



PLAY WITHOUT LIMITS

Designing School Environments that Restore Free Play

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Introductions



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01 / AUDIENCE ACTIVITY

First, let's play.

PLAY-DOH / No right answer. No limits.



01

An invitation to play

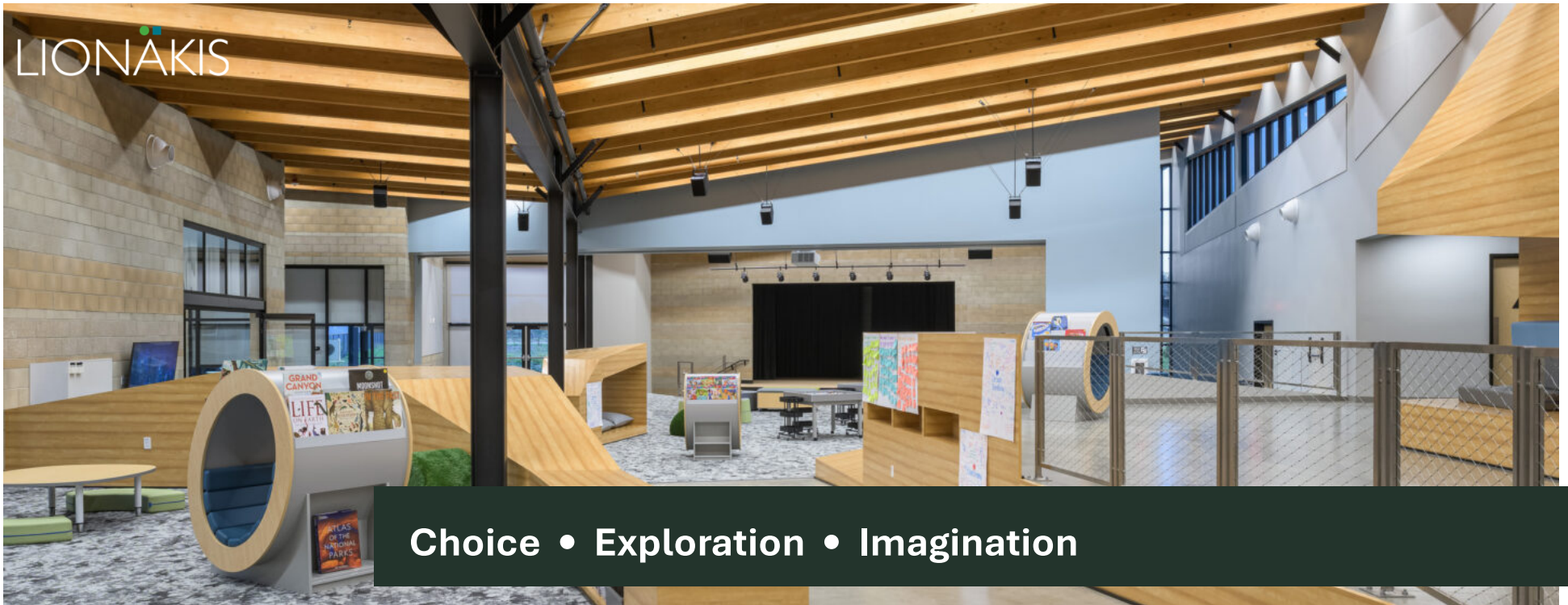
Create, experiment and see what happens.

Optional challenge: design a space where kids would want to play.

02 / UNDERSTANDING FREE PLAY

What is play?

It is not a scheduled activity with a predetermined outcome.



Choice • Exploration • Imagination

Research

How Peter Gray describes play

The child is in charge of the experience.



SELF-DIRECTED

Chosen and directed by the player

INTRINSIC

Done for its own sake

IMAGINATIVE

Guided by ideas and possibility

ALERT + LOW STRESS

Active without high-stakes pressure

Why it matters

Play is not an extra.

Freedom to play gives children room to develop on their own terms.



**“The drive to play freely is a basic,
biological drive.”**
—Peter Gray

Benefits

What play makes possible

An opportunity for growth that cannot be reduced to test scores.

01

Problem solving

Invent, test, adapt

02

Social connection

Negotiate and collaborate

03

Emotional growth

Experiment without pressure

04

Joy + motivation

Discover the pleasure of agency

Everyday discovery

Play is all around us

Children explore the world by moving, making and trying.



MOVE

Test boundaries and physical possibilities

MAKE

Build, take apart and transform

CONNECT

Take turns and try on social roles

Understanding play

Patterns children return to

Play schemas are repeated ways to explore how the world works.



Transforming

Trajectory

Transporting

Rotation

Enclosing

Connecting

Positioning

Perspective

Design implications

Movement is part of learning about space

Give children more than one way to move through and occupy their environment.



Over, under, through

Around and between

Up, down and across

Pause, observe, repeat

Opportunity

Design for more than one activity

A school day should include room for children to choose.

CREATE

MOVE

SING

DISCUSS

OBSERVE

READ

PLAY

03 / WHAT HAPPENS WHEN PLAY IS REMOVED?

When academics pushed recess out – a cautionary tale

Atlanta Public Schools, 1990s

“You don’t do that by having kids hanging on the monkey bars.”

Benjamin Canada, Atlanta superintendent, 1998

Source: The New York Times quote, corroborated in Kappan (2019)

Real example

A school built without a playground

Cleveland Avenue Elementary / Atlanta, Georgia

NO PLAYGROUND

In 1998, reporting described Cleveland Avenue as a school built just two years earlier without a playground, during Atlanta's no-recess era.

A DESIGN DECISION

When free play is removed from the schedule, it can disappear from the physical campus too.

Sources: Harvard Crimson (1998); Heartland (1998)

Another warning

When playgrounds become parking lots

Chicago shows the long-term consequence of removing recess.

01

First, remove recess

Chicago schools phased out recess across many campuses.

02

Then, lose the space

Some playgrounds were converted to parking lots; others deteriorated or disappeared.

WHAT WE SCHEDULE — AND WHAT WE DESIGN — TELLS CHILDREN WHAT WE VALUE.

