

EDUCATIONAL PROGRAM VISION **GENERAL GUIDELINES**

2020 | FACILITIES MASTER PLAN



DISTRICT-WIDE themes

Through the focus group meetings and Educational Visioning Charrette held to inform this set of Educational Specifications, the following themes became apparent as the participants translated their Specific Plan into the built form.

Social-Emotional Support

- Provide balance in a student's day where the student can experience unstructured play and feel a sense of calm, safety, and happiness.
- This can manifest itself in the built environment in the following ways:
 - Providing a Wellness Center at each school where students can utilize as a safe place of respite and calm.
 - The 'Play Pod' model where maker-type materials are available to students at the playground during their recess and lunch breaks.
 - Outdoor gardens that can create pleasant views from the building interiors.
 - Engaging dining experiences that promote the development of social skills.
 - The use of natural light, ventilation, and building materials.

Collaboration & Flexibility

- Going hand-in-hand with flexibility, collaborative environments support the district's Project-Based Learning pedagogy that is inquiry-driven and teacher-guided. In this environment, students take ownership of their learning process and engage in hands-on learning related to science, dramatic play, and the refinement of gross motor skills.
- Specific to Special Education, collaboration is supported through inclusivity and access to their grade-



CUSDk8 Educational Visioning Charrette

- level peers. The challenge comes with encouraging collaboration with students who may be autistic and have trouble in group environments.
- Collaboration can manifest itself in the built environment in the following ways:
 - ADA-accessible play structures.
 - Furniture that can be re-arranged into a variety of group sizes.
 - Furniture and spaces that promote social interaction such as a student union with a 'coffee shop vibe.'
 - Direct connection between classrooms to promote team-teaching and cross-classroom student interactions.
 - Remote faculty work rooms near the classrooms.
 - Parent education and Teacher Training rooms dedicated to parent/teacher use to reduce conflicts with student activities.

Celebrate School Community

- Create a welcoming environment that feels like 'home' and contributes to the overall comfort of those who inhabit and visit it.
- Provide individuality across schools within the district; the school environment is reflective of the school's community and cultures.
- Ability to hold whole-school assemblies.
- This can manifest itself in the built environment in the following ways:
 - Use of natural materials for outdoor furnishings and play.
 - Display of murals and/or student-created art.
 - Ample floor space within the classroom.
 - Strategic use of color (soft where necessary for calming, vibrant when appropriate).
 - Create a safe environment via a single point of entry.

Decentralization

- Provide easy access at all times to shared site resources.
- This can manifest itself in the built environment in the following ways:
 - Maintain and support technology provided for each student for use during the school day. This lessens the need for a centralized computer lab.
 - Satellite work rooms for faculty.
 - Maker-type tools within collaboration areas and in the play areas.

Sustainability

- Create an environment that is socially, economically, and environmentally sustainable.

		ELEMENTARY	K-8	MIDDLE
CLASSROOMS	Kindergarten	●	●	
	Standard Classroom	●	●	●
	Special Education: moderate/severe	●	●	●
ELECTIVES	Art / Science	●	●	
	2D / 3D Art			●
	Culinary			●
	Design and Innovation Lab: model a	●		
	Design and Innovation Lab: model b		●	●
	Music: model a	●	●	
	Music: model b			●
	Science Lab		●	●
	Wood Shop		●	●
	Metal Shop		●	●
STUDENT SERVICES	Learning Center	●	●	●
	Wellness Center: model a	●	●	
	Wellness Center: model b			●
SHARED SPACES	Colab	●	●	●
	GLC: Assembly (includes food service)	●	●	
	Library: model a	●	●	
	Library: model b			●
	Student Union (includes food service)			●
	Event Center / Gym			●
ADMIN / FACULTY	Administration / Front Office: model a	●	●	
	Administration / Front Office: model b			●
	Flex Lab / Faculty Lounge	●	●	●
OUTDOOR LEARNING AND PLAY	Outdoor Learning	●	●	●
	Kindergarten Play Yard	●	●	
	Playgrounds and Hardcourts	●	●	●
	Track and Field	●	●	●

