Fielding International

Designing schools where learners **thrive**

The Future of Work & Learning

Less Seat & Screen Time, More Physical Movement & Face-to-Face Connection

Randy Fielding & Nathan Strenge

October 8, 2:45 PM

Room CR #3/4

LearningSCAPES 2022

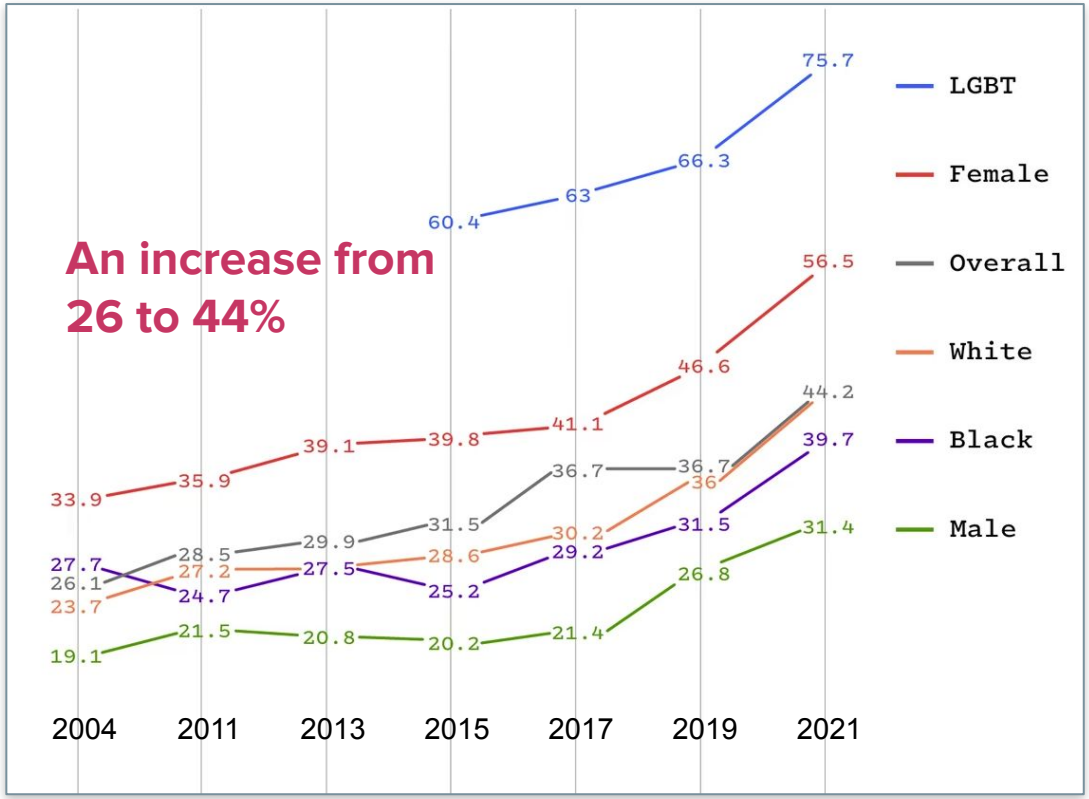
Essential Human Needs

Are they being met?

“Almost every measure of mental health is getting worse for every teenage demographic, and it's happening all across the country.”

Derek Thompson
Why American Teens Are So Sad | The Atlantic, 2022, CDC data

Percentage of High School Students Feeling Persistently Sad or Hopeless



How can we address essential human needs with design?

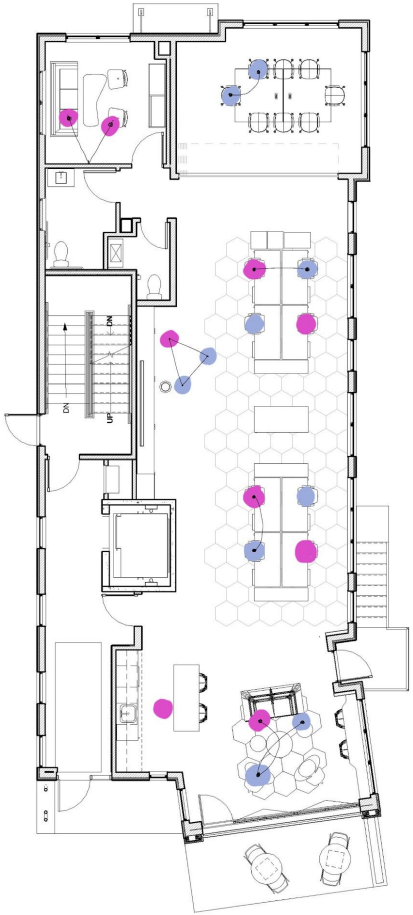
"Buildings will be able to instantly shift purpose to serve as a theater, gym, social center, minimizing the urban footprint and allowing cities to get more from less."

