MISSION BAY SCHOOL

SAN FRANCISCO UNIFIED SCHOOL DISTRICT

EXECUTIVE SUMMARY

Designing a School for "Each and Every"

San Francisco Unified School District (SFUSD) has embarked on a focused journey to consider the full breadth of opportunity available to its students, families, teachers, and staff in the development of the new Mission Bay School, located in the burgeoning Mission Bay neighborhood.

Concurrent with the agreement by University of California, San Francisco (UCSF) to transfer a parcel of land to the District as a new school site, the District began a robust planning and development process involving school and community stakeholders.

SFUSD had recently launched an ambitious undertaking: to develop a new vision for the future of public education in San Francisco, and then use that vision as a guide to transform the city's school system, over the next decade. This vision led to the exploration of Mission Bay School as a pioneering project to address equity and social justice across its schools. Our planning and design process leveraged Universal Design for Learning (UDL) as a holistic strategy to achieve the District's goal of a truly equitable school system. We integrated UDL principles throughout the design to remove educational barriers and serve "each and every" student in alignment with SFUSD's mission.

Through engagement with District stakeholders and the community, we developed creative ideas for achieving synergies via the three disparate program elements of PK-5 Elementary School, Linked Learning Hub for high school students and Professional Learning Facility. This process created not only SFUSD's first UDL school, but a model for the District's future schools. The mission-forward emphasis of this new school model is intended to prepare students for their own authorship—not only in the future of San Francisco but also 21st Century global citizenry.

SCOPE OF WORK AND BUDGET

The new facility is designed to be approximately **$90 Million** and **106,000 gross square feet** in 4 stories of Type IIA construction on a 2.5 acre parcel of land (Block 14).

It will consist of three primary programmatic components:

1. An **Elementary School** consisting of preschool, transitional kindergarten, and kindergarten through 5th grade
2. A **Linked Learning Hub** in which high school students coming from other SFUSD schools participate in job training, internships and business partnerships
3. A **Professional Learning** facility in which educators and administrators participate in training, adult learning and continuing professional development.

Focus

A focus of our design process was to explore synergies between these traditionally disparate programs, to increase programmatic richness, spatial efficiency, and engagement potential with the wider community.

Deliverables

We provided SFUSD with Criteria Documentation and Performance Specification representative of the full scope and breadth of the programming and design work of the project through Schematic Design.

Duration

This process commenced in July 2019 and continued for approximately 18 months. The project is to be delivered through a design-build delivery method.

Aerial Looking Northeast

SCHOOL AND COMMUNITY ENGAGEMENT

A Growing Need

San Francisco Unified School District (SFUSD) is the seventh largest school district in California, educating more than 57,000 students in the city of San Francisco every year. Anywhere between 7,000 to 16,000 students are expected to enter the SFUSD system by 2030. As the southern and eastern portion of the city continues to grow around the University of California, San Francisco Mission Bay campus, families living in the area often travel significant distances to elementary, middle and high schools. The need for a new preschool to Grade 5 elementary school to serve this area of the city was identified as one of the District's most critical needs.

The new school will be located in the Mission Bay neighborhood, which is an emerging area of San Francisco. The neighborhood includes new multifamily housing, the UCSF campus, biotech businesses, public park areas and the new Chase Arena. SFUSD's demographic projections show enrollment of young students to grow significantly both in this region as well as other South of Market areas. This school is the first of several new District facilities being planned to address developing neighborhoods, to assist its goals to serve all children in San Francisco.

SFUSD began engaging the community from October 2018, inviting community members to share reactions and input for a new Mission Bay school. Later, SFUSD and the design team engaged in a robust community outreach process together during the programming phase. The goal of these meetings included spreading the word about the new Mission Bay School and getting feedback from the community on opportunities this school could represent to them. The need and desire for a Linked Learning Hub within the project was identified through this initial engagement period, where staff summarized and aggregated community feedback and reflected on what rose to the top as most desired. "Experiential opportunities for schools to partner with the Mission Bay tech and health industries—but these opportunities should be offered to all kids across the district, not just to kids residing in one neighborhood" was a common theme expressed by community members.

1980s

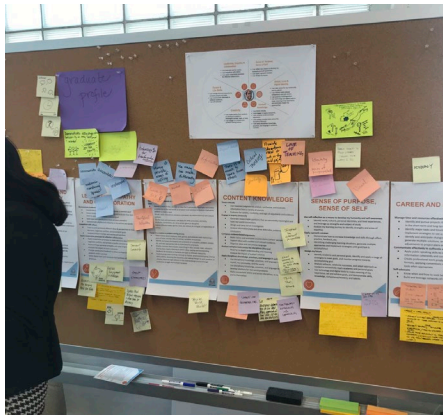
2000s

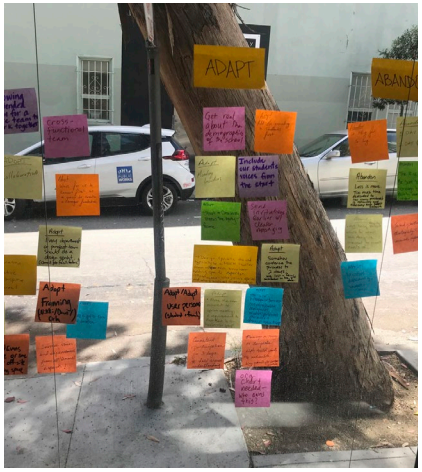
2019

Engagement Process

In collaboration with the District, we developed a process of comprehensive user engagement to address the needs, vision and program development of the new school. The process engaged a broad and diverse range of District stakeholders, including teachers, staff, students, families and community members.

The order of engagement was strategic, to both align with the flow of information needed to facilitate consensus building and approvals, and to also move methodically from Ideation to Prototyping to Testing and finally to Implementation. The following pages walk through this process of engagement.





PROGRAM STAKEHOLDERS

To elicit visionary design thinking at the forefront of the programming process, a series of 'Sparks' and 'Sprints' were created for each of the Pre K-5 school, Professional Learning and Linked Learning Hub programs:

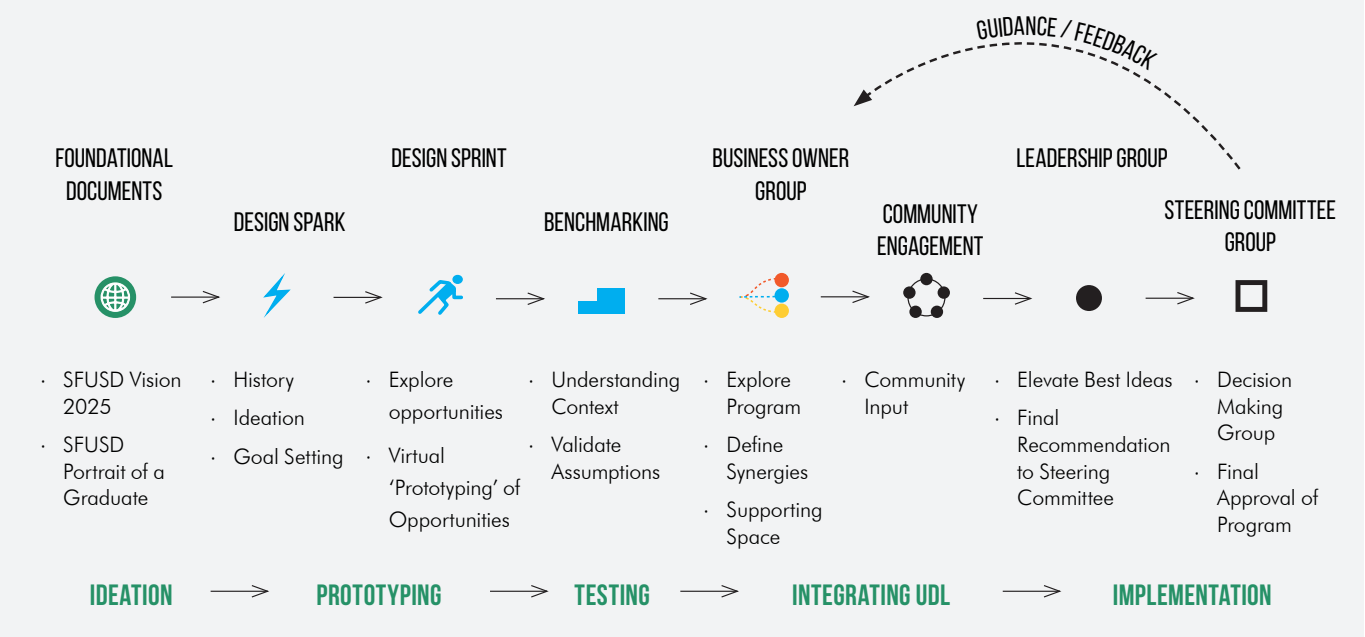
Design Spark

- To gather information early, with respect to each of the three building components and to discuss global opportunities.
- Opportunities were identified here. Ideas from these discussions were documented, synthesized, and analyzed.
- Decisions on inclusion into the program took place at Business Owner Meetings.

