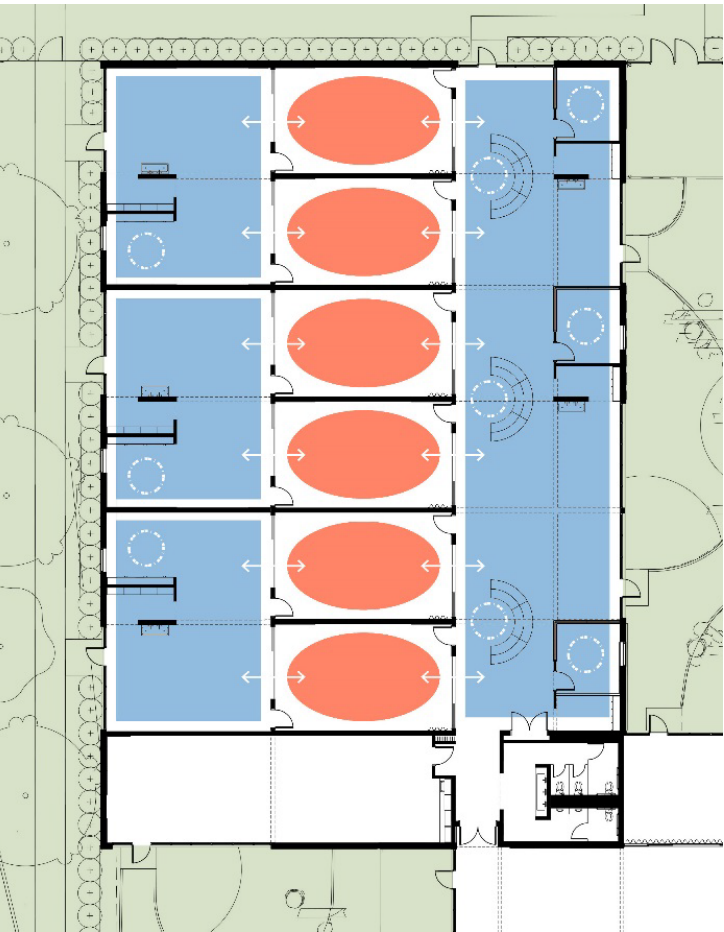


2016 Exhibition of School Planning and Architecture

Arlington Elementary School

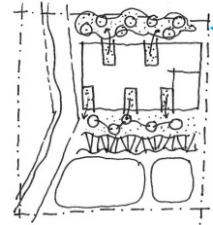
Tacoma Public Schools
Tacoma, Washington

Arlington Elementary

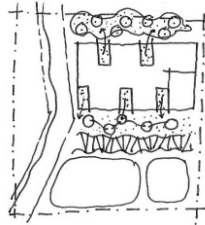


Arlington Elementary

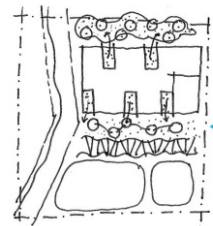
Watch, Listen, Anticipate, Interact



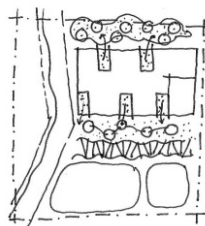
Observe, Dig, Study, Plant, Build



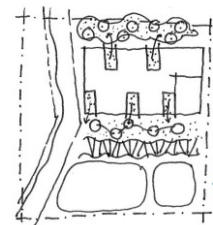
Read, Draw, Grow, Socialize



Slide, Climb, Cross, Navigate



Run, Swing, Catch, Throw, Kick



Early sketches developed during schematic design in collaboration with students, staff, and administrators identify key zones on site to accommodate a range of learning activities.

(RIGHT) The final, rendered site plan shows realization of the original goals.