Klaus Schwab, Founder, World Economic Forum, author, The Fourth Industrial Revolution

The Hummingbird Design Lab, Fielding Minneapolis Office

8-12 Person Workspace

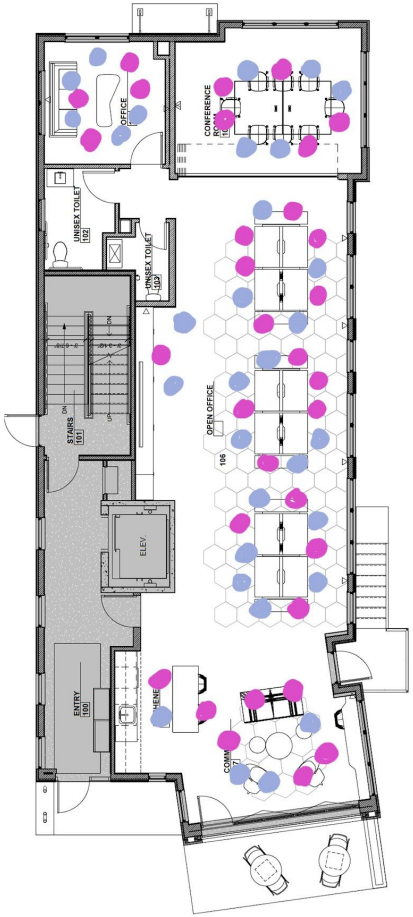
Furniture Plan



Hip-Hop Genius 2.0

Book Launch & Celebration (50 People)