Source: Learning Landscapes / Space to Grow, Chicago schoolyards

04 / DESIGNING FOR PLAY: INTERIOR SPACES



Choice in school interiors

HKIT ARCHITECTS

Interior zones

Provide options inside the classroom



Spaces

Smaller places within larger spaces



Child-scaled places within a shared room

Opportunities for movement and imaginative play

Quiet places to pause, observe or retreat

Transitions

Places between destinations



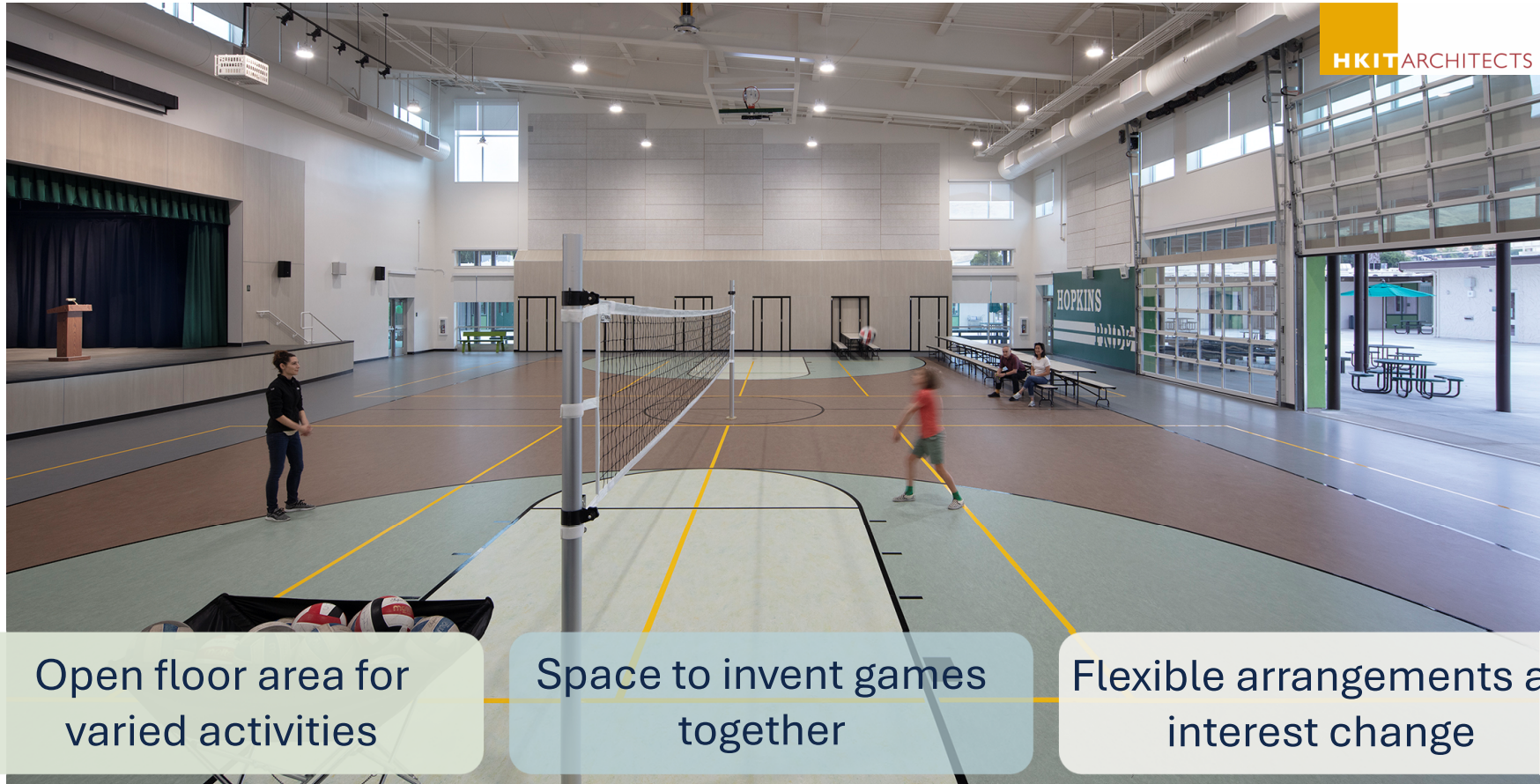
Places to pause beyond the classroom

Informal gathering at different scales

Open-ended setting for conversation and imagination

Large spaces

Large Spaces with Multiple Possibilities



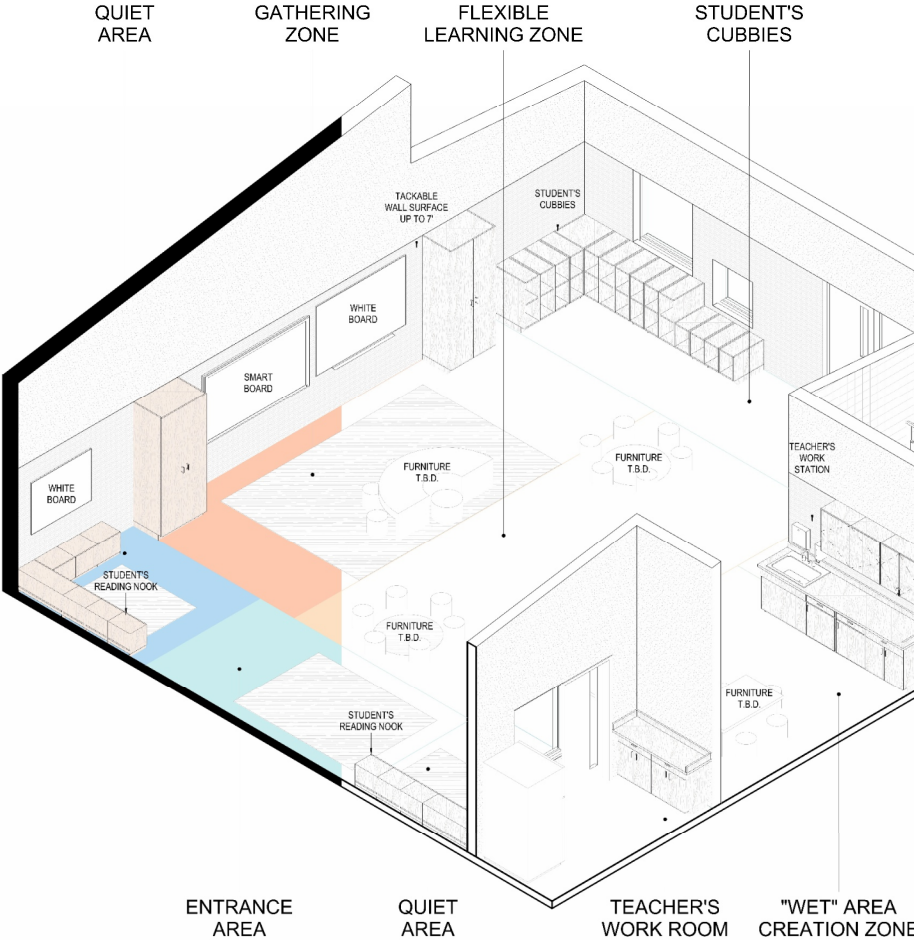
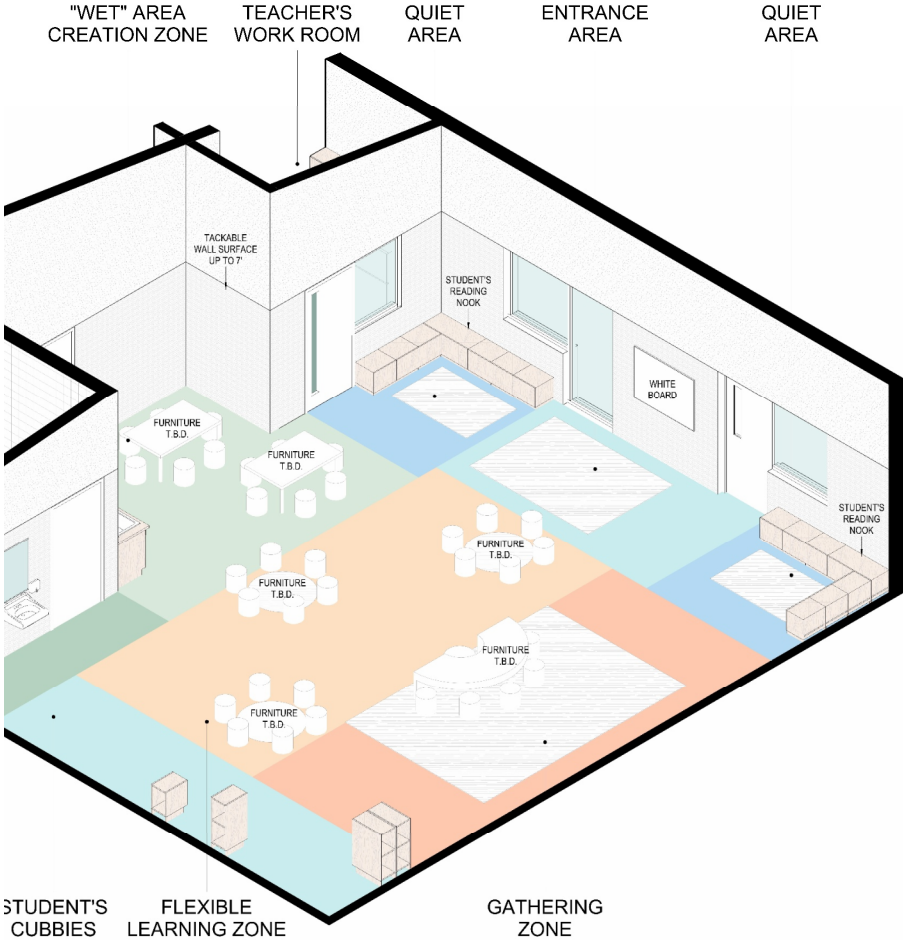
HKIT ARCHITECTS

Open floor area for