Design Sprints

- A deep dive into and expansion of the opportunities that came out of the Design Sparks
- Refinement and continued ideation of elements to include in the Space Program.

To create consensus and identify a clear program and design direction to move forward, multiple review groups were established.



Business Ownership Group

- Regularly scheduled every 3 weeks to discuss content from Design Sparks and Sprints.
- Decisions were made on relevant content from Sprints and Sparks and their inclusion into the program.
- Ultimately, these distilled ideas and programmatic elements were elevated to the Steering Committee for discussion and ratification.

Leadership Group

- This weekly as-needed call ensured our team stayed on the same page and served as the ultimate curator on what was elevated to the Steering Committee.
- When conflicting philosophies or programmatic requirements were discussed. This group assisted in refining the ideas and synthesizing content to be elevated to the Steering Committee.

Steering Committee Group

- SFUSD decision makers, provided thought leadership on district initiatives and the alignment of the Mission Bay School with those initiatives.

COMMUNITY STAKEHOLDERS

A robust community outreach process was conducted during the programming phase. The goal of these meetings included spreading the word about the new school and getting feedback from the community on opportunities this school could represent to them. We shared background information and asked several important questions:

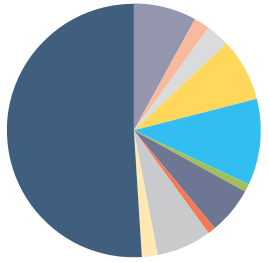
- How can this campus promote wellness, nutrition and sustainability for the school and neighborhood community?
- What types of outdoor play spaces would be valuable to add to the neighborhood or the City at large?
- What types of indoor and/ or outdoor gathering spaces would be valuable to add to the neighborhood or the City at large?
- What other hopes and dreams do you have for this campus and its connection to the community?

After developing preliminary recommendations, we again invited community members to share reactions and input. We collected community members' "*Wows*" (aspects of the proposal that were exciting) and "*Wonders*" (remaining questions to raise up), as well as some basic demographic information to better understand who we had reached with the engagement process. There were nearly 200 respondents that provided in-person or electronic input during the community engagement period.

The process provided a pathway to a future-ready teaching and learning environment that leverages the synergies between the traditionally disparate programs of a Pre K-5 school, Professional Learning, and a high school / industry Linked Learning Hub, while being rooted in and serving the community.

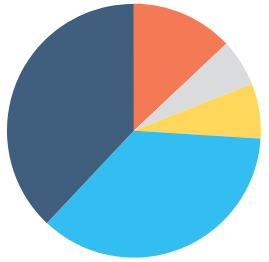
Respondents by Race/Ethnicity

51%	White (not Hispanic)
8%	African American
2%	American Indian / Alaska Native
3%	Chinese
8%	Decline to state/ I'd rather not say
11%	Hispanic/ Latino
1%	Middle Eastern
6%	Multi-Racial/Ethnic
1%	Other
7%	Other Asian
2%	Pacific Islander



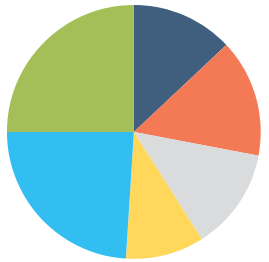
Respondents by Zip Code

38%	94158
13%	94107
6%	94110
7%	94112
36%	Other



Respondents by Household Income Level

13%	Under $50,000
15%	$50,000 to $99,999
13%	$100,000 to $149,999
10%	$150,000 to $199,999
24%	More than $200,000
25%	Decline to state/I'd rather not say



ENGAGEMENT PROCESS FEEDBACK IMPLEMENTATION

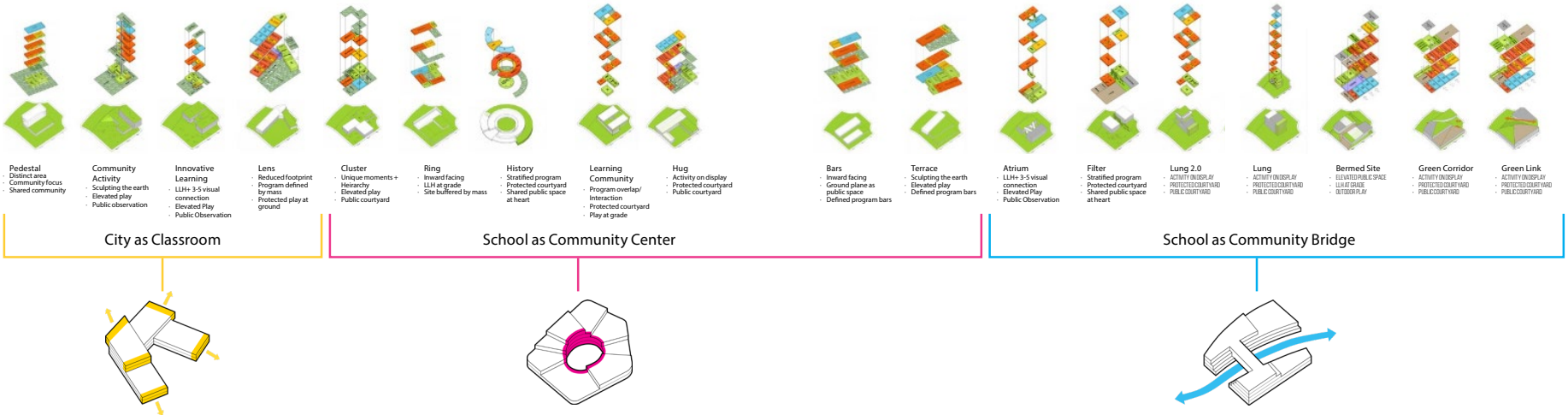
After collecting all of the information from the engagement process which included multiple workshops and community meetings, program models were then arranged into various blocking and stacking opportunities. Based on site and environmental constraints, opportunities were leveraged to address larger project goals derivative of the drivers established early in design.
Of these, reflection upon the history of the site has been considered a powerful link in addressing contextual relationships and equity through those experiencing the project.

Of the blocking and stacking options considered, three major 'themes' resulted from the studies:

1. 'City as Classroom', expanding on the reach of students in their quest to become global citizens
2. 'School as Community Center', creating a unifying community hub between school and regional communities
3. 'School as Community Bridge', literally linking existing green-ways to planned, future greens and pathways that connect to San Francisco proper.

These themes helped to influence the final design.

Concepts studied during the programming phase



Community Challenges

Pre-K–12 education will be transformed over the next decade. Among education experts, there is deep consensus that the industrial model of education on which the U.S. has relied for more than 100 years cannot, in its current form, prepare our students to thrive in the future that is coming—nor is it adequately serving students now.

In San Francisco and across the U.S., we're seeing the emergence of new educational models that change the way that students learn and teachers teach. Significant shifts in our approaches to education and instruction—including the introduction of the Common Core State Standards; a new national focus on science, technology, engineering, the arts, and math (STEAM) education; and a move away from the era of No Child Left Behind federal policy—are opening up exciting new pathways and options for learning.

San Francisco is also changing. On one hand, it is a flourishing global epicenter of innovation and creativity in the throes of yet another economic boom, driven in large part by the technology sector. On the other hand, the sharp influx of wealth, combined with limited available housing, has created an affordability crisis that threatens to undermine the values and spirit that have long defined San Francisco. Rents and home prices are soaring, and even longstanding families who have lived here for generations are being driven out, due to evictions or to simply being unable to afford the rapidly rising costs of living.