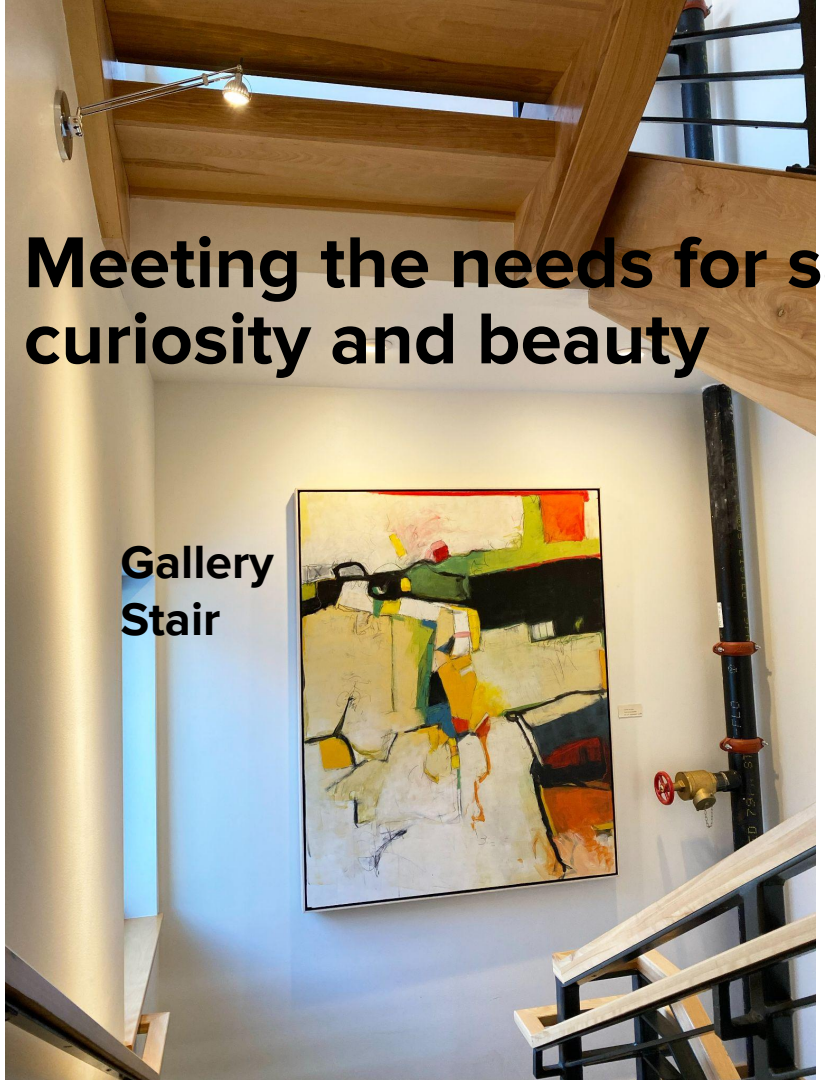
Furniture Plan



Open Up Education!
Author Talk, 70 Person Gathering
High Expectations...High Support

Meeting the Needs for Love and Belonging

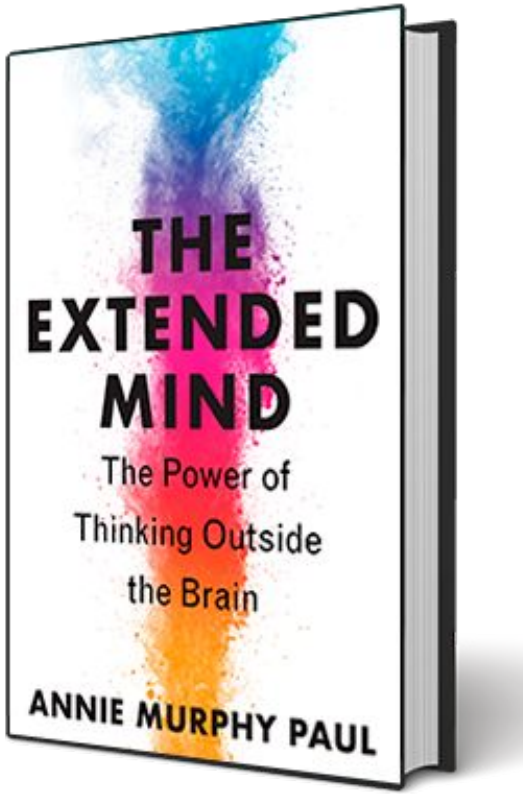
Meeting the needs for safety, curiosity and beauty

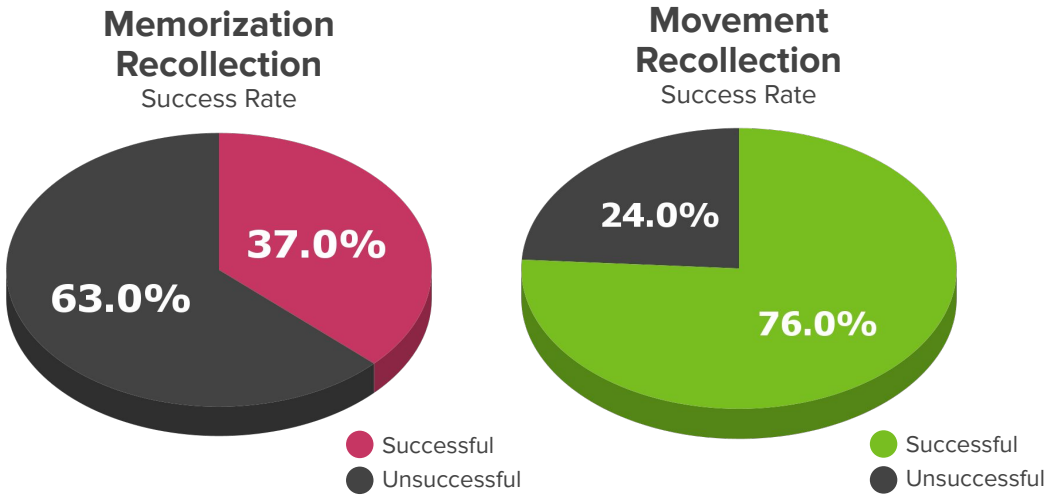


Gallery Stair

Calming Retreat,
Mother's Room and Small Conference

The Need for Movement





"Students who incorporated movement into their learning strategy remembered 76 percent of the material, while those who engaged in 'deliberate memorization' recalled only 37 percent."