DESCRIPTION

CLASSROOMS

Kindergarten	flexible classroom space with attached restrooms, storage, and faculty work
Standard Classroom	flexible classroom space supportive of individual and small to large group work
Special Education: moderate/severe	flexible space with attached support spaces including restrooms and a calm room

ELECTIVES

Art / Science	wet lab with resources for students to create and investigate
Art (2D, 3D)	wet lab that supports paint, ceramics, and other forms of visual art
Culinary	cooking lab with student and instructor cooking stations
Design and Innovation Lab	dry lab where students can build and test; activities could include computer programming, robotics, video production, and 3D printing
Music	spaces for band and choir with ample storage and appropriate acoustics
Science Lab	wet lab complying with Next Generation Science Standards
Wood Shop	industrial learning environment with heavy equipment supporting wood-working
Metal Shop	industrial learning environment with heavy equipment supporting metal-working

STUDENT SERVICES

Learning Center	suite of offices and small- to large-group space to support counseling/therapy services
Wellness Center	suite of offices and open space to support a student's mental health

SHARED SPACES

Colab	open area that acts as an extension of the classroom, supporting group work
GLC: Assembly	multi-functional space for assemblies and large group activities
Library	flexible environment for research, study, and reading
Student Union	hub of student interactions and dining in a cafe-like environment
Food Service	facilities including a kitchen and indoor student servery
Event Center / Gym	space for large assemblies, performances, and sports events; includes locker rooms

ADMIN / FACULTY

Administration / Front Office	a safe, single-point of entry housing offices, conference rooms, and faculty work areas
Flex Lab / Faculty Lounge	faculty lounge with kitchenette, supporting professional development activities

OUTDOOR LEARNING AND PLAY

Outdoor Learning	expansion of the classroom to the exterior environment, could include gardens, amphitheater, and 'play pods' for STEAM-type activities
Kindergarten Play Yard	secured play area for Kindergarten, TK, and/or Preschool, includes play structure and shade/outdoor dining
Playgrounds and Hardcourts	outdoor environments for structured and non-structured play, includes play structure
Track and Field	elementary school: natural grass field with asphalt perimeter running track middle school: synthetic turf field and rubberized perimeter running track

DISTRICT-WIDE considerations

Technology

- Presentation technology should include a short-throw, laser projector or LCD monitor at the presentation wall. Technology should be capable of wireless streaming content and wireless or hard-wired connection to a laptop or desktop computer.
- A mobile lectern with a document camera and laptop station should supplement the presentation display equipment.
- Voice amplification is optional within the classrooms and small learning spaces but should be provided within large assembly areas.
- Technology should support classroom flexibility. Ceiling-mounted power drops are appropriate where equipment moves frequently throughout the room, such as in the Design and Innovation Lab. Floor- and wall-mounted power outlets are appropriate when it supports a stationary piece of equipment that is expected to remain in its place long-term.
- Infrastructure should include:
 - 2 drops near the teaching wall
 - 2 drops near the teacher's desk
 - 2 drops for wireless internet at the center of the classroom
 - 2 drops at the back wall
- All drops should have a home run back to a central IDF.
- Provide wireless access points to cover outdoor learning environments.
- Provide an IP-based network for all systems including EMS, clock, intercom, and fire alarm. Each site should have a unified fire alarm system.

Furniture

- Provide a variety of furniture options that allow seated and standing options. The furniture should be durable and support individual work as well as small and large group collaboration.
- Consider some furniture that allows for seated movement, especially in the lower primary grades.
- Furniture should be able to store easily out of the way, such as the 'nesting' furniture shown in the image below.



mobile lectern from Lakeshore Learning



writable "nesting" furniture

Finishes

- The finishes throughout the learning environments should enhance the student's ability to learn and share ideas.
 - Writable and tackable surfaces should be utilized as appropriate. This could be implemented by the use of mobile, magnetic white boards, for example.
 - Finishes should enhance the acoustic qualities of the space, aiming to reduce noise.



mobile, magnetic white board

DISTRICT-WIDE overall strategies

Create an environment that is socially, economically, and environmentally sustainable.