varied activities

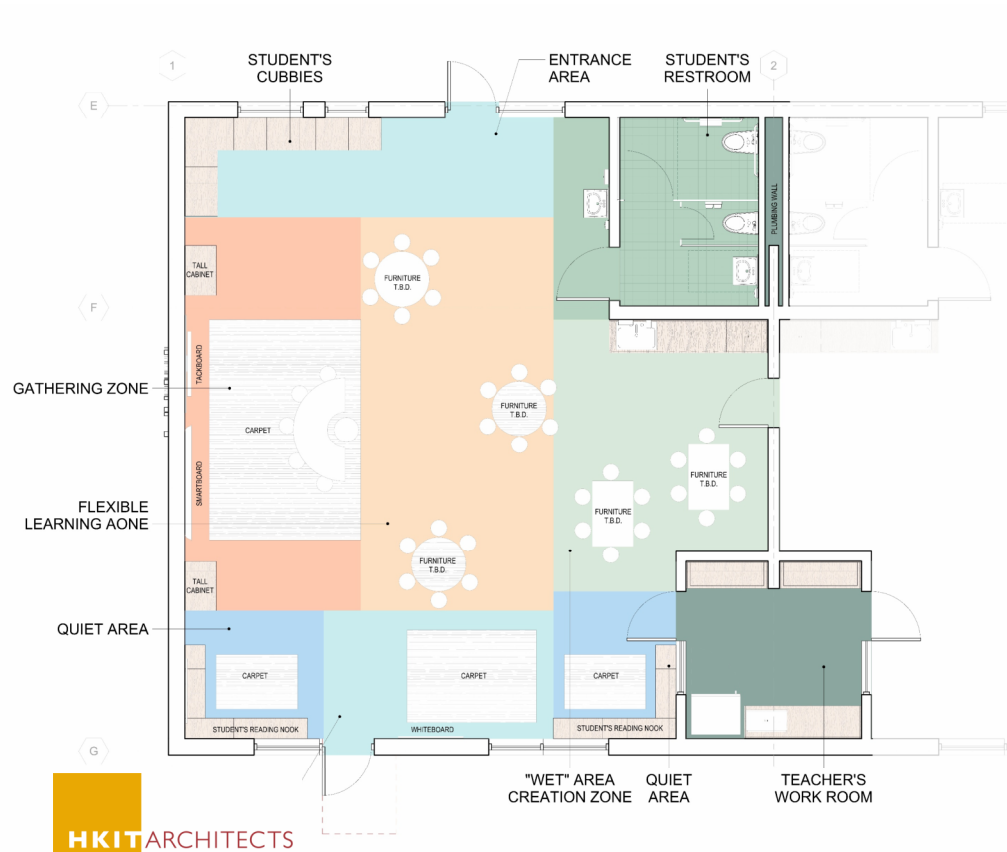
Space to invent games
together

Flexible arrangements as
interest change

Transitional Kindergarten | Pre-Kinder Planning



TK/Pre-K choices within one classroom



Gathering, creating, and quiet areas

Small group settings alongside shared space

Clear connection between activity zones

TK/Pre-K: The child's experience



Different settings
within sight of
one another

Small group
settings along
shared spaces

Clear
connections
between activity
zones

05 / PROJECT SPOTLIGHTS

PROJECT EXAMPLES

PROJECT SPOTLIGHTS



La Scuola

Exploration thru light and reflection



- Changing views through movement and reflection
- An invitation to investigate and experiment
- Possibilities for children to discover their own uses

