

04

GREENING OPPORTUNITIES

OPPORTUNITY: NATURE DISCOVERY ZONE

The Nature Discovery Zone is a space intended for unstructured exploration and manipulation by the students. These settings are dynamic, changing with the seasons, ongoing use, and the growth and decay of natural materials. These zones complement other schoolyard elements (like play structures) that are intended to remain unchanged over time.



COMPONENTS

1. ENGAGING MATERIALS

- Gravel & Pebbles
- Streambed / Creek
- Shallow Pool

2. DIVERSE PLANTS

- Native Plants
- Plants for Drought
- Sensory Plants (Fragrance, Wind, Texture)

3. HIDE & REVEAL

- Mounding
- Plants for Screening

4. EDUCATIONAL SIGNAGE

- Plant Names / Facts
- Activity Areas
- Green Infrastructure Facts

5. PLAY COMPONENTS

- Logs & Stumps
- Rope Swing
- Defined Gathering and Circulation Areas



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OPPORTUNITY: WOODLAND GROVE

The Woodland Grove is a place where students and staff can immerse themselves in a shaded space, reminiscent of our local parks and native wooded areas. Space permitting, the grove has layers of trees that provide enclosure, textural interest, and seasonal variation. Subtle mounding and variations in the topography add to that sense of enclosure and interest. Natural elements on the ground plane contribute to the overall feeling of the space and help distinguish the grove from other areas of the schoolyard. Ground level elements can also allow the woodland grove to function as an outdoor classroom, performance space, or discovery zone.



COMPONENTS

1. CLIMATE ADAPTED TREES (FOR PRESENT & FUTURE CLIMATE)

- California Natives
- Seasonal Interest
- Low Maintenance (No Seed, Fruit or Sap)

2. DIVERSE PLANTS

- Flowering/Non-Flowering
- Evergreen/Deciduous
- Varying Heights & Canopy

3. ENCLOSURE

- Mounding (If Possible)
- Sense of Entry/Exit (Ex: Planted Borders)

4. NATURAL MATERIALS ON GROUND PLANE

- Boulders/Logs for Seating
- DG, Flagstone or Mulch
- Understory Planting

5. EDUCATIONAL OPPORTUNITIES

- Signage



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OPPORTUNITY: OUTDOOR CLASSROOM

Learning in the outdoors can look different across schools and subjects, but it is important to always ensure comfort and accessibility, and to include necessary teaching resources. Outdoor learning environments should be able to accommodate an entire class comfortably, but additional opportunities can also be provided for small group activities and larger gatherings. The outdoor classroom should be distinct from its immediate surroundings, whether inside some physical border or structure, to help the teacher be heard and the students to focus.



COMPONENTS

1. COMFORT

- Seating/Tables Sufficient for Standard Class Size
- Shade
- Sound Buffering (With Plants, Trees, Fencing, Etc.)

2. ACCESSIBILITY

- Wheelchair & Companion Seating
- ADA Compliant Ground Materials
- Located Near Classrooms

3. OPTIONAL FEATURES

- Access to Water
- Power (For Audio/Visual Teaching Tools)
- Instruction Board
- Instruction Table
- Storage Cabinet for Teaching Tools
- Work Desks/Tables
- Seating With Backs for Extra Comfort



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OPPORTUNITY: THERAPEUTIC SPACE

Therapeutic spaces can be calming or stimulating depending on your school population’s needs. A calming therapeutic space might invite students to get comfortable and be quiet, while a stimulating therapeutic space might have opportunities for sensory and tactile play or learning. Ideally, in either case, students have the ability to alter the space or objects within the space to suit their needs. Therapeutic spaces include areas near classrooms where students have the opportunity for emotional self-regulation.