[illegible]

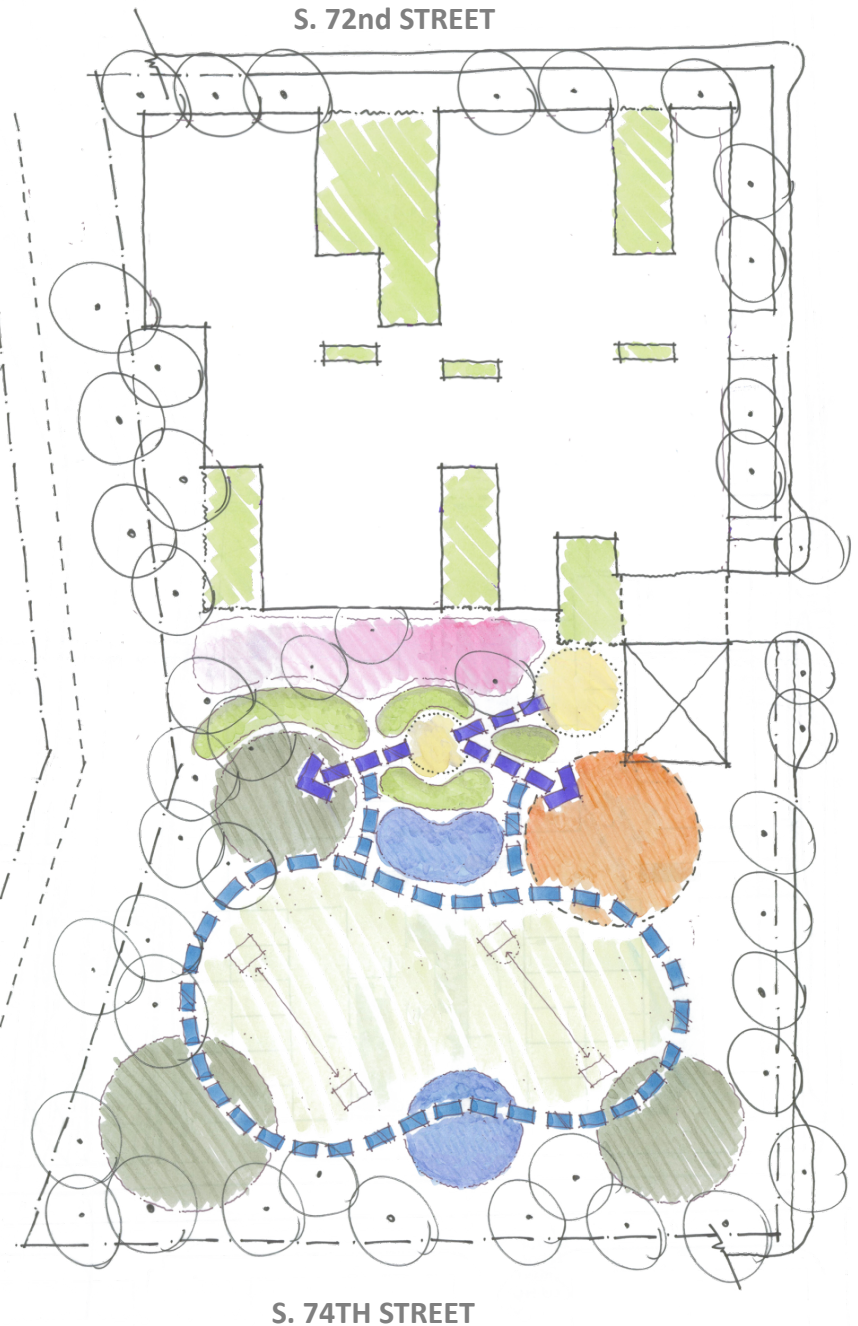
A hand-drawn map of a residential neighborhood in Tacoma, WA, showing streets, parks, and walking distances. The map includes labels for streets like S. Tacoma Way, S. Puget Sound Ave., S. 66th St., S. 68th St., S. 70th St., S. 72nd St., S. 74th St., and S. 76th St. It also shows parks like S. Alder St. Park and S. Junett St. Park, and walking distances such as 2 min. walk, 3 min. walk, 4 min. walk, and 5 min. walk. Handwritten notes include "SOMETIMES VISIT FOR SCIENCE CLUBS (LOOK FOR BIRDS, DIFF. TRAILS)" and "INDOOR SOCCER".