La Scuola

A shared space with different uses

Different places to
sit and gather

Light & color as
elements to
explore

Shared space with
room for individual
interpretation



La Scuola

Preschool



La Scuola

Materials and imaginative play



Materials within
children's reach

Small setting for
shared make
believe

Opportunities to
invent roles and
stories

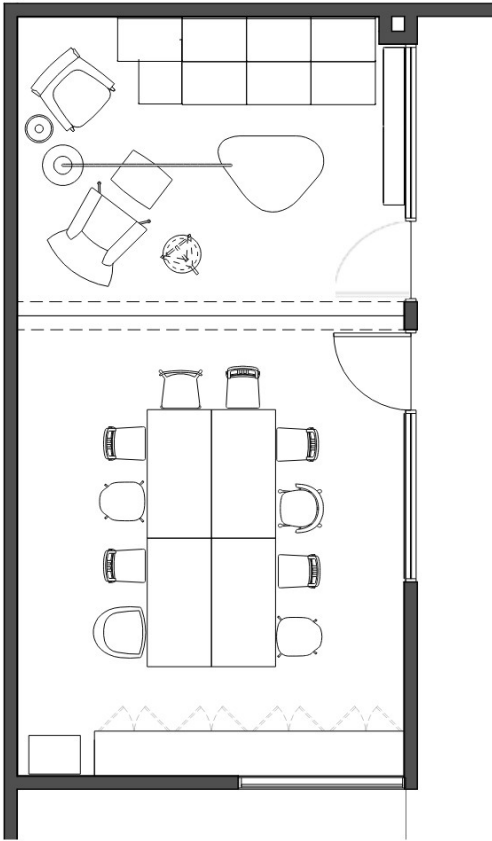
Chapter 510

Writing center

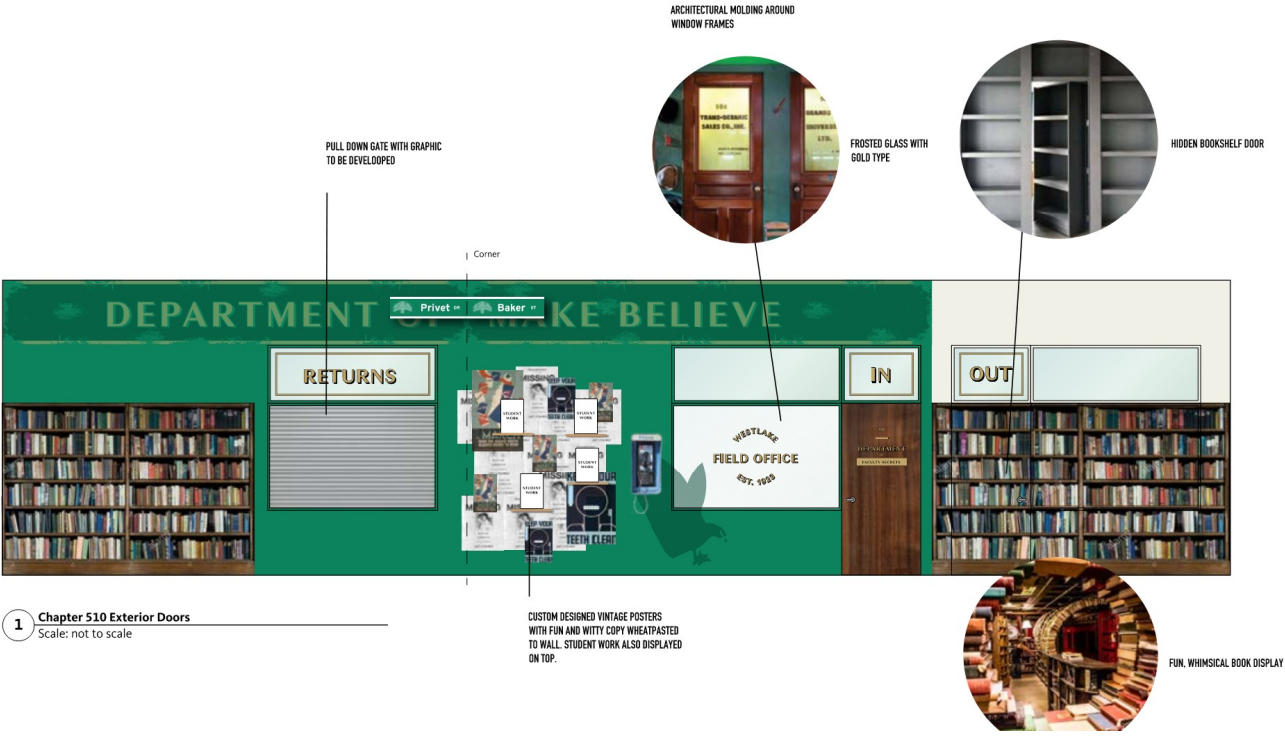


Chapter 510

An invitation to enter



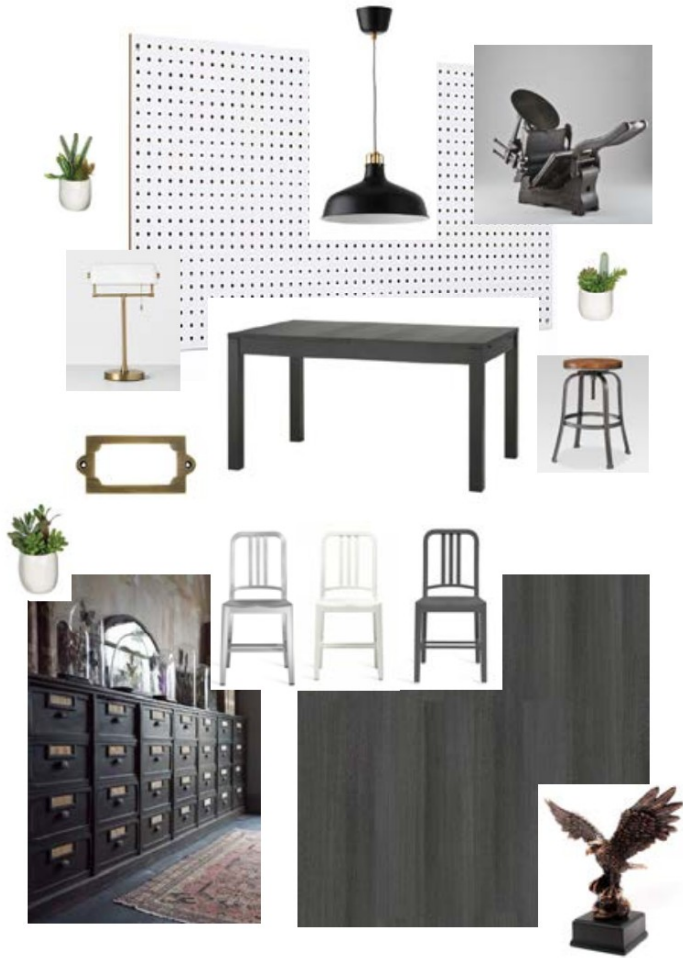
*PLAN NTS



Playful choice



Chapter 510



Different ways to create



Informal seating for
imagining and
exchanging ideas

Worktables for
developing and
producing work

Distinct settings
that support
different creative
processes

The decisions children get to make



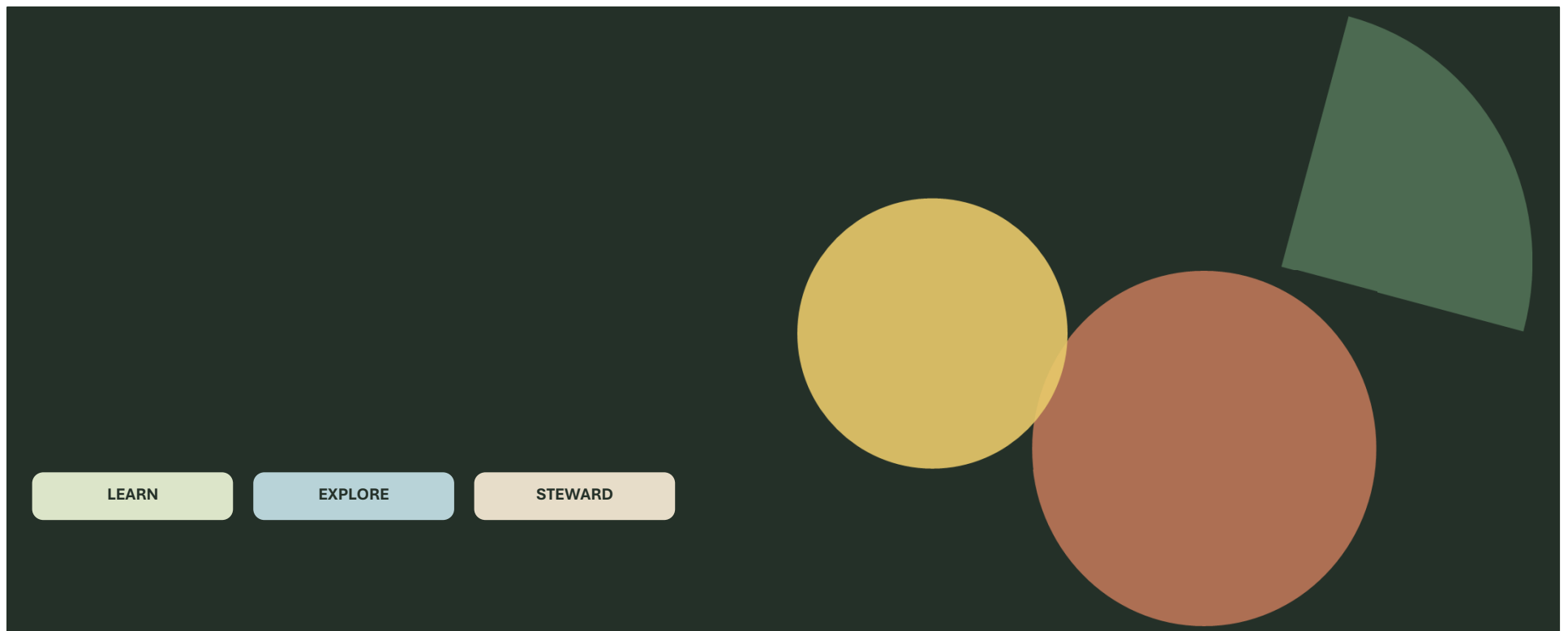
What can they
choose?

What can they
change or imagine?

Can they join,
watch, or step
away?

Outdoor Play Environments

Shaping campuses as memorable landscapes for teaching, discovery, ecology and belonging.



Learning begins with the experience of place

The landscape can be both setting and participant: a place where human experience and learning come together

EXPERIENCE • CONNECTION • DISCOVERY • LONGEVITY

Design for the human experience

Outdoor environments invite observation, movement, making, conversation and discovery—giving learning a physical, environmental and emotional dimension.

Create memorable places

A memorable campus offers a range of spatial experiences: intimate and expansive, social and quiet, cultivated and wild.

Merge ecology with design