Annie Murphy Paul
The Extended Mind: The Power of Thinking Outside the Brain

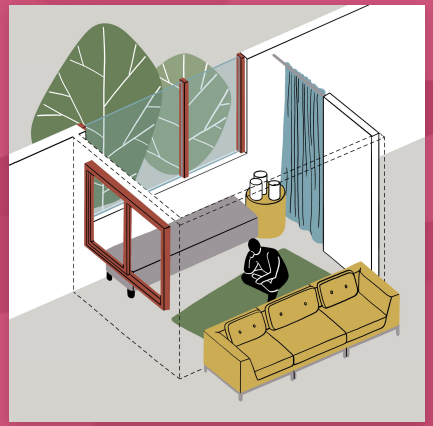
The Need for Movement

Standing meetings with sound diffusion and natural light

The Need for Movement & Connection to Nature

A Design Framework for Essential Learner Needs

70 freely available design patterns



Safety & Wellness

Autonomy & Opportunity

Love & Belonging

Curiosity & Mastery

Nature & Beauty

Purpose & Joy

Reflect for a moment:

Think of a place that you like to go to work, or to learn, that helps bring out your best. Try to visualize that place in your mind.

What's important about it?

Share-pair, *3 min*

Find someone with shoes like yours and describe the place that you visualized.