[illegible]

Community Environment

To draw a positive influence back to the site and discourage drug trafficking that occurs there now, a multi-use gymnasium, naturalized playground, basketball courts and playfields push out to the street and connect to an urban bike and walking trail located on site, inviting after-hours recreational use by families: the covered play provides a bright, daylit outdoor gathering space, and at the heart of the site, a naturalized playground and amphitheater draws the community together so that they can rally around the school, and each other.

S. CEDAR STREET



S. PINE STREET

S. 74TH STREET

Community Environment

Arlington is designed to be the center of gravity for the entire community, not just their children. To help break the cycle of poverty, education at Arlington fundamentally redefines who the student is; assuming we are all learners. Arlington will be a resource for adult education, outreach, preventative services, technology and extended learning; as well as being a regional hub for preschool. Partnership with outside community resources that can help the District provide much needed services are accommodated in the design with distributed work spaces, kitchenettes, storerooms for access to materials and multiple levels of interior division in and around the central core and shared learning areas that allow the facility to respond fluidly to concurrent use by multiple community partners throughout the day, and into the night.



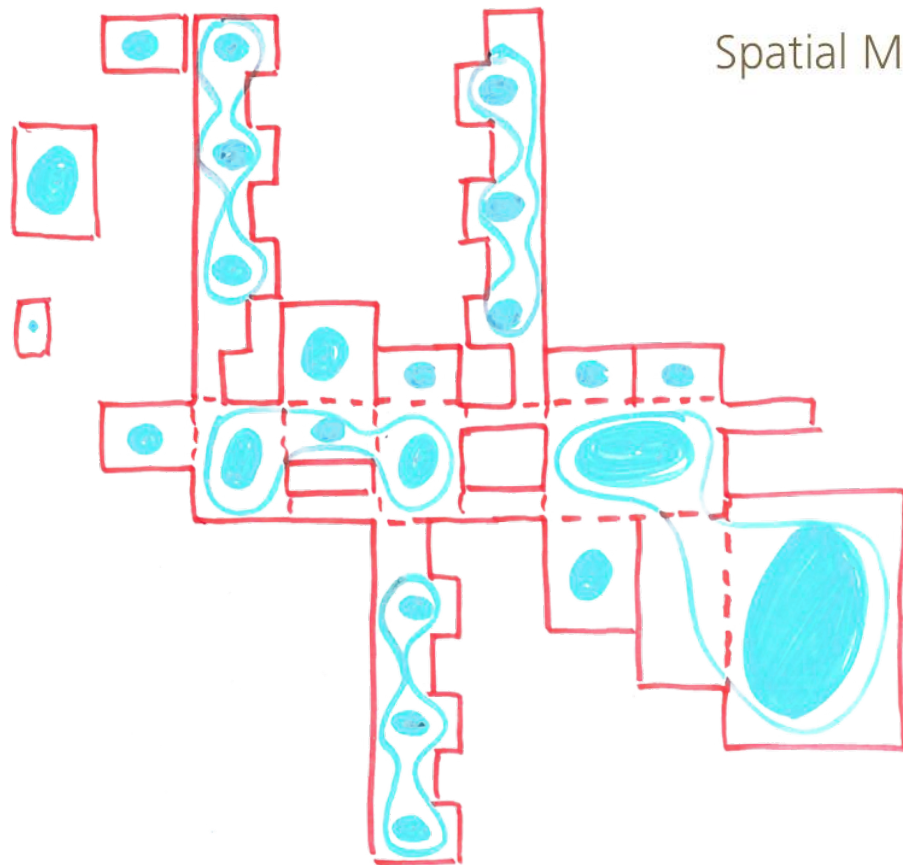
Planning for flexibility in the learning wings allows shows how the facility can be shared with community partners if space requirements change, e.g. fluctuating student populations, year-round school schedules, increased online learning.

Learning Environment

Arlington is an exploration of what spatial possibilities emerge for schools when a community sets out to build a culture that wraps around kids so they are learning all day, every day, and throughout the year; in environments where learners are continuously challenged, relentlessly supported, and engaged in a way that is both safe and healthy; with an emphasis on designing for learning activities rather than student seats; in a pilot program that wraps traditional curriculum around a fusion of technology and flexible teaching space.