Planting, water, habitat and seasonal change are not add-ons. They are fundamental design materials and opportunities for learning and stewardship.

Design implication

Make outdoor learning part of the everyday campus experience—not a special destination separated from daily life.

VISIBLE FROM CLASS

QUICK TO ACCESS

EASY TO RESET

MULTI-PURPOSE

SEASON-READY

Six principles for learning landscapes

These principles translate a placemaking approach into a framework for educational environments



Human-centered

Begin with how people learn, gather, move and feel in the landscape.



Integrated

Connect buildings, circulation, open space and curriculum into one campus experience.



Responsive

Shape microclimate, comfort and scale in response to site and daily use.



Welcoming

Create shared experiences that welcome different ages, abilities and learning styles.



Ecological

Make living systems visible, beautiful and integral to the identity of place.



Future-ready

Design for today while allowing the landscape to evolve with future programs.

CURRENT DIRECTIONS · nature-based learning · freedom to move · visible ecology · curriculum connections

Play + learning

A spectrum of play

Children move fluidly among different modes of play. A successful landscape makes room for that range rather than privileging a single activity

OBSERVE + SELF

SOLITARY

independent

ONLOOKER

observational

PARALLEL

alongside

SOCIAL + IMAGINATIVE

ASSOCIATIVE

shared

COOPERATIVE

collaborative

DRAMATIC

imaginative

MAKE + MOVE

CONSTRUCTIVE

making

COMPETITIVE

rules + challenge

PHYSICAL

movement

Play + learning

Types of play environments

A place for everyone: combine active, imaginative, constructive, social, and nature-based settings across the landscape.