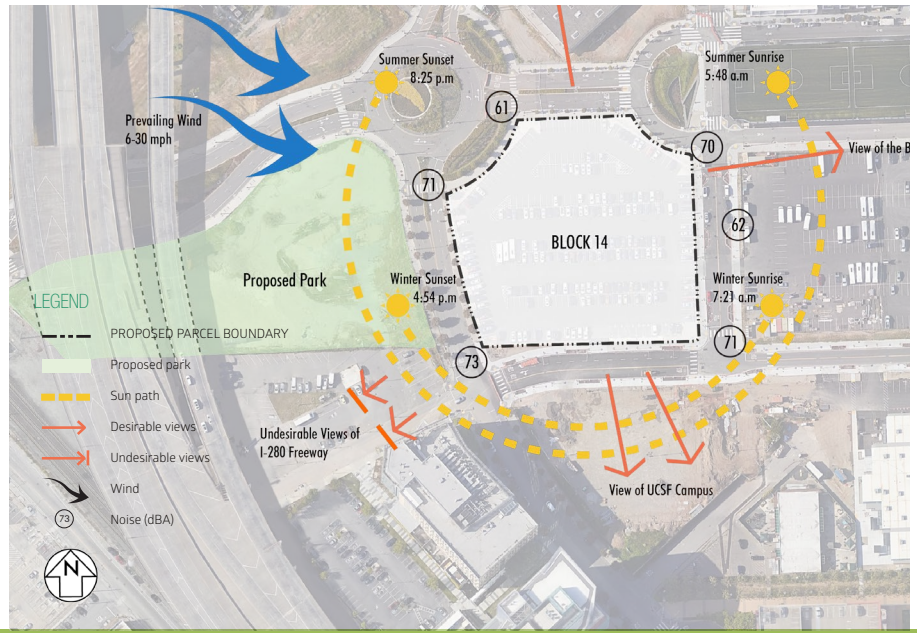
The city faces deep issues of housing equity and resultant inequity in access to quality education that positions students to succeed in the 21st century. SFUSD is working to address these challenges with two visionary documents that served as a point of departure for space planning and design: the "SFUSD Vision 2025 Plan" for quality instruction and equitable support and the "SFUSD Portrait of Graduate" outlining the knowledge and skills our students need to succeed in the future.

Project Challenges

The primary project challenges involved the school site due to its adjacency to the Highway Interstate 280 overpass. As part of the project process, we conducted a detailed site analysis to address concerns about air quality, wind, noise and traffic. Air quality is the primary concern as a healthy indoor and outdoor learning environment is essential.

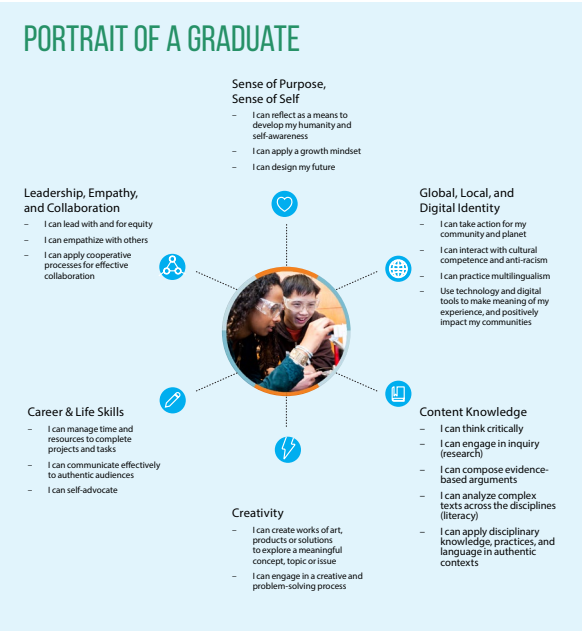
While the school's urban site has its challenges, it also has many benefits such as connecting families, pedestrians, cyclists and the adjacent park space. The school site offers many health and ecological benefits if developed in conjunction with the future park. From an urban design perspective, the connections of walking and cycling systems should be supported and enhanced. Valuable habitat, bird sanctuary and connectivity of open space for pollinators are tangible benefits for the school community. In addition, it should be expected that soils will improve with native vegetation and storm water best practices to temper the microclimate all around the school site and play yards. Generally, if a higher and thicker vegetation barrier is developed on the park, it may result in greater reductions in downwind pollutant concentration. The park also serves to link neighborhoods on the west side of Interstate 280, while still serving the housing development north of UCSF Mission Bay campus.

While the site is bound by four existing roadways, the current acreage provides sufficient area for the school program with the understanding that some programming can inhabit floor levels above grade. The Living School Yards program would likely thrive in this site location given the growing number of families in this neighborhood. These many programmatic and design opportunities support the future resilience of this school community. The Block 14 school site also offers a unique opportunity for integration of SFUSD's sustainable and programming goals with the Mission Bay School and the surrounding neighborhood.



Assets, Foundational Documents, and Adding Value to the Community

Several powerful drivers have positioned this project for success.



A Vivid Picture of a Future State

In the fall of 2013, the superintendent of SFUSD, under the leadership of the Board of Education, launched an ambitious undertaking: to develop a new vision for the future of public education in San Francisco, and then use that vision as a guide to transform the city's school system, over the next decade, into one of the premier systems in the world. ***Vision 2025*** is based on the many ideas and contributions generated by a wide range of stakeholders throughout the visioning process. Its chief goal is to paint a rich and aspirational picture of what SFUSD could look and feel like in 2025. While that initial process has ended, it is important to recognize that the vision itself will, inevitably, continue to evolve as it did throughout the project process.

The District's strong vision led to the exploration of this pioneering project to address its imperative for equity and social justice across its schools. To meet the forward-looking Vision, the design team leveraged ***Universal Design for Learning (UDL)*** space design strategies. Universal Design for Learning (UDL) is a framework to improve and optimize teaching and learning for all people based on scientific insights into how humans learn. As a framework, UDL is focused on supporting the variability of every learner through the design of a learning environment or classroom that both expects and accepts the variability of 'each and every' learner.

A Vision of Equity

Great cities demand excellent—and equitable—public education systems. Yet despite good intentions and well-orchestrated efforts in the past, we do not yet have a premier public education system that can provide a solid foundation for all of the children of this generation—let alone generations to come. This project is emblematic of a vision in which innovation, community, family, leadership, and social justice are a seamless part of what great teaching and learning look like in San Francisco. This is critical, because the quality of our public education system plays an enormous role in nurturing the soul of the city and in defining its future. If our students are to retain the option to make their lives in the city in which they were raised—and, in so doing, to preserve the city's multicultural heritage—we must ensure they graduate well-equipped to compete in the local workforce and to address the social, economic, civic and environmental challenges of life here now and in the future.

To accomplish this goal, throught the project process the design team continued to align space design strategies with ***SFUSD's Graduate Profile***—which defines the knowledge, skills, dispositions and behaviors the District expects its graduates to possess, so they are prepared to thrive in life and career.

Photo from SFUSD Vision 2025

Learning Community

EDUCATIONAL ENVIRONMENT DESIGN

Vision and Goals

It is our intent that the project goals distill down to the best representation possible of this process. The visionary aspirations communicated through engagement with school and community stakeholders have been translated into educational environment design, both inside and outside, for Mission Bay School. The lens of Universal Design for Learning brings equity and accessibility in support of "each and every" student—a dominant theme and goal. Big pedagogical shifts, as further defined in "SFUSD Vision 2025", are amplified and applied directly to Mission Bay School. The following goals support the District's core values of being "Student Centered, Fearless, United, Social Justice and Diversity-Driven."

Project Goals:

- **Access and Equity:** Make Social Justice a reality by ensuring every student has access to high quality teaching and learning.
- **Student Achievement:** Create a learning environment thats foster highly engaged and joyful learners and support every student reaching their potential through personalized pathways and individualized learning. Provide blended and project-based learning opportunities and provide learning environments that allow for a transition from traditional classrooms to flexible learning models.
- **Accountability:** Keep District promises to students and families and enlist everyone in the community to join in doing so. This school will reimagine the school day and classroom.
- **History of Place:** Our site has a long history dating back to the Yelamu Tribe of Ohlone peoples. Community was the center of their daily lives. Community is fundamental to the vision of the Mission Bay School. We want to create a Community School that acknowledges the history of place and the indigenous people that occupied this land prior as well as elevate cultural competencies and celebrate multiculturalism.
- **Become Embedded in the Neighborhood:** A new developing neighborhood of San Francisco needs a school and place for the community to connect. Students should apply real-life lessons to learning, utilizing the neighborhood and San Francisco as a classroom.
- **Sustainable Place of Learning:** Create a place that teaches students about this site, the city, their own impact on the environment, and their connections to the greater systems.