COMPONENTS

1. EDUCATIONAL OPPORTUNITIES

- 1-On-1 Sessions
- Motor Skills
- Vestibular Skills
- Sensory & Tactile Play

2. CALMING

- Curated Stimulus
- Enclosures (Ex. Willow Huts)
- Comfortable Spaces to Sit / Lay Down

3. SOFT SURFACING

- Poured-in-Place Rubber
- Non-Infills Synthetic Turf
- Lawn
- Mulch

4. ACCESSIBILITY

- Wayfinding Signage
- Spacious Pathways
- Accommodations for Activity Areas (Ex: ADA Accessible Garden Beds)



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OPPORTUNITY: PAVEMENT AND STRIPING

Light-colored pavement and striping can serve practical, educational and playful purposes on school grounds. Light-colored pavement and striping (added coloring or coating to pavement), when done with LEED compliant products, can help lower surface and ambient (<6’ above surface) temperatures. Striping can additionally take on whatever form is useful to the schoolyard: a game, a school motto, a teaching tool, a navigational tool. Pavement painting also adds interest to school yards by breaking up expansive black asphalt spaces, while defining use zones for different activities. The painting and striping design can also be integrated with other aspects of the site design.



COMPONENTS

1. HEAT MITIGATION

- Light Color Pavement & LEED Compliant Striping

2. EDUCATIONAL OPPORTUNITIES

- Curriculum Connections Striping (Text/Images)
- Ecological Info Striping (Text/Images)
- Green Infrastructure Info Striping (Text)

3. PLAY COMPONENTS

- Walking/Running Paths
- Game Striping (Hopscotch, Mazes, etc.)
- Ball Play Striping

4. CULTURAL ELEMENTS

- School Identity Striping (Mottos, Values, Quotes, etc.)
- School Context Striping (Local People, History, Ecology, etc.)

5. WAYFINDING

- Navigational Striping (Lines, Arrows, Text, etc.)



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OPPORTUNITY: PERFORMANCE AND EVENT SPACE

A performance and event space is a flexible intervention that could equally serve as a theatrical venue or an outdoor classroom. In general, it should have a focal point around which a group can have easy viewing. Ideally, it has adequate seating, shade, and sound buffering elements. A stage, integrated into a larger green space, can provide opportunities for students to practice presentations during class time or to engage in dramatic play during recess.



COMPONENTS

- 1. SEATING**
 - Benches
 - Chairs
 - Amphitheater Seating
- 2. SHELTER**
 - Tree Canopy
 - Shade Structures
 - Planted Trellis
- 3. PERFORMANCE STRUCTURES**
 - Stage
 - Plaza
- 4. SOUND ENHANCEMENTS**
 - Planted Sound Buffers
 - Solid Walls or Screens
 - Roof Coverings
- 5. CULTURAL ELEMENTS**
 - Tiling
 - Murals



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OPPORTUNITY: MEADOW

A meadow within the schoolyard is a gesture towards wildness. It demonstrates a desire to let in more nature, including its creatures. Students can greatly benefit from exposure to more natural spaces, both in their education and their sense of wellbeing. A school meadow can have a large or small footprint; diverse and seasonal plantings and wildlife accommodations are most important to bring this implementation to life.



COMPONENTS

1. CLIMATE ADAPTED & DIVERSE PLANTS

- California Natives
- Seasonal Interest
- Low Maintenance (No Seed, Fruit or Sap)
- Flowering/Non-Flowering

2. WILDLIFE HABITAT

- Bee Hotels
- Bird Houses
- Butterfly Stations

3. WAYFINDING

- Clear Pathways
- Signage

4. EDUCATIONAL OPPORTUNITIES

- Signage

5. ENGAGEMENT OPPORTUNITIES

- Sensory Stations
- Wildlife Viewing



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OPPORTUNITY: TEACHING TOOLS

Teaching tools are portable objects that enhance the outdoor learning experience. These tools are best used in the outdoor contexts described throughout this document, and should be stored in the most accessible, convenient areas of the school buildings or grounds. A weather-proofed outdoor shed or cabinet would likely be a fine solution for convenient storage.