PLAY STRUCTURES

Traditional active play



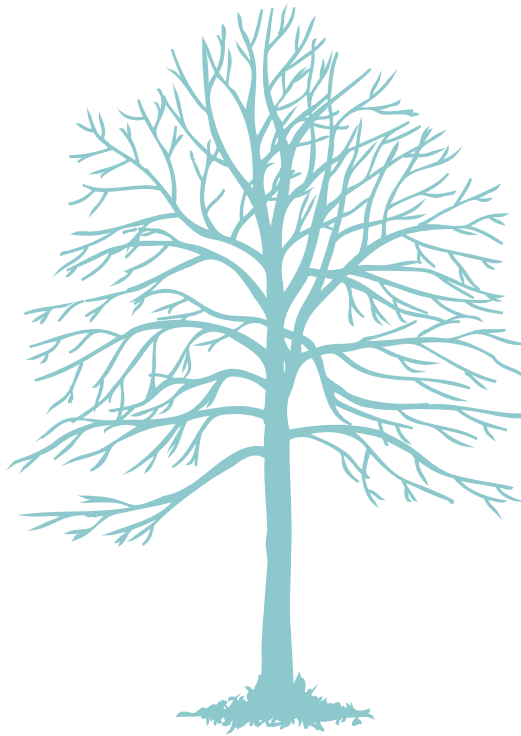
THEATERS + PLAYHOUSES

Solo and group performance, storytelling, and community



GAME COURTS + BOARDS

Large and small games—from four square to field play



NATURE-BASED PLAY

Natural materials—rocks, trees, sticks, soil



CONSTRUCTION ZONES

Loose parts such as blocks, gravel, and sticks



MANIPULATIVE ZONES

Sand, water, and hands-on material play

Inclusive play

Play for Everyone

Different needs call for different spatial response – but the objective is a landscape where children can play together

SOCIAL + EMOTIONAL

Places to sit and observe; areas of retreat; quiet play zones; enclosure with clear sightlines.

VISION

Detectable entrances, tactile/Braille information, and strong visual contrast.

LEARNING DIFFERENCES

Many types of activities, varied levels of stimulation, and intuitive organization.



MOBILITY

Fully accessible routes and accessible play opportunities integrated throughout.

MEDICAL + SUPPORT NEEDS

Space for assistants and mobility/medical equipment without separating children from play.

HEARING + COMMUNICATION

Strong visual cues plus music, sound-making, and non-verbal forms of participation.

Trends

Trends in outdoor learning

An outdoor math and physics educational space merges physical play with hands-on STEM learning by turning a traditional playground or schoolyard into a real-world laboratory.

01 FOCUS ON NATURE

Natural materials invite touch and manipulation.

Planted areas become habitat, pollinator landscapes, and living systems.

02 FREEDOM TO MOVE

Move beyond the designated play yard toward a full landscape experience.

Support active, quiet, observational, social, and hands-on learning.

Strong indoor / outdoor connections.

03 ACTIVE ENVIRONMENTAL LEARNING

Make ecology visible.

Seasonality, water, materials, habitat, and change become everyday teaching tools.

04 CONNECT TO CURRICULUM

Use the landscape to reinforce biological processes, sustainability, mathematics, physics, and other areas of study.

Project example



White Hill School

FAIRFAX, CA

Project example

DeAnza Arts Complex

CUPERTINO, CA



10 / A CAMPUS OF LEARNING PLACES

Design a sequence of outdoor rooms, not a single classroom

This approach to placemaking favors varied, connected settings that support gathering, exploration, experimentation, retreat and return, addressing different learning styles.

A GATHER

Semicircle or circle seating
20–30 learners + instructor

B MAKE

Worktables, water, power
where needed
Durable “mess-friendly”
surfaces

C GROW

Raised beds, orchard, nursery
Compost + tool storage
nearby

D OBSERVE

Habitat, weather, water,
geology
Places to pause and record

E MOVE

Open lawn, court edge, trail
loops
Scale for demonstrations and
embodied learning

F RETREAT

Small shaded niches
Quiet reading, sensory reset,
one-to-one learning

Project example



Ecology as experience

Immersion in natural systems

Living systems can perform, teach and create beauty at the same time. The design should reveal processes rather than conceal them.

CANOPY shade • phenology • birds

UNDERSTORY pollinators • habitat • texture

SOIL decomposition • roots • carbon

WATER runoff • infiltration • water quality

Design for change over time

Choose systems that offer something new to notice across a day, a season and a school year.