Supporting the Curriculum

The new Mission Bay School was designed as a transition environment to help bridge between current and future educational approaches. SFUSD's student-centered approach to learning is catalyzing a transformation of the teaching and learning experience. In response, classrooms will become dynamic 21st century learning environments supported by an array of pedagogies and pathways. They will function as inquiry-based learning hubs or hands-on "labs" that expose students to new kinds of content and more deeply engaging ways to acquire knowledge. The following "Key Design Concepts" were refined throughout the project's robust planning and design process. The following is a summarization of this process inclusive of this project's unique approach to educational environments.

Key Design Concept:

1. A **Community Teaching/ Learning Model** which supports project-based learning, real world experience at every grade level, integrated differentiated teaching/ learning environments and common space that supports individual break-out, small group break-out, and multi-class curriculum. This model is designed to support an evolving and multi-disciplinary curriculum, including both traditional teaching methodologies that may be in place today, as well as future teaching methodologies that more robustly support the District's forward-looking goals for graduates.

USING SELECTED PRE K-5 MODEL FROM STAKEHOLDER ENGAGEMENT PROCESS TO INTEGRATE WITH PROFESSIONAL LEARNING MODEL

Having identified the Models serving Pre K-5, Professional Learning and Linked Learning, synergies among the three components were discussed – a unique opportunity for the Mission Bay project. Perhaps most compelling, a fully integrated Professional Learning model is recommended, providing both student and adult learning within the same program space, allowing for oversight and mentoring from both directions.

Adaptable and Flexible

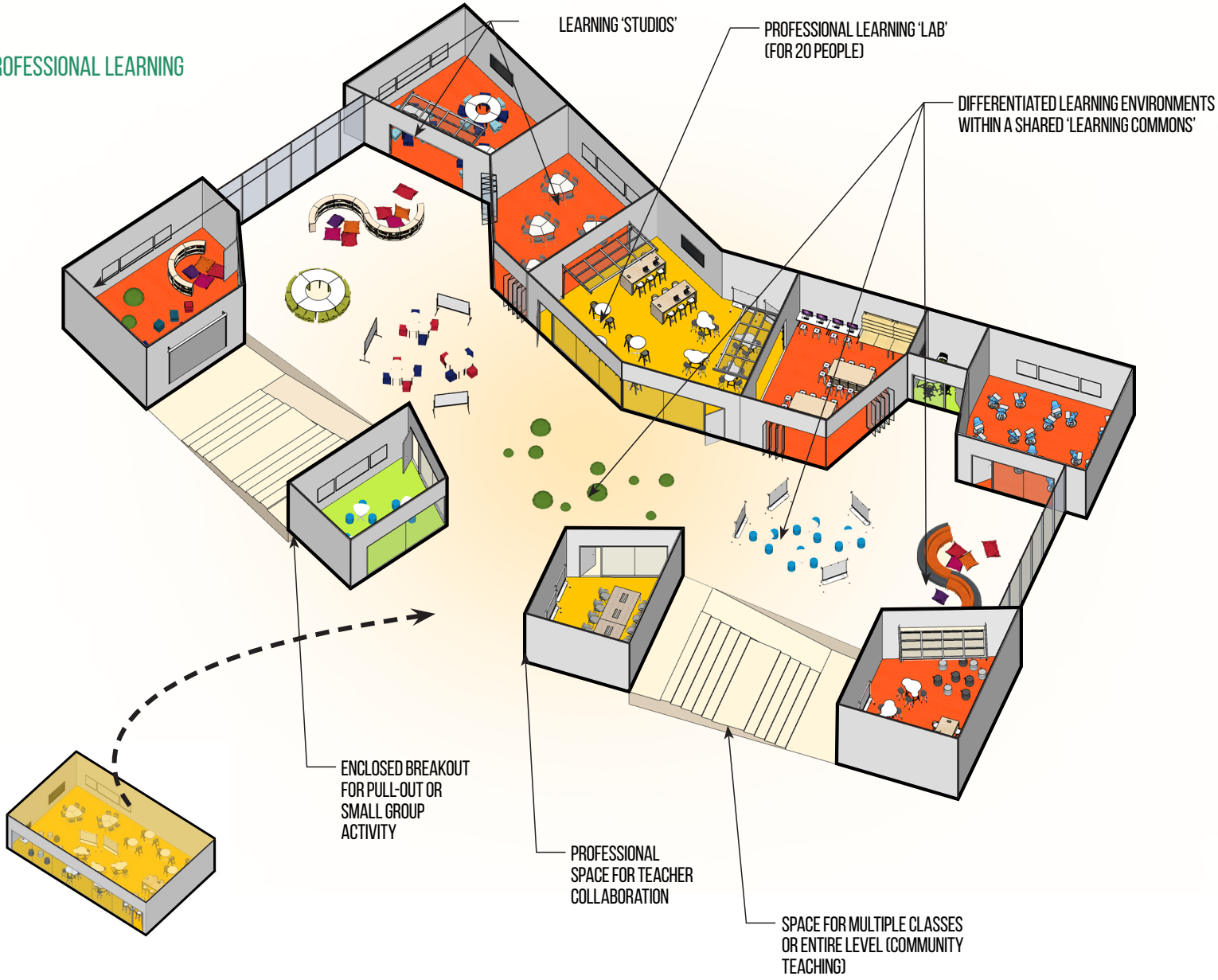
TESTING |
COMBINED MODEL FOR PRE K-5 & PROFESSIONAL LEARNING

FREE ADDRESS SPACE

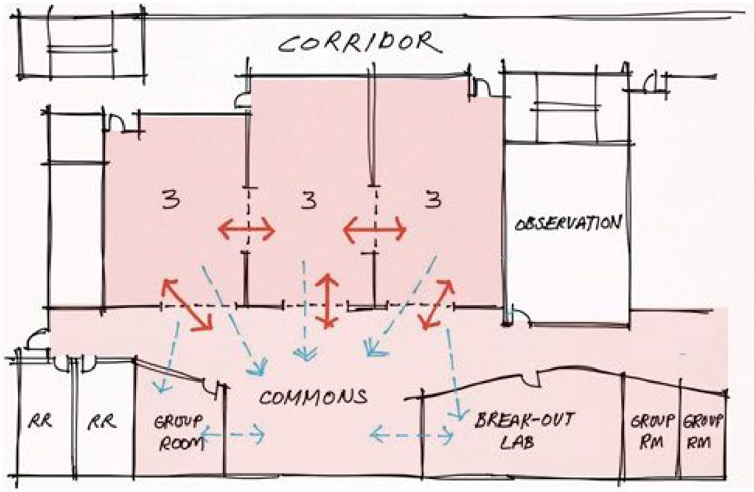
What if, *50% of the space is provided for classroom size groups of +/- 30, and the other 50% is free address space? For contract and grading purposes, one teacher needs to be associated with 30 students. However, there may be an opportunity to design the ability for teachers to flow with their 30 students through the building.*

Teachers will flow into the free address space *as part of the overall team concept. Over time, their teamwork and instruction might shift towards specialization as some prefer the home base environment, while others like managing the free address spaces – both of which require different types of planning.*

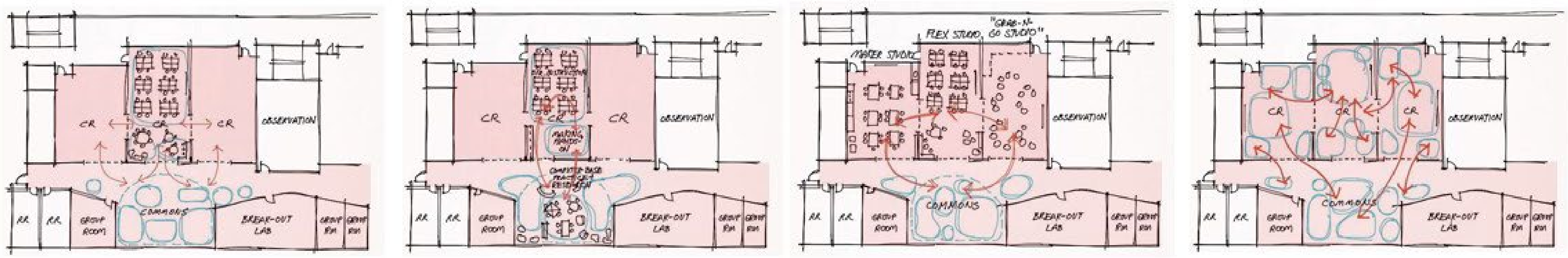
Through the study of several built examples, *free address spaces have been found to have elevated noise when students are working on projects. Acoustic design will be integral to designing a successful address space.*




Learning Studio



Supports a variety of learning & teaching styles



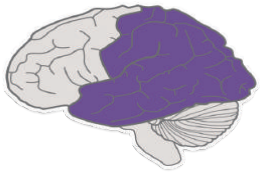
Today's Teaching Model ← - - - → *Highly Personalized, Differentiated, UDL*

Key Design Concept:

2. A focus on **Literacy Support**, is provided through fully integrated professional learning within every grade level suite, including dedicated professional learning 'break-out' spaces.

