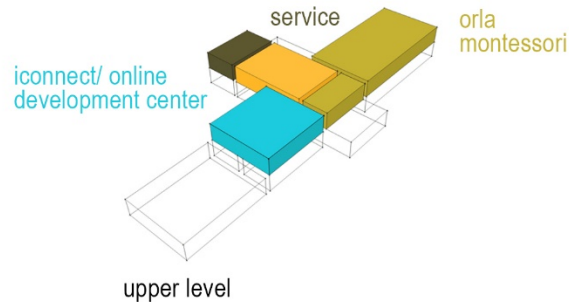
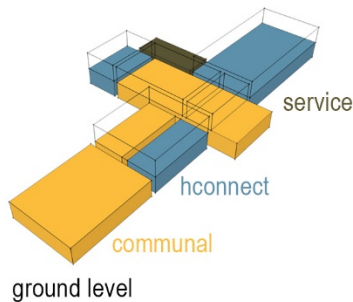


Planning Process

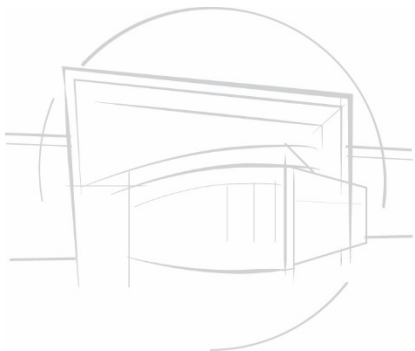
Following an interactive start-up process of confirming needs and wants with the school's planning committee, the architectural design team held an intensive weekend design charrette among its in-house professional staff. This exercise led to the creation of two equally compelling concepts. Upon presentation to the District and planning committee, the client group favored aspects of each, and a series of refinements to both occurred over the next few days. When the concepts were presented again, the planning committee found value in the opportunities offered by both. This unusual scenario continued, and ultimately led to the extension of the schematic design phase schedule by four weeks. The additional time allowed the team to deeply investigate the tradeoffs offered by the two concepts, as well as provided the committee with more time to carefully weigh the benefits.

Ultimately, cost estimating confirmed that the simple, cruciform floor plan provided greater savings through efficiency in materials and systems. The planning committee recognized that moving forward with this layout would bring more value to the project over the long run. Throughout the remainder of design, the decision making process shared by the dedicated group sought to strike a balance between meeting project goals while suiting the tight budget.

Input gained through neighborhood outreach efforts helped lead to the determination that ideal placement of the building would be in a central location, square in the middle of the parcel. This solution would address the site and building considerations, as well as mitigate the visual impact that a large, two-story building would have on the smaller-scale nearby residences. However, the team also recognized that this placement would require a zoning code amendment, a long and involved process essential to achieving jurisdictional approval. Six presentations at various stages of the project served to demonstrate to City representatives that the project's massing, colors, security strategies, site lighting and other aspects would positively affect the surrounding neighborhood. A cooperative effort amongst the School District, City of Olympia, and the design team contributed toward achievement of this hurdle, an approach that continued throughout design and construction, leading toward achievement of great success for the finished project.



- 1 main entry/lobby
- 2 administration
- 3 teen room
- 4 curriculum resource center
- 5 toddler room
- 6 stroller parking
- 7 gymnasium
- 8 parent kitchen
- 9 commons
- 10 platform/music
- 11 balcony
- 12 general learning
- 13 science
- 14 cooking
- 15 art/projects
- 16 digital lab
- 17 outdoor learning
- 18 kitchen/service
- 19 break-out (lounge)
- 20 electrical/mechanical
- 21 gallery



Working together to meet the needs of the School District and ORLA's programs within the given parameters led to an inclusive and intriguing process, and what we believe is an outstanding result. The building and site are designed to support the principles of flexibility, adaptability, longevity, and the opportunity for outdoor education, all contributors toward the delivery of a 21st century education.

As awareness of the importance of green school design increases amongst the public - and the drive toward achieving forward-thinking school facilities continues - Districts throughout the region are taking notice of the Olympia Regional Learning Academy as inspiration for more future-planned projects.

Exhibition of School Planning and Architecture

Project Data

Submitting Firm :	TCF Architecture
Project Role	Architect
Project Contact	Brian Fitzgerald
Title	TCF Managing Principal /Principal in Charge, ORLA
Address	902 North 2 nd Street
City, State or Province, Country	Tacoma, WA 98403
Phone	(253) 572-3993

Construction Firm:	FORMA Construction
Project Role	GC/CM (General Contractor/ Construction Manager)
Project Contact	Drew Phillips
Title	FORMA President /Project Principal
Address	2823 29 th Avenue SW, Suite A
City, State or Province, Country	Tumwater, WA 98512
Phone	(360) 754-5788



Exhibition of School Planning and Architecture

Project Details

Project Name	Olympia Regional Learning Academy
City	Olympia
State	Washington
District Name	Olympia School District
Supt/President	Dick Cvitanich
Occupancy Date	February, 2015
Grades Housed	K-12
Capacity(Students)	600
Site Size (acres)	8.25
Gross Area (sq. ft.)	66,023
Per Occupant(pupil)	110
gross/net please indicate	Gross
Design and Build?	Yes
If yes, Total Cost:	\$21.3 million
Includes:	Building and site development costs
If no,	
Site Development:	
Building Construction:	
Fixed Equipment:	
Other:	
Total:	\$21.3 million