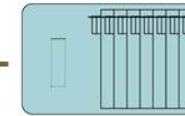
It is a response to the vision: If education is a living, breathing organism, how can a facility be evolutionary?



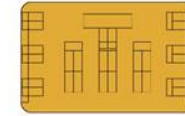


Spatial Models - Need

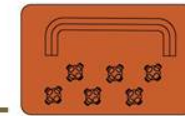
23%



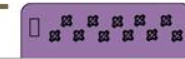
Forum/Lecture



Workshop/Create



Community/Gather



Project/Activity



Large Group



Small Group



Individual Study

77%

Learning Environment

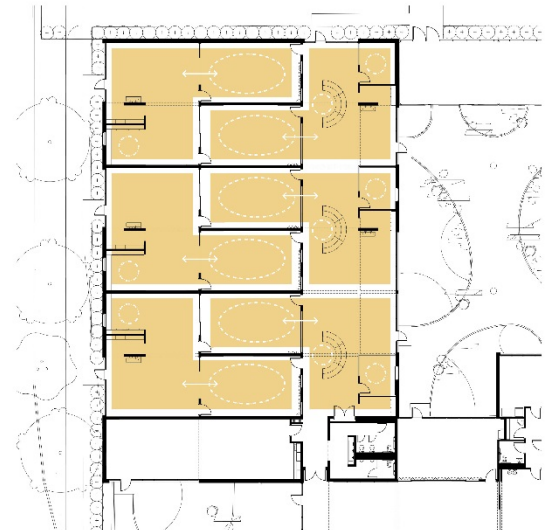
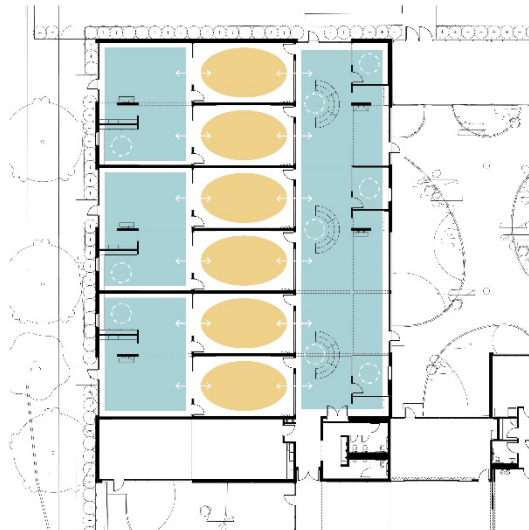
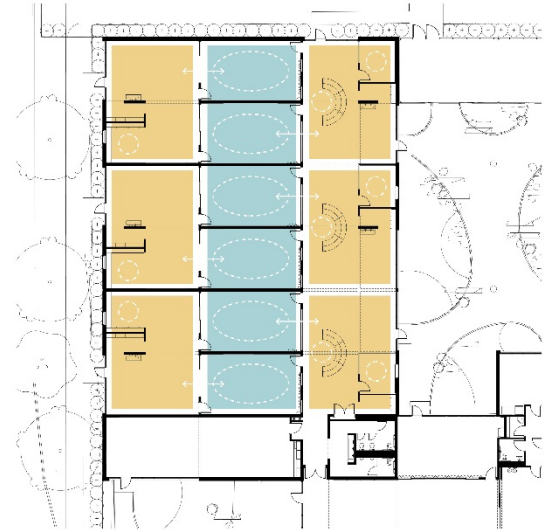
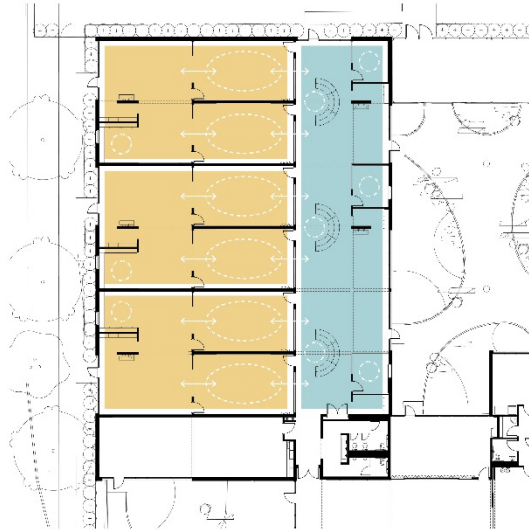
There are no classrooms at Arlington. There are only spaces for learners and learning activities. This provides a new spatial framework that maximizes teaching space, offering every learner a choice while giving every teacher the variety, flexibility and partnering they need to better address differentiated learning. In addition, the planning process discovered that 77% of the time, learning would ideally occur in groups of 15 students or less, and that direct instruction time is decreasing.