Key Design Concept:

3. A **Universal Design for Learning (UDL) Model School** focuses on supporting learning variabilities of each student, providing a range of adaptable learning environments to support the diversity of 'each and every' learner, removing barriers to the learning experience. A model UDL school will further reinforce SFUSD's goals around equity, inclusion and access to learning.

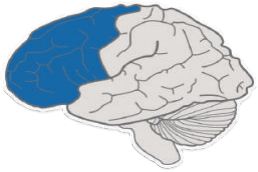


Provide Multiple Means of
Representation
Resourceful, Knowledgeable learners

Principle I

Guideline 1: Provide options for perception
1.3 - Offer alternatives for visual information

Guideline 3: Provide options for comprehension
3.3 - Guide information processing, visualization, and manipulation

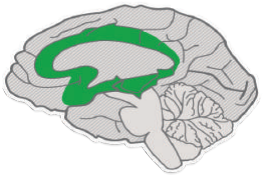


Provide Multiple Means of
Action & Expression
Strategic, goal-directed learners

Principle II

Guideline 4: Provide options for physical action
4.1 - Vary the methods for response and navigation

Guideline 5: Provide options for expression and communication
5.1 - Use multiple media for communication
5.2 - Use multiple tools for construction and composition



Provide Multiple Means of
Engagement
Purposeful, motivated learners

Principle III

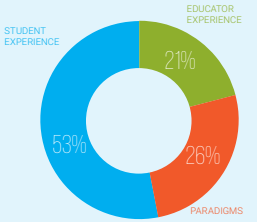
Guideline 7: Provide options for recruiting interest
7.1 - Optimize individual choice and autonomy
7.2 - Optimize relevance, value, and authenticity
7.3 - Minimize threats and distractions

Guideline 8: Provide options for sustaining effort and persistence
8.2 - Vary demands and resources to optimize challenge
8.3 - Foster collaboration and community

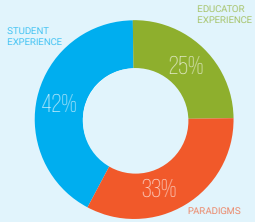
UNIVERSAL DESIGN FOR LEARNING

SFUSD Feedback

	STUDENT EXPERIENCE	EDUCATOR EXPERIENCE	PARADIGMS
PRIORITY I	· Embrace fidgeting and movement · Tie learning to broader systems · Content consumed and delivered in multiple mediums · Playgrounds as rich, outdoor learning spaces · Exhibit original work to the public	· Support collaboration among teachers and classes · Equity of space in the classroom · Faculty "scrum space"	· Engage family members with hospitality · Students' ownership of their space · Defeat the stigma of "school" · Engage students in the work of adults
PRIORITY II	· Grown up environments · Every square foot used for learning · Variety of work settings · Learning prototype studio · Daylight and connection to the outdoors · Quiet "pockets"		· Create a safe culture to dream · Develop self-regulated learners
PRIORITY III	· Allow students to "make space" · Cockpits and enclaves · Interactive walls · Support varied processes · Create learning neighborhoods · Presentation/pitch space	· Integrate design thinking · Teachers doing PBL with teachers · Make space within space · Create a culture of learning among faculty	· Redefine innovation as more than technology · Create a maker ethos throughout the school



OVERALL



PRIORITY I

Through UDL Exercises, we want to reshape the way people think about the power of space to reinforce and amplify the UDL teaching practices taking place in the classroom or school. The ultimate goal is to give students choices of where they work, how they approach the problem / project, and with whom they work – alone or together.

There were 31 different guidlines, and our exercise were focused on the Top 10 guidlines that tend to have the strongest implications for space design.

Key Design Concept:

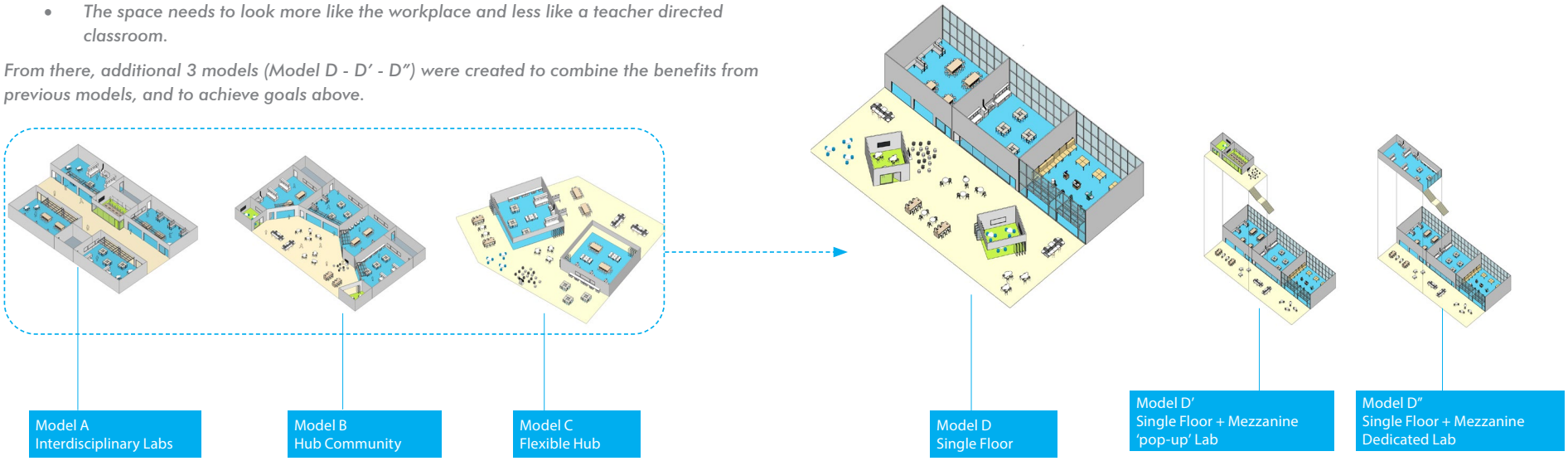
4. A flexible **Linked Learning Hub** community will provide space for district-wide high school students' project-based work tied to real-world experiences with industry partners in continuing support of the District's Career Pathways program.

TESTING | LINKED LEARNING HUB MODELS

Three spaces models (Model A - C) were created for Linked Learning Hub as how the space can be envisioned. Through a series of exercises and feedback, we learned:

- *The space should be highly adaptive and modular, not to look like a traditional classroom.*
- *The space should not be precious – students must feel comfortable taking risks, making mistakes, and adapting their space to suit their needs.*
- *The space needs to look more like the workplace and less like a teacher directed classroom.*

From there, additional 3 models (Model D - D' - D") were created to combine the benefits from previous models, and to achieve goals above.



Heart / Lobby Looking Northwest

Key Design Concept:

5. A **'Heart' Space** will create a welcoming environment that is safe and in support of social justice, equality and sense of belonging. By representing the multiplicity of the individual and collective experience of students and teachers, this shared space is where everyone belongs.

Heart / Lobby Looking North

Key Design Concept:

6. Having **Community at The Center** of the school embodies the idea of 'one love'. The Mission Bay neighborhood is an emerging area that needs a school to not only grounded in the community but also that will activate its members. Opening up the school to the neighborhood and its network may benefit students by being an integral member of their community and experiencing this first-hand.

Learning Community

Heart / Lobby Looking North

Key Design Concept:

7. A **Sustainable Place for Learning** links our personal actions to the effects on our broader ecosystems. The building may become an active educational tool in support of a healthy learning environment.