— flower → fruit → seed

— dry → rain → infiltration

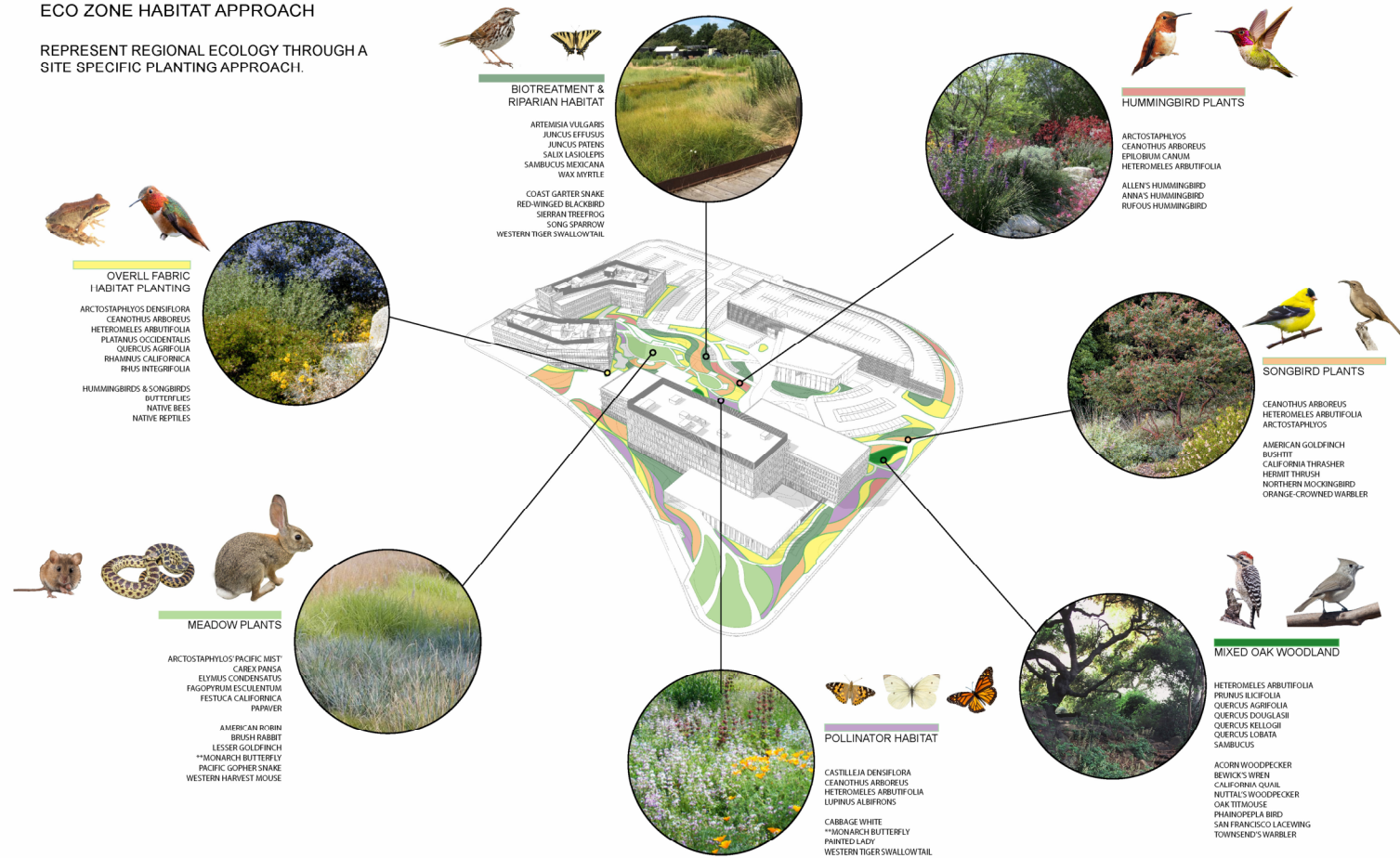
— leaf-out → shade → leaf-fall

— compost → soil → crop

Ecology as experience

ECO ZONE HABITAT APPROACH

REPRESENT REGIONAL ECOLOGY THROUGH A SITE SPECIFIC PLANTING APPROACH.



Design for belonging

Create a shared landscape experience

Inclusive design begins with dignity and choice: everyone should be able to participate in central experience of the landscape

Physical access

Firm, stable routes; turning space; accessible seating choices; reachable garden beds and work surfaces.

Sensory choice

Offer both stimulating and quieter settings. Avoid forcing every activity into one exposed, high-input space.

Communication + orientation

Clear thresholds, landmarks, simple signage and predictable organization help students navigate independently.

A useful test

Can every student participate in the central learning activity without being assigned a separate “accessible” version of the space?

Offer active, social, observational, and quiet choices within the same learning landscape.

Project example

Magical Bridge Playground

PALO ALTO, CA



Design across scales

A strong framework supports changing needs over time

From Intimate discovery spaces to independent field study, scale and complexity can evolve while the campus retains a coherent identity.

EARLY YEARS

sensory + imaginative

small-scale spaces • loose natural materials • edible/scented planting • close supervision

ELEMENTARY

hands-on + social

garden beds • water + soil investigations • gathering circles • visible systems

MIDDLE SCHOOL

inquiry + collaboration

field labs • project tables • habitat monitoring • flexible team zones

HIGH SCHOOL / COLLEGE

independent + applied

research plots • fabrication • outdoor seminar spaces • technology + field instrumentation

Project example



Sonoma Academy

SANTA ROSA, CA

From vision to living campus

Design for the moment while planning for the future

A strong framework can begin with modest interventions, establish durable infrastructure, and mature over time through canopy, habitat and stewardship.

NOW

0–6 months

movable seating •
clipboards • shade
umbrellas • outdoor
teaching routines

NEXT

6–24 months

accessible routes •
permanent shade •
storage • water •
teaching surfaces

GROW

2–5 years

tree canopy • habitat •
rain gardens • food
gardens • research plots

The goal is not simply to place classrooms outdoors. It is to create a memorable campus landscape where learning, ecology and community are inseparable.

STEWARDSHIP PROCESS • co-design • pilot • assign ownership • measure + adapt

12 / PROJECT SPOTLIGHTS

PROJECT EXAMPLES

PROJECT SPOTLIGHTS

From design principles to places for discovery,
connection, and stewardship.