Learning Environment

Arlington's learning community centralizes six direct instruction spaces flanked on each side by shared learning that moves both up and down in scale. Where the traditional classroom model gives each learner/teacher access and ownership to a single (900 SF) primary learning space in group sizes of 25-32,

Arlington gives each learner/teacher: a core instruction space (550 SF), a project lab (950 SF), a small group room (180 SF), a shared learning space (3,000 SF) and an outdoor learning space (3,000-6,000 SF) in a way that allows nimble freedom of movement, group size, program development and collaboration.

Learning Environment Agility Diagrams: Orange zones represent space used by a single teacher / class of students. Blue zones represent spaces for collaboration between classes and teachers. Spaces flex to accommodate a wide range of teaching and learning styles



Learning Environment

Core learning support is equally transformable. An open library, dining, gym and specialized learning spaces form the center of the school, allowing ebb and flow throughout the day to support research, discovery, making, gathering and celebration.





Physical Environment

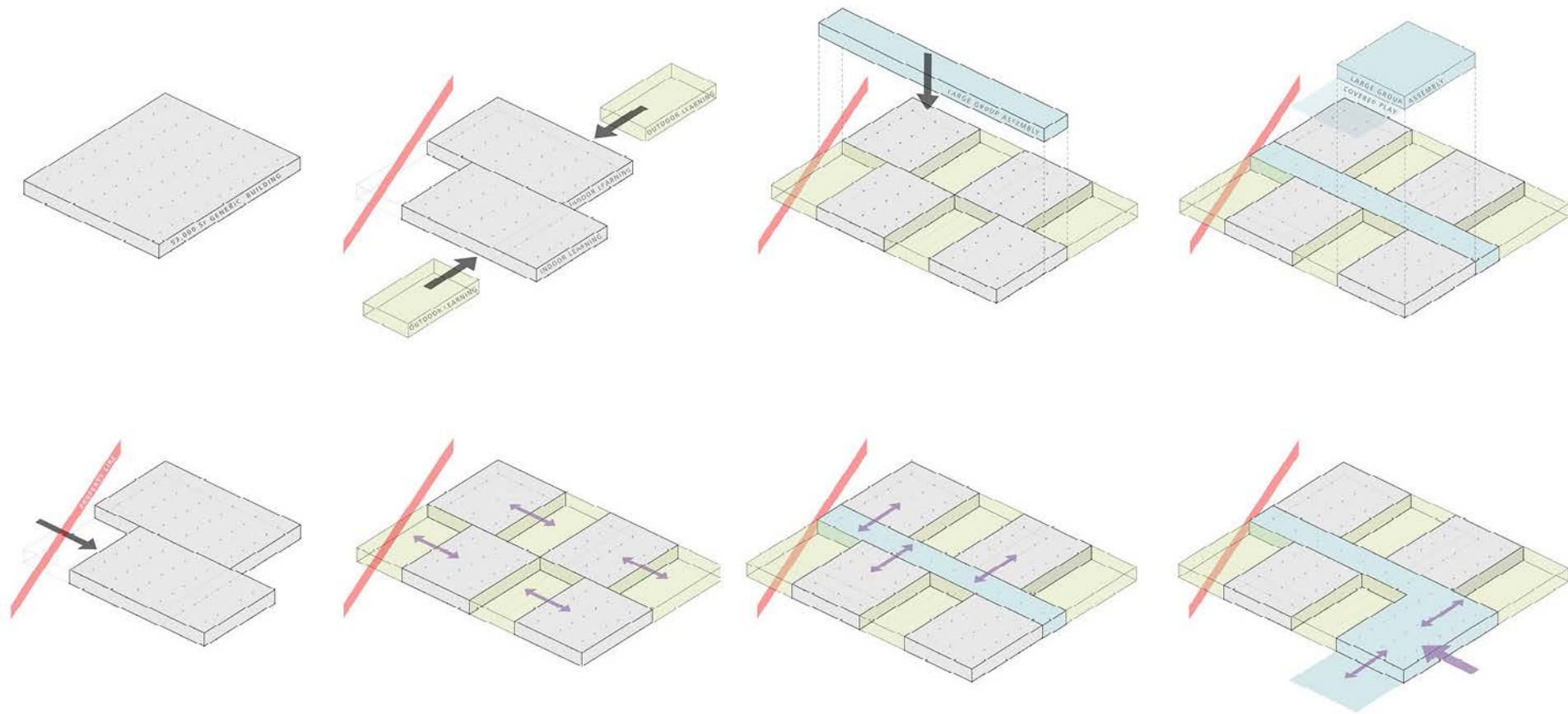
The sustainable story of Arlington is dominated by these themes:

Reduce More learning in less built space

Integrate Embrace nature (school without walls)

Practice Simplicity in maintainability

Return Bring sustainability to the community and give back



Physical Environment

The building form results from a regular structural grid overlaid on an efficient volume, divided into three learning communities; each married to an active exterior learning space, and connected at the core and to the street by assembly spaces. Efficiency is paramount, as is connectivity and future transformability.



Physical Environment

The architectural expression is simple, but intended to emanate transcendence – a formative quality of Arlington’s students despite their economic circumstance. Exterior permanence and solidity give way to interior flexibility – but both are characterized by color and light. Exterior brick and aluminum windows integrate color and materials in patterns that create a balance between the ideals of education as the path toward both foundation and uprising. The white sawtooth roofline dissipates into the Pacific Northwest cloudscape on the exterior.



Physical Environment

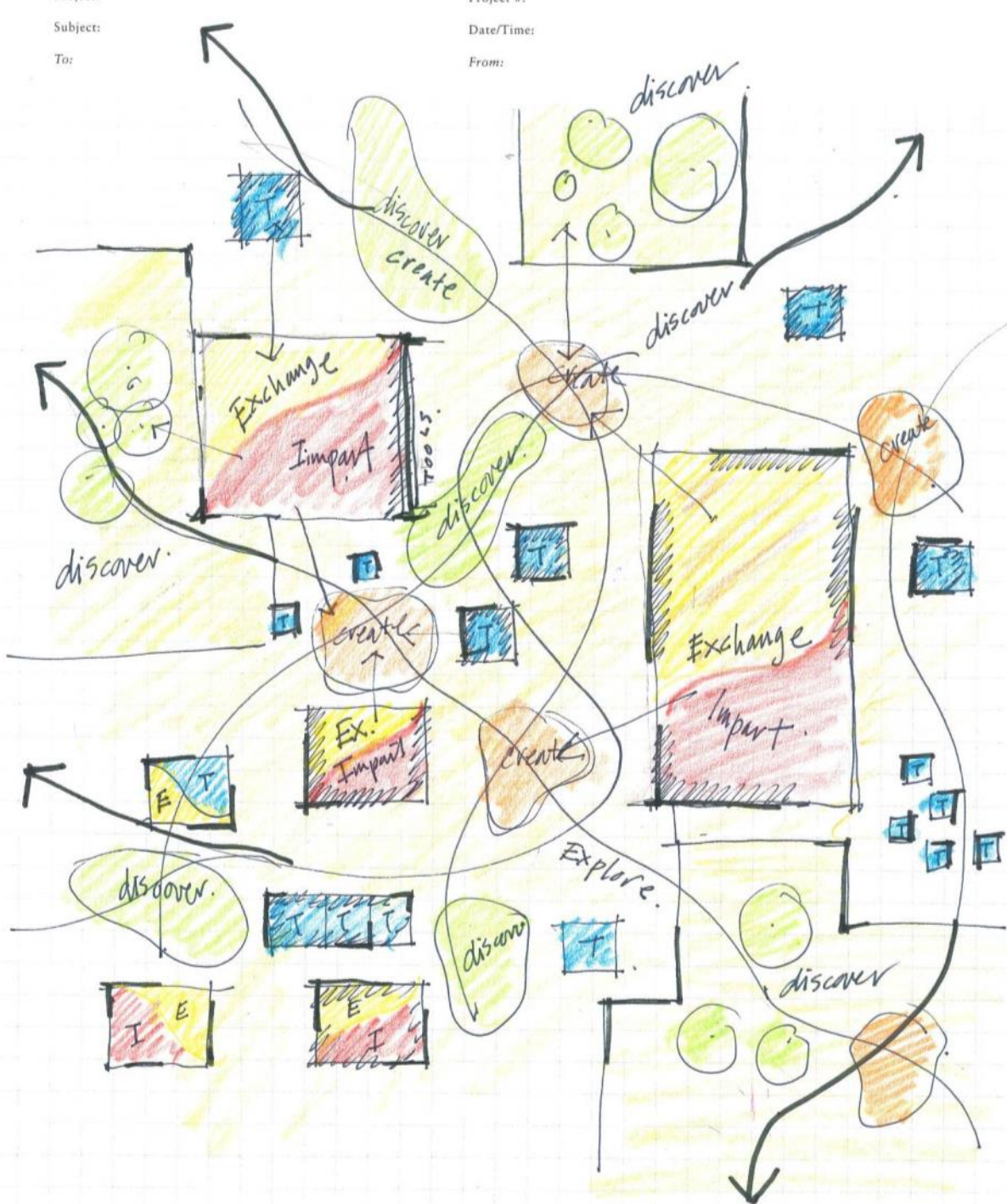
The sawtooth roofs flood interior learning spaces that would otherwise be dark with natural light. Views to green spaces and the sky thereby dominate the interior environment, acknowledging both student and staff desires to “learn outdoors.” The material character of the physical environment is student centered; moveable and stackable furniture create soft, student enabled divisions of space. Walls and surfaces are writable and moveable, allowing spontaneous fits of creativity; color installations inspire and cheer; kids chart their own path; positive learning happens everywhere.



Planning Process

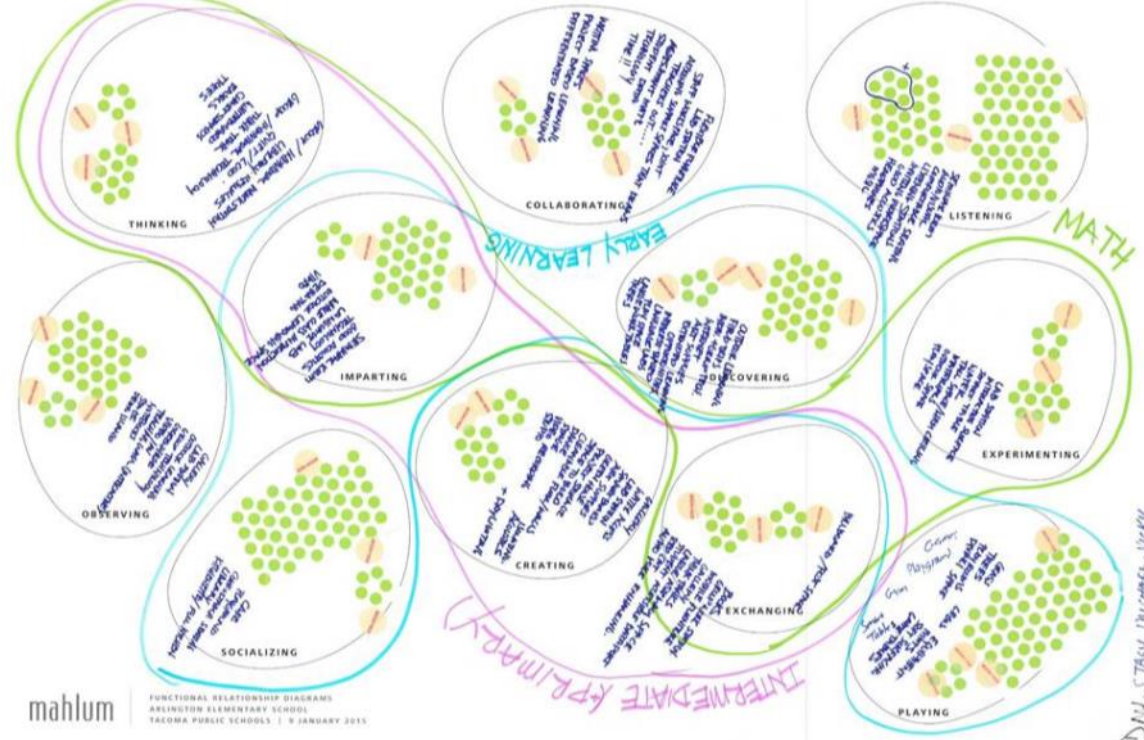
Arlington is the first ground-up elementary school to follow Tacoma Public Schools' new, non-traditional Ed Spec, "A Vision for the Elementary Learning Environment;" guidelines for building, planning and design.