COMPONENTS

1. GARDENING TOOLS

- Shovels, Rakes, Hoes
- Gloves
- Bins/Buckets
- Watering Cans

2. OBSERVATION TOOLS

- Clipboards
- Magnifying Glasses
- Binoculars
- Specimen Containers

3. NATURE PLAY & THERAPEUTIC TOOLS

- Kitchen Equipment
- Bins/Buckets
- Utensils, Shovels, Rakes, Hoes
- Sifters

4. EDUCATIONAL SIGNAGE

- Plant Labels
- Infographics
- Observation Guides or Games



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OPPORTUNITY: EDUCATIONAL SIGNAGE

Educational signage supports student learning and navigation with written and visual information. Signage provides students with the opportunity to engage with their environment and their curriculum throughout the school day, whether they are in or out of class sessions. Signage can help develop student interests and independence, encouraging students to follow their individual curiosities as they appear around campus.



COMPONENTS

1. CULTURAL ELEMENTS

- Local Ecology
- Local Historical Figures/Groups/Events
- School Values/Mottos

2. INFRASTRUCTURE

- Illustrative Panels about Hidden Infrastructure (Ex: Underground Pipes or Creeks)
- Illustrative Panels about Visible Infrastructure (Ex: Rain Chains, Solar Panels, Etc.)

3. CURRICULUM SUPPORTS

- Informative/Illustrative Panels
- Game Instructions
- Fun Facts
- Question Prompts

3. ECOLOGY

- Plants
- Wildlife
- Climate

5. WAYFINDING

- Directions to School Landmarks
- Directions for Scavenger Hunt



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OPPORTUNITY: ART DISPLAY

Art on school grounds is key to a vibrant, creative school identity and culture. Art displays can give students permission to think outside of the box, to express themselves, and to seek inspiration. It also increases students’ sense of ownership and pride, helping them understand that they have a role to play in shaping their environment. It can thrive in a number of forms outside of school buildings: in murals and sculptures, in painted fences and concrete. It can be permanent or temporary; it can be made by students of all ages, perhaps collaboratively across many school years.



COMPONENTS

1. 2D APPLICATIONS

- Paintings
- Mosaics

2. 3D APPLICATIONS

- Sculptures
- Fence Elements
- Seating

3. MAKERS

- Individual Students
- Groups of Students
- Community Members/Organization + Students

4. CONTENT

- School Values/SEL Tools
- Local Figures/Events
- Local Ecology
- Memorials

5. INSTALLATION

- Temporary
- Permanent
- Permanently-Changing



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OPPORTUNITY: LEARNING GARDEN

A learning garden is more than an aesthetic garden. It has the equipment and design for learning opportunities. That is an important distinguishing factor for those wanting a learning garden: what will students learn about? For example, if they are learning about growing and processing food, a school may need raised beds and a washing station. If students are learning about native plants, a school might need an in-ground native plant garden, providing examples of plants from different local microclimates.



COMPONENTS

1. PLANTING AREAS

- Raised Beds/Containers
- In-Ground Planting
- Vertical Planting (Trellises, Planter Pockets, Etc.)

2. SIGNAGE

- Plant Labels
- Infographics
- Observation Guides or Games

3. HABITAT

- Bee Hotels
- Bird Houses
- Butterfly Stations

4. DISCOVERY

- Native Planting
- Edible Planting
- Sensory Planting

5. EQUIPMENT

- Sink/Washing Station
- Food Processing Station
- Cob Oven



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OPPORTUNITY: SCHOOL FRONTAGE

School frontage is the entry area of your school, typically where pickup and dropoff are located. Enhancing school frontage is an opportunity to provide comfortable gathering spaces for pickup and dropoff, to reaffirm school identity through artwork and signage, and to create a welcoming and beautiful impression of the school.



COMPONENTS

- 1. SHELTER**
 - Tree Canopy
 - Trellis
- 2. CULTURE**
 - Painting
 - Mosaic
 - Signage
- 3. BEAUTY**
 - Artwork
 - Specimen Trees
 - Aesthetic Planting
- 4. VISIBILITY / ACCESSIBILITY**
 - Navigational Striping/Signage
 - Clear/Wide Pathways
 - Continuous Accessible Path
 - Sight Lines Toward Exits/Entrances
- 5. SEATING**
 - Benches
 - Seatwalls
 - Picnic Tables



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