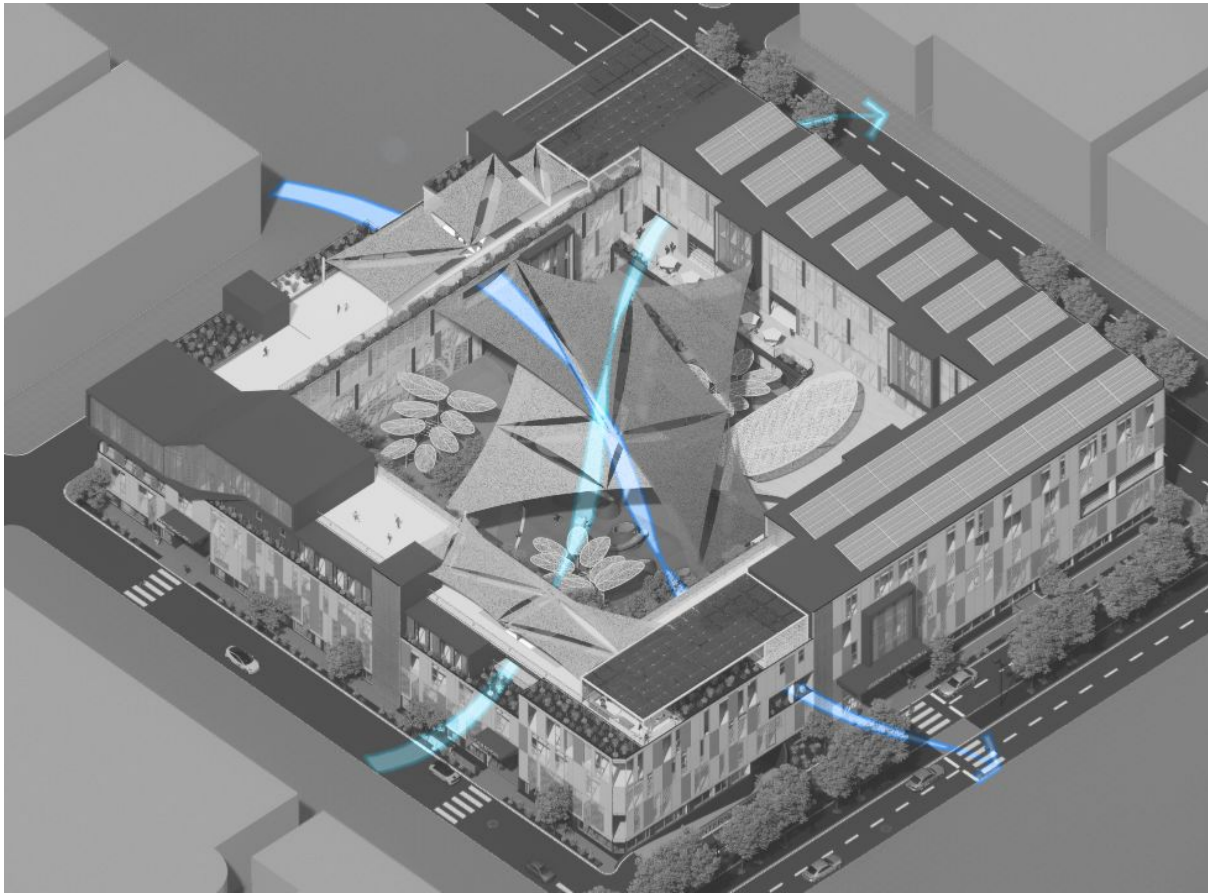
Case Study:
From Minneapolis to Jeddah

How can designers address essential human need and also the needs of a warming planet?

Case Study

Key ideas:

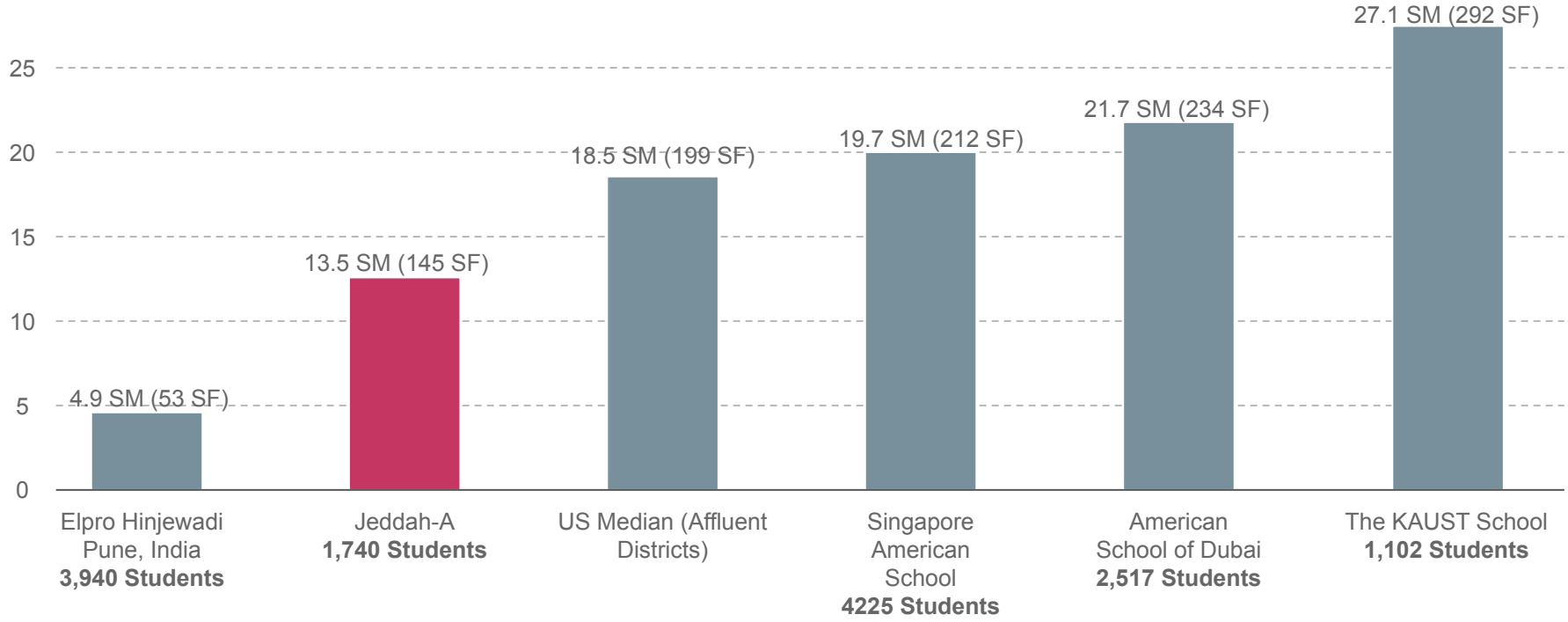
- Adaptive reuse rather than landfill
- High Density but with a feeling of open space
- Making a big school feel small
- Embrace shade and outdoor space in 116 F
- Taking down fences and inviting community