Project spotlight



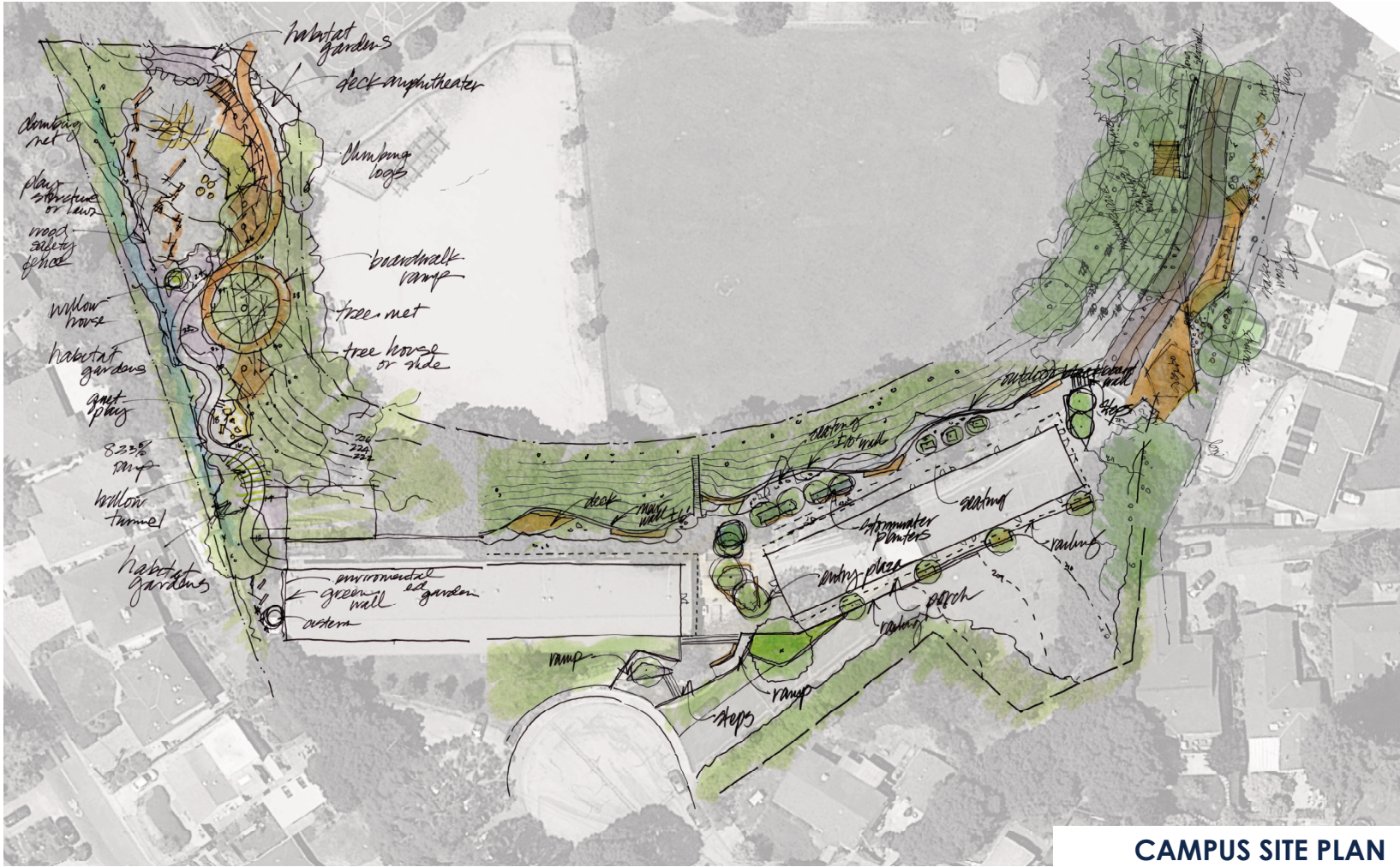
SERENDIPITY SCHOOL

Belmont, CA

PROJECT STORY / KEY DESIGN MOVE

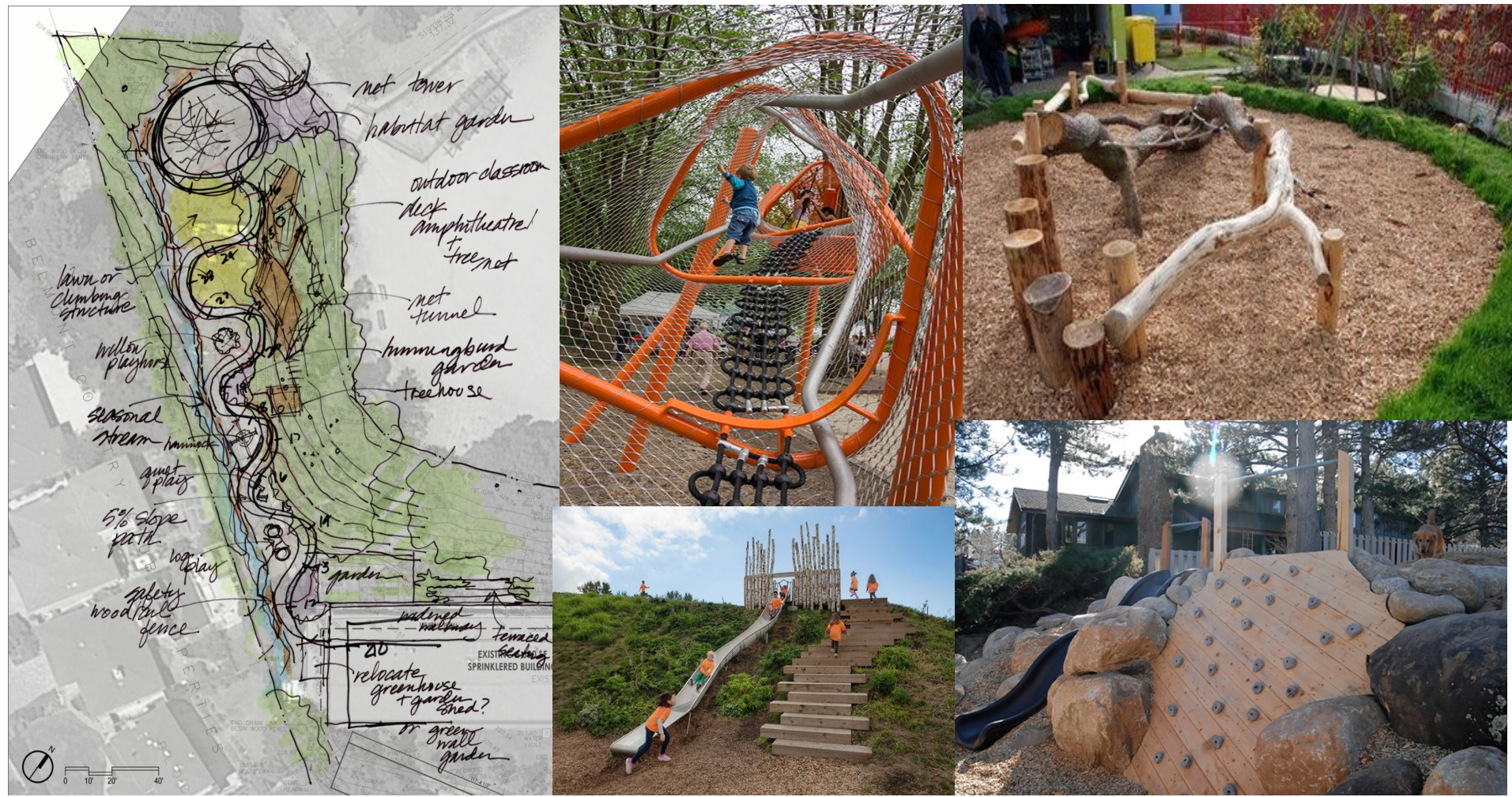
- K-5 independent school
- Enhanced outdoor experience to allow exploration and rising risk with rising ages
- Immersion in nature

Project spotlight



CAMPUS SITE PLAN

Project spotlight



Project spotlight



PLAY WITHOUT LIMITS / LearningScapes 2026

Project spotlight



Project spotlight



Project spotlight



Project spotlight



Project spotlight



SONOMA ACADEMY

Santa Rosa, CA

PROJECT STORY / KEY DESIGN MOVE

- Students are wired to learn
- Need a rich, challenging environment to fuel natural curiosity
- Visible results of their learning – farm to table
- Indoor / outdoor flow for learning, social interaction

Project spotlight



Project spotlight



Project spotlight



Project spotlight



Project spotlight



Project spotlight



Project spotlight



LA SCUOLA SCHOOL

K-5 Emilio Reggiano School

PROJECT STORY / KEY DESIGN MOVE

- Children are competent learners who are curious, capable and full of potential rather than passive recipients of information
- Schoolyard design to allow exploration, freedom and follow children's natural interests
- Active play, mini farm, pollinator gardens

Project spotlight



Project spotlight