As such, the planning process stipulated relentless reinterpretation, deep analysis, creative synthesis and meaningful reinvention at every turn. Basically, the process was built to question everything.



Planning Process

We included students, educators, visionaries, neighbors, parents, alumni, community partners, public agencies and design professionals equally. Highly interactive and engaging exercises prevailed: mapping neighborhood assets, drawing exercises, observation and listening sessions, Pinterest boards, photography and videography, foundational question “diaries,” tours of schools balanced by tours of collaborative industries, functional programming exercises, and eventually, manipulative ¼ scale physical models of space and furniture. This established the foundational aspirations, to be developed under the simple evaluative measure: what makes a good environment for learning?



Planning Process

Enable collaboration

(both spatial and organizational)

Push innovation

(grasp the cutting edge)

Facilitate ability based groupings

(3-phase rotational model, 8:1 ratio)

Learner centered

(shift the locus of control)

Extend learning outdoors

(fully integrate)

Support the inquisitive mind

(infused, expressive, hands-on, messy)



A process highlight: working with groups of kids around tables covered in rolls of butcher paper, we simply asked them to draw fun places to play. Themes emerged and ideas surfaced that a small hill on the site should be the playground itself. Hill slides, rock-scrambles, climbing nets and rolling hills now replace traditional play equipment and occupy what was originally assumed to be an obstacle. Designed by kids for kids!



Exhibition of School Planning and Architecture

Project Data

Submitting Firm :	Mahlum
Project Role	Architect
Project Contact	Karen Wood
Title	Associate
Address	71 Columbia, Floor 4
City, State or Province, Country	Seattle, WA, USA
Phone	(206) 441-4151

Joint Partner Firm:	Not Applicable
Project Role	
Project Contact	
Title	
Address	
City, State or Province, Country	
Phone	

Other Firm:	Not Applicable
Project Role	
Project Contact	
Title	
Address	
City, State or Province, Country	
Phone	

	Not Applicable
Project Role	General Contractor
Construction Firm:	Neeley Construction
Title	
Address	111 23 rd Street SE, suite B
City, State or Province, Country	Puyallup, WA, USA
Phone	(253)845-8838

Exhibition of School Planning and Architecture

Project Details

Project Name	Arlington Elementary School
City	Tacoma
State	Washington
District Name	Tacoma Public Schools
Supt/President	Carla Santorno, Superintendent
Occupancy Date	Fall 2017
Grades Housed	PreK-5th Grade
Capacity(Students)	450
Site Size (acres)	4.5
Gross Area (sq. ft.)	54,000
Per Occupant(pupil)	120
gross/net please indicate	Gross
Design and Build?	Low Bid
If yes, Total Cost:	\$17,000,000
Includes:	Building and Site Development
If no,	
Site Development:	
Building Construction:	
Fixed Equipment:	
Other:	
Total:	