For new construction, consider pursuing CHPS Verified (Collaborative for High Performance Schools), or LEED Certification (Leadership in Energy and Environmental Design) or at a minimum, meet LEED best practices for modernization projects.

safe & healthy environments

- Specify materials, products, and systems that are sustainable, durable, and easy to maintain.
- Apply biophilic design strategies with goals of increasing user comfort and decreasing stress levels.
- Eliminate materials that may be harmful to the environment in terms of harvesting and transportation.
- Eliminate materials that may be harmful to the occupants in terms of off-gassing, user comfort, etc.
- Implement safety and security measures including improvements to pedestrian and vehicular circulation, replacing door hardware, addition of security systems (passive and active strategies), and reorganizing campuses to ensure the main point of campus entry is easily located and secure.
- Educate staff and administration on sustainable environments and practices, and create teachable topics for students of every grade level.

an eye on sustainability

In an effort to provide healthy environments and act as a good steward of the environment, the district and its stakeholders are interested in exploring and implementing sustainable strategies that:

- increase energy efficiency,
- lower energy usage,
- conserve natural resources,
- reduce environmental impacts, and
- reduce operating and maintenance costs.

In doing these things, the district can also look for teachable moments for their students.

energy efficiency

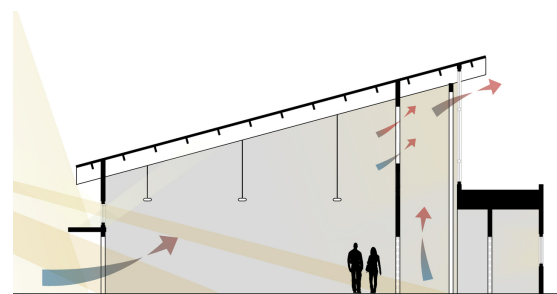
- Life-cycle planning and decision making; consider the long-term impacts when selecting materials.
- Building design that is responsive to local climate and solar orientation.
- Consider 'solar-ready' construction and install solar (photovoltaic/PV) panels where feasible and in a location that will not prohibit the implementation of the master plan concept. Consider locations that serve a dual purpose such as shade over parking, play, or dining areas.
- Include Battery Energy Storage Systems (BESS) where feasible.
- Utilize passive design strategies such as building orientation to maximize daylighting and natural ventilation.
- Balance natural daylighting with energy efficient LED fixtures and lighting controls.
- Regulate climate controls. Provide personalized thermal comfort, increase cognitive performance, and reduce HVAC/ electrical loads through the use of Ceiling Fan-Integrated Air Conditioning strategies.



photovoltaic (PV) panels over parking



biophilic design strategies, Wilkes Elementary



passive ventilation, Environmental Nature Center

DISTRICT-WIDE conservation

- Encourage use of recycled materials and the active recycling of materials on each site.
- Consider pervious concrete, pavers and other alternatives to traditional hardscape.
- Install artificial turf and all-weather tracks.
- Specify low-flow fixtures for water and cost savings.
- Utilize green cleaning products and select materials that are easy to clean / maintain.
- Include technology in the renewable materials; invest in systems that have a low carbon footprint.
- Implement water reclamation strategies.
- Prioritize planting material that is native or adapted, water-efficient, and low maintenance.
- Preserve healthy, mature trees and integrate them into new spaces.