A New Model School

The project process not only developed a design approach for a new prototype school for the District, it resulted in a set of eight key design concepts based upon UDL principles for all SFUSD schools – both new and existing.

1. Multiple Settings to Support Learner Variability – the Learning Community model developed for the school is highly supportive of differentiated learning. Spaces can be tailored to support different activities and varied learning paces can be accommodated.
2. Promote Student Agency & Creativity
3. Fluid Connections Between Grade Levels
4. School-Wide Resources: Distributed vs. Destination
5. Faculty Culture & Focus on Faculty Development
6. Support Health & Wellness
7. Community: Formation & Connections
8. Real World & Authentic Learning

PHYSICAL ENVIRONMENT

We intentionally designed the Mission Bay School to be the center of community life and spirit. The building and site design approach articulate synergy between the school community and the broader neighborhood, UCSF campus, city, and world. Through the guiding principle of global citizenship and bridging of broader community scales, the project design intends to expand learning experiences and opportunities for 'each and every' student.

Site Plan

LEARNING HAPPENS EVERYWHERE

Every square foot (sf) of the site is leveraged for learning. The outdoor space at Mission Bay School is comprised of approximately 32,400 sf of physical education/play areas, 11,400 sf of outdoor learning environments and other shared spaces at street level. A third-floor play area is approximately 8,450 sf above the Multi-Purpose Room and Kitchen.

It is open and flexible for physical education use and other school functions. The L-shaped building creates distinct open spaces at the street level.

- The western side of the school building is designed with landscaping in support of the main entry/ lobby plaza, primary pedestrian circulation areas, bicycle parking, vehicular drop-off and pick-up, parking, bioretention areas and perimeter planting.
- The eastern side landscaping includes an alternative entry promenade and plaza, outdoor classrooms, and shared outdoor programming spaces—Creative Endeavor, Library, food garden, dining area, play areas for grades 1-5, kindergarten and preschool, and bicycle parking.
- Bioretention planting supports the north and east perimeter water treatment is visible to the student population and creates green

buffer between the city street and the school premises.

An additional outdoor learning environment with direct access from the school building is located on the north side of the building for use by younger students.

A formerly designated 20' wide setback area on west side along Owens Street is available for school use and can accommodate future bioretention, parking, utilities, or a vegetated buffer to provide separation from the street level vehicular traffic.

WELCOMING ENTRY PLAZAS

Welcoming Entry Plazas
The main entry areas from both sides of the site address the coalescence of architecture and landscape, as well as safe interaction of pedestrian and vehicular traffic, and public and private interests. Both plazas are welcoming, providing ample space for students, parents, and teachers to socialize, and intend to guide people to the building by clear visual sightlines of planting and patterned unit paving. The east entry primarily accommodates students and families who walk and bicycle to school, as well as commuters — the City's public transportation connects mostly through the UCSF Mission Bay campus and adjoining neighborhood. The west entry accommodates pedestrians as well; however, limited parking provides families with the opportunity to walk students into school or meet with school staff. We were intentional in not providing on-site parking, and in improving the pedestrian experience through landscaping instead of extensive paving.

INVITING OUTDOOR DINING

Adjacent to the food growing garden for Grades 1-5, and directly opposite of the servery and dining room, an outdoor dining area is furnished with picnic table seating for over 30 students. It is flanked by trees and understory planting for shade and visual separation from activities in the play yard. Picnic tables can be further shaded by a series of overhead retractable shade sails.

Physical Attributes

CHARACTER

The architectural language of the school is designed to meet SFUSD's goals by:

- Being intentionally different from the UCSF Mission Bay campus's institutional architecture and its materiality, such as large spans of reflective glazing and metal paneling
- Providing detailing at the pedestrian level that students and families can relate to
- Providing visually rich, accessible, and graphic signage and wayfinding
- Integrating art and murals
- Inviting and conveying community connection

PROGRAM STACKING

Program stacking directly relates to the three primary program adjacencies (elementary, professional learning and linked learning hub), shared school community resources and code requirements for floor level accessibility and student ages. The Ground Level houses large, shared spaces to ensure access by all school grade-level students, such as the Library, Creative Endeavor Space, the Lobby and "Heart" of the campus, Cafeteria and Dining and Multi-Purpose Room, as well as the Quiet Down Room and other specialized support spaces in support of social-emotional health. Preschool and Transitional Kindergarten are also located on the Ground Level with direct adjacency to outdoor play areas and ease of parent/guardian drop-off, pick-up, and parking if the family chooses to accompany their child to their learning environments.

The Kindergarten, 1st and 2nd Grade learning environments inhabit Level 2 with dedicated egress paths that lead students directly to the Ground Level and their play yard areas.

Grades 3, 4 and 5 learning environments and their direct support spaces occupy Level 3. The direct adjacency of the Roof Commons allows these upper grade students to access outdoor physical education programming without a longer circulation pathway down to the Ground Level.

Level 4 houses the Linked Learning Hub, for high school students and their career technical partnerships and the Professional Learning suite spaces, including Teaching Training Lab, Breakout Labs and Hoteling spaces with views of the Mission Bay neighborhood and the city. The midrise four (4) level north-south portion of the 'L' building not only protects the outdoor play areas from existing environmental site challenges, but also promotes logical, code compliant, age-appropriate learning environments.

PLAY AREAS

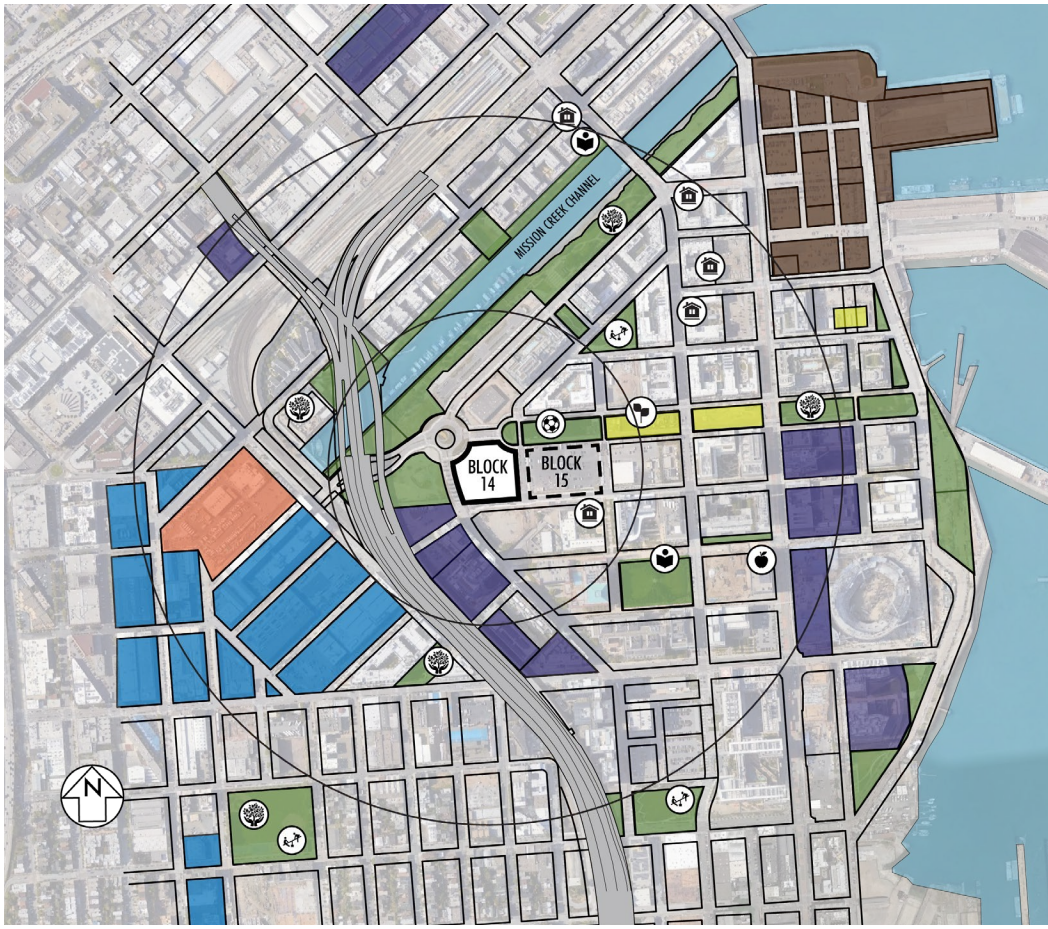
Students' wellbeing and access to unique, high-quality, interactive spaces and urban nature for recess, physical education and outdoor learning are at the forefront of the design. Each play area is tailored to age-specific activities and provides ample open space for running, nature play, learning and play structures for physical development. Additional outdoor amenities such as intimate contemplative seating areas, raised beds for food growing, areas with natural elements and materials, and amphitheater gathering seating serve the school through discovery and learning.