CAPACITY BENCHMARKS | GSM/Student

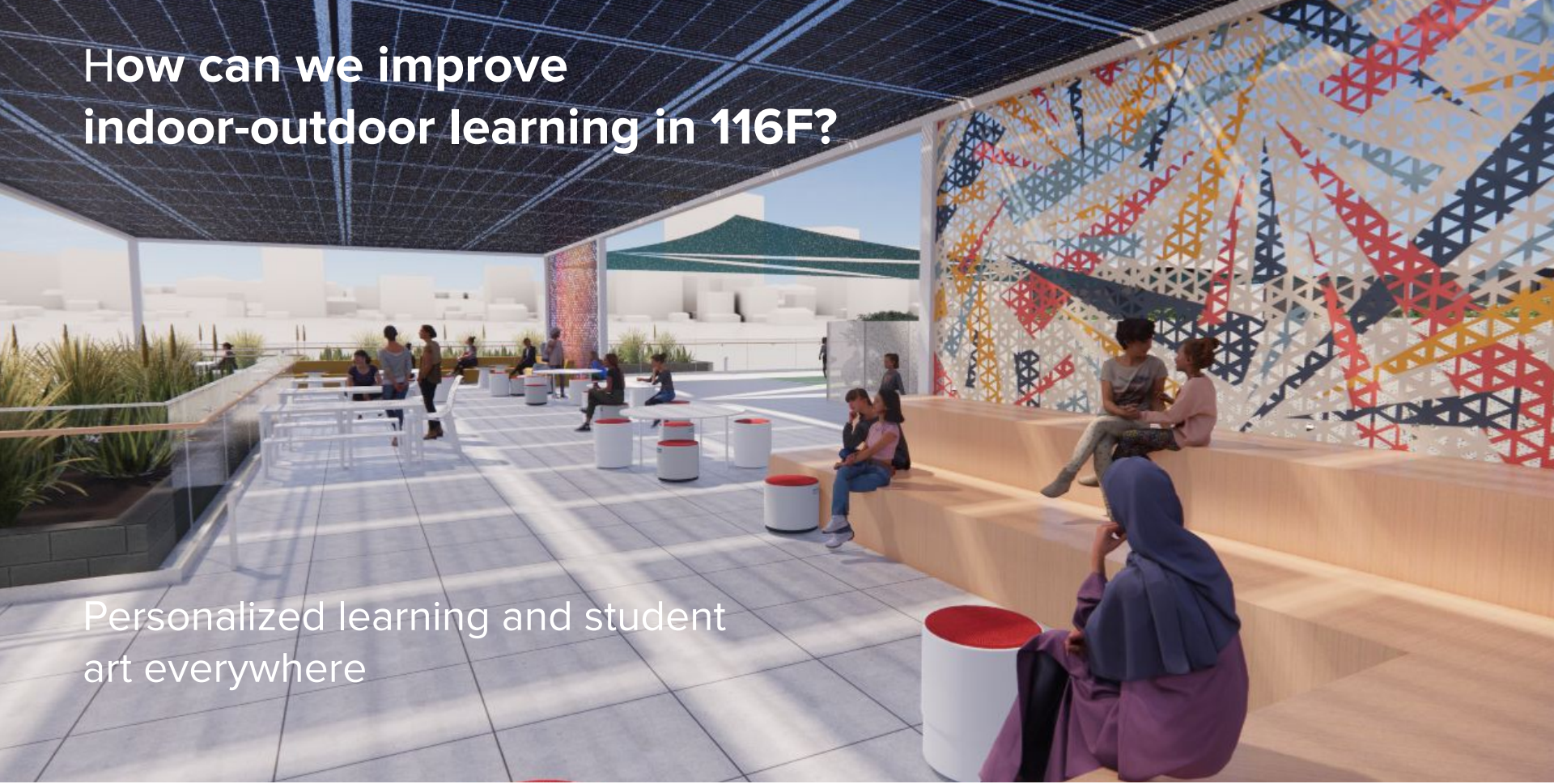
What if we right-sized the capacity based on GSM/Student of other international schools around the world?