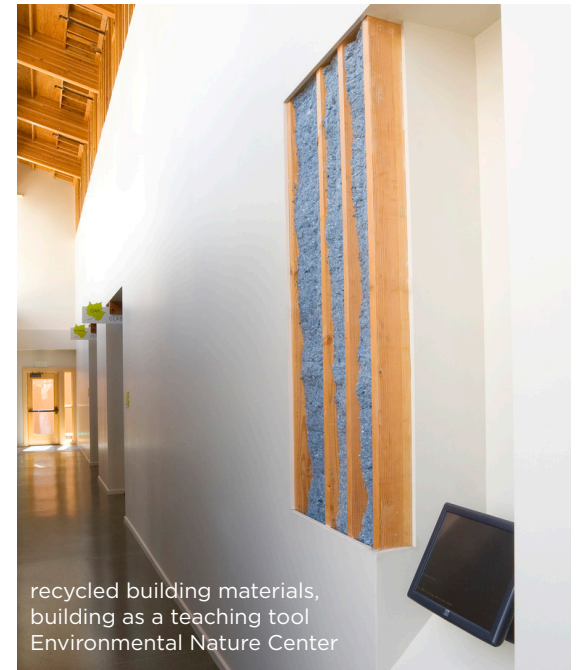
pervious concrete

curriculum connection

- Design with the student in mind, consider locating windows at low heights so students may benefit from direct outdoor views.
- Utilize the opportunity to educate students in citizenship and responsibility towards the environment by getting students involved in building systems management.
- Emphasis on natural lighting, for cost savings and connection of students with environment.
- Establish recycling and composting programs with student participation.
- Cultivate and continue organic school gardens with edible and native plants; incorporate water efficient irrigation strategies.
- Create learning dashboards for solar and energy monitoring, biology and water sustainability.
- Pursue opportunities for students to monitor and study building energy use; this could include the use of anemometers, occupancy sensors and daylighting controls, and/or photovoltaic arrays.



preserved tree, Menlo-Atherton High School



recycled building materials,
building as a teaching tool
Environmental Nature Center

DISTRICT-WIDE arrival

Pedestrian and vehicular points of entry to the campus provide visitors the first look at a school site. These spaces are the face of the school to the surrounding community and provide the initial impression of the overall campus character.

design

Consider using key landscape and/or building features to aid in wayfinding and orientation of visitors as well as staff and students.

arrival by car

Entry points create a sense of arrival through open views to the campus at key locations. The vehicular arrival should be from a main roadway connecting the campus to the immediate community. The entry shall include clear signage that leads students, staff, and visitors to the appropriate parking or drop-off areas. Reduce traffic on the adjacent road(s) by lengthening on-site stacking distance to the extent possible.

arrival on foot

Pedestrian arrival shall be enhanced at key locations of entry to the site. These include student drop-off locations, entry to student gathering areas, shared community facilities, and shared field space. Community use of these facilities after hours will require wayfinding signage and exterior lighting. Limit pedestrian crossings with drive aisles.

signage

In addition to signage used for pedestrian and vehicular approach, appropriate signage should be provided to direct towards major program elements in the school. In particular, visitors and new students will require clear wayfinding to the Administration building.

service areas

Provide service areas that accommodate the appropriate amount of storage spaces, parking for District vehicles and maintenance equipment, support delivery, waste/recycling enclosures and composting areas as needed for the campus.

shelter

Service areas require covered space that can accommodate storage of maintenance equipment. These areas are to be sheltered and screened from the campus core as they often require large vehicle circulation for waste pick-up and delivery of food and supplies.

access

Wide access ramps shall lead from the parking area to the receiving door of the food service building.

recycling

Recycling collection stations should be incorporated at the ends of classroom/building wings to facilitate student recycling efforts and allow for easy pick up by maintenance staff at the end of the day. Bins should be well placed and should have covers so that odors will not permeate into other areas.

compost

If there is available space at the site, provide an area for on-site composting of excess plant material wherever possible and if supported by staff and/or incorporated into the educational program. If used, co-locate compost bins with trash and recycling.



entry, Tradition Elementary School



signage, Warner Middle School



mobile lectern from Lakeshore Learning