Larger Community Context

The conceptual massing for the project was developed in response to the SFUSD stakeholder engagement process, established project goals and the environmental site analysis. The massing creates visual and physical connections to the Mission Bay Community and larger San Francisco landmarks with an 'L' parti that terminates the urban language of open space blocks at nearby collaborative, mixed-use community space Park Lab. The site's open space is encircled by the L-shaped configuration and provides school play and learning areas protected from prevailing westerly winds and noise emanating from the adjacent freeway and railroad lines. The building serves as a critical buffer for these environmental site impacts. The four-story height of the building affords this tight urban site with additional rooftop outdoor areas that meet physical education programming requirements and provide views of the city, while the intersection of the two bar buildings creates shared resource opportunities and planning. **Through these simple architectural gestures, the Mission Bay School design provides community connectivity, efficient space planning and massing, and safe outdoor learning areas.**

Inspiring and Motivating

The exploration of Mission Bay School's programming is rooted in rich history, site context and site analysis. The team examined the synergies within the Mission Bay area—its indigenous people and history with the proposed development of the school within the opportunities and constraints for the site. The programming stakeholder team seeks to represent accurately this rich context of place and history, and cultural aspects within the new school. In other words, as the Mission Bay area continues to change culturally and physically, the origins of Mission Bay as "place" should be honored and recognized within the new school.



RESULTS OF THE PROCESS & PROJECT

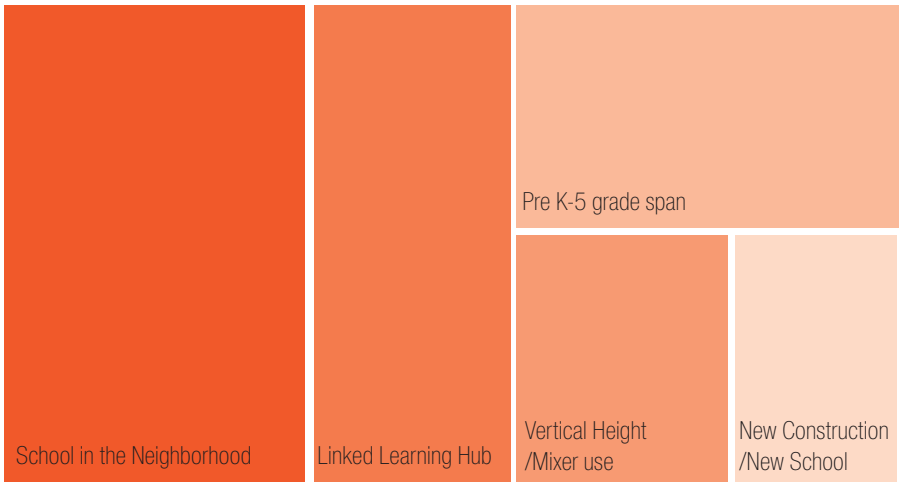
This project started with SFUSD foundational documents that includes SFUSD Vision 2025 and the SFUSD Graduate Profile. An equally important driver in the design of the building was a vision of equity to design for "Each and Every". We have illustrated how goals were achieved for each of the three primary programs represented in the project.

Achieving Educational Goals: K-5 Elementary School

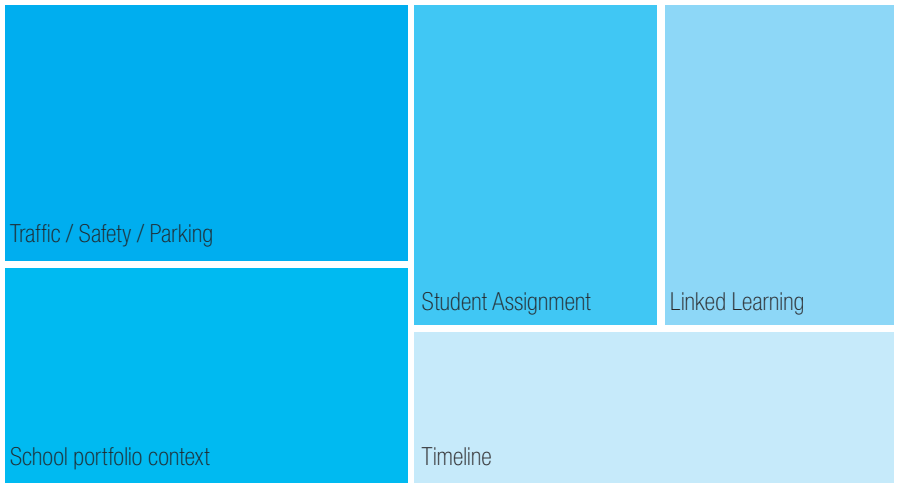
- Nature play areas including dry creek areas, nature play equipment, and areas for urban gardening. ***Goal: Engage students through play.***
- Outdoor learning – not just some steps outside. Spaces designed for learning when in play areas and adjacent making spaces at the Creative Endeavor Room. ***Goal: Provide real learning opportunities with outdoor spaces.***
- A heart to the school that supports UDL goals and literacy goals. ***Goal: Create a place to come together as a school for all students.***
- A Learning Community model that supports individual learning and shared experience between classes and grade levels and creating a model UDL School. ***Goal: Opportunities for Each and Every.***

Achieving School District Goals: Professional Learning Hub

- Created a 60-person Professional Learning space. ***Goal: The district needs much more space for Professional Learning.***
- Integrated Professional Learning into Learning Communities with observation space. ***Goal: Provide new opportunities for professional learning from a new learning model.***
- Observation spaces and debrief rooms. ***Goal: Support UDL School and how to reach Each and Every.***



Top 5 Wows - Community Reaction to Mission Bay School Use Recommendation



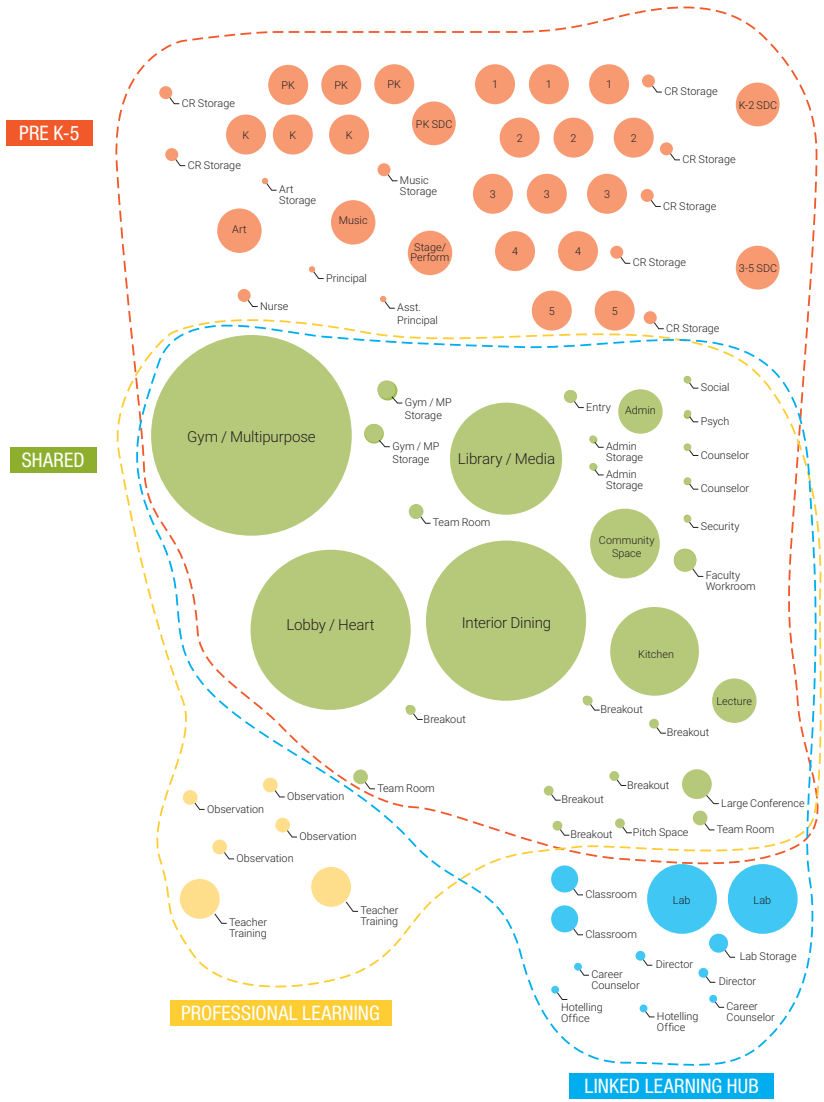
Top 5 Wonders - Community Reaction to Mission Bay School Use Recommendation

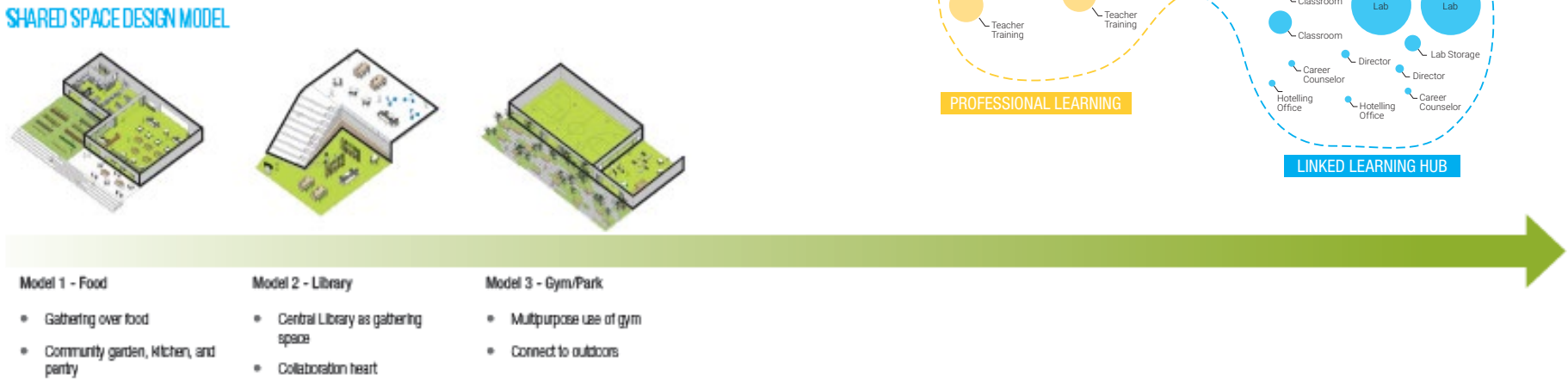
Achieving Community Goals: Linked Learning Hub

- Provide labs, co-working/touch down space and outdoor space. *Goal: Create space for integrated learning with students, faculty, and professionals.*
- Labs designed with high bays to accommodate future partnerships. The labs or learning spaces could integrate healthcare simulation or technical labs. *Goal: Unique space with a unique offering to students focused on opportunities in Mission Bay – healthcare, technology, etc.*
- Intentionally provided in programming breakout spaces, hoteling, conference rooms, and food warming space. *Goal: Create a space for real collaboration and support from professionals.*

Unintended Results and Achievements

This project had many goals and aspirations and through out the process the program and building has evolved to meet each of the district's goals. The primary goal of "Each and Every" allowed for some amazing unintended consequences. The project started with three separate programs noted above that were considered separately through the focus on "Each and Every" the building evolved into an integrated and collaborate school that is an Elementary School first. The integrated observation spaces and debrief rooms that will provide professional learning for faculty and the shared floor between Linked Learning Hub and Professional Learning are two examples of unintended outcomes that have made the project stronger, more welcoming and centered on the students.





Aerial Looking Southwest

SUSTAINABILITY AND WELLNESS

SFUSD is committed to providing a healthy school and integrated sustainable design strategies to meet the goals outlined in the District's Design Standards guide for Sustainability. Our team worked with a sustainability consultant, biologist and District representatives to outline the specific goals for the Mission Bay School.

A "Zero-Net Energy-Ready" Solution

The building is designed to be a high-performance, all-electric building with no natural gas infrastructure nor combustion equipment of any kind (except the generator for fire pump) on-site. The project will be zero-net energy ready, maximizing conservation with a Target EUI (Energy Use Intensity) of 20kBTUs/sf/yr or less and providing a plan to add solar and battery storage in the future.

A well-insulated building envelope helps to reduce both energy and operational costs.

Durable and Green Materials

The durable, green material use on the New Mission Bay Elementary School has been considered at a Schematic Design level and as such not all final material selections for the project have been made. However, as part of the

stated overall sustainability goals for the project, Healthy Building Material Standards are included in SFUSD's Sustainability & Zero-Net Energy Standards.

Key features include:

- Target EUI (Energy Use Intensity) of 20kBTUs/sf/yr.
- 75% Construction Waste must be diverted from the landfill
- Exterior Cladding rainscreen system (OSHA compliant maintenance systems)
- Healthy Building Material Standards from SFUSD
- Identified durable materials for paving, furnishings and play equipment.
- 50-year life for cladding; 30-year life for fenestration.
- Interior material goal of eliminating all Red List Materials.
- Use of FSC (Forest Stewardship Council) Certified Wood.

All materials selected are intended to be cost efficient, durable, and easy to maintain and operate.

Multipurpose Room

Designing for Healthy Environments

A PIVOTAL SITE

The project site is well-positioned within a rapidly growing neighborhood and can serve the needs of families and community members in several adjacent underserved neighborhoods. However, the site has some challenges with its proximity to the I-280 freeway, the Mission Creek and contaminated soils. These contexts have been considered in the approach to siting this building and strategies to ensure this school is responsive to its particular environment.

MASSING AND LANDSCAPE CREATE A SHIELD

The building is strategically sited to provide a buffer for indoor and outdoor learning environments and play areas with respect to air quality, noise, and wind. The building form and landscape strategies have considered the air quality in the area as influenced by the I-280 freeway, continuing construction in the area, and the CalTrain railway. Through investigative modeling we were able to turn the building to disrupt wind patterns that would assist in directing air past our site.

Landscape strategies have been incorporated to help clean air to support further improvement of air quality. The western side of the site offers an opportunity for dense planting to visually separate the school from highway I-280, aid in air filtration and reduction of wind speeds, as well as create habitat for wildlife. Additionally, it serves as a bioretention area to filter water collected from the building roofs and the adjacent hardscape. A narrow plant buffer on the north and east sides of the site likewise provides a level of visual screening from the neighborhood, shade and wildlife habitat, and serves as bioretention and filtration facility for rainwater directed there from the playgrounds and paved surfaces. The direct adjacency of the site to a future park may also provide significant ecological and health benefits, and potentially help mitigate air quality concerns stemming from the proximity of the freeway overpass to the site.

BIOPHILIC DESIGN, OUTDOOR LEARNING AND NATURAL PLAY

The building is designed to have a strong biophilic connection. Indoor environments are naturally daylit, have clear views of the surrounding neighborhood, and learning environments have direct access to outdoor play areas. The building's exterior and interior color palette further reflect this desire to relate to the natural environment.

The Mission Bay School's site design can be used as an instructional model for broader environmental systems. The site provides natural play areas, outdoor learning opportunities, places

to assemble/gather, shade elements, and drought tolerant landscaping.

Some of the outdoor educational opportunities within the landscape include:

- Raised accessible vegetable beds for each student age group intended for hands-on experience of growing food
- Bioretention swales for demonstration of water flow and filtration during rainy seasons
- Direct exposure to a variety of plant species that represent California native flora, include species known to have been used for practical and medicinal purposes by Bay Area indigenous populations, and attract birds and beneficial insects.
- Informally arranged natural outdoor classrooms that are part of each play area.

Overall, the Mission Bay School's design maximizes the use of outdoor areas, encouraging more time spent outdoors to improve mental and physical wellbeing.

CONVENIENT ACCESS

The campus design encourages entry from Owens Street and 6th Street to create a synergy with Park Lab and the future public park—planned to the west across Owens Street. Limited parking is provided on site to further encourage students, teachers, staff, and community members to arrive to the campus by foot, bicycle, or other sustainable means.

South View

MISSION BAY SCHOOL

A NEW SCHOOL FOR EACH AND EVERY CHILD