Jeddah-A
Current Area: 23,506 sm
Total Capacity: 1,740 Students
GSM/Student = **13.5** sm (145 sf) / Student



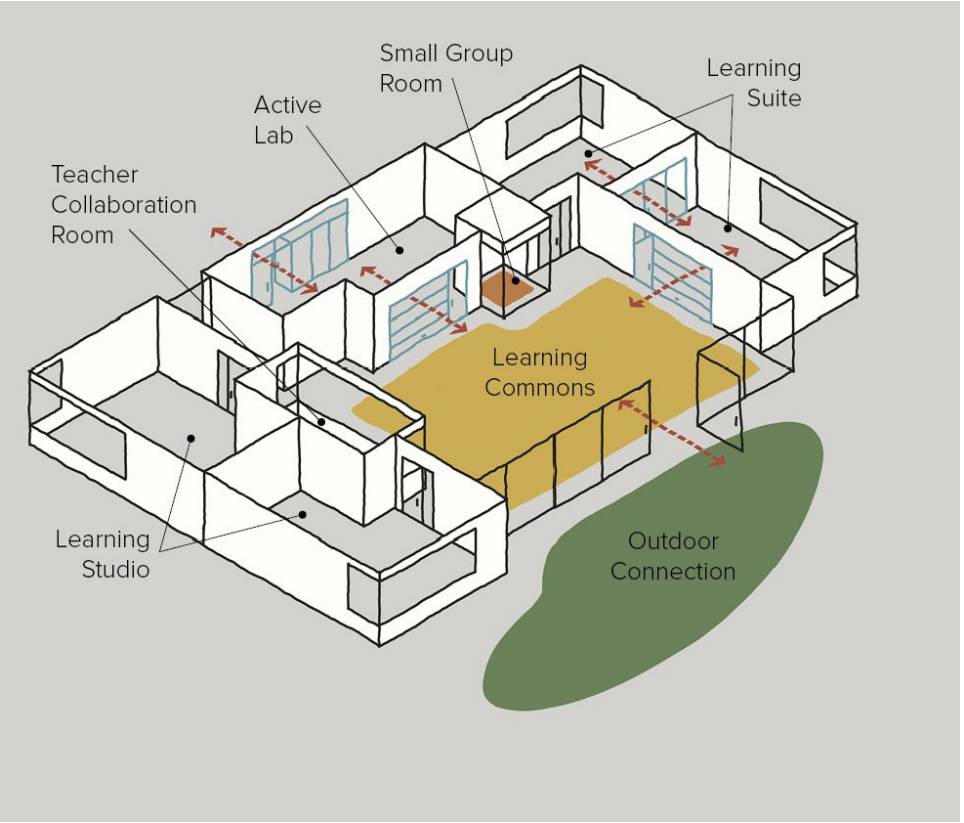
Big School, Small School Feeling

How can we improve indoor-outdoor learning in 116F?



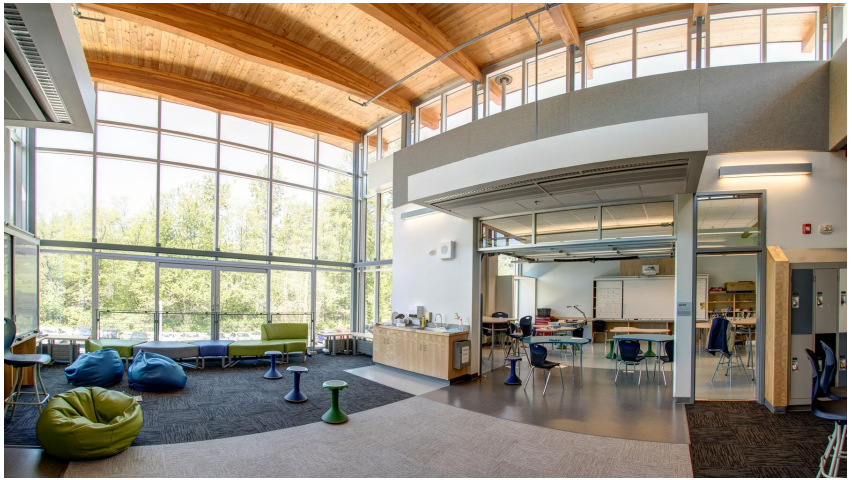
Personalized learning and student art everywhere

A Framework of Design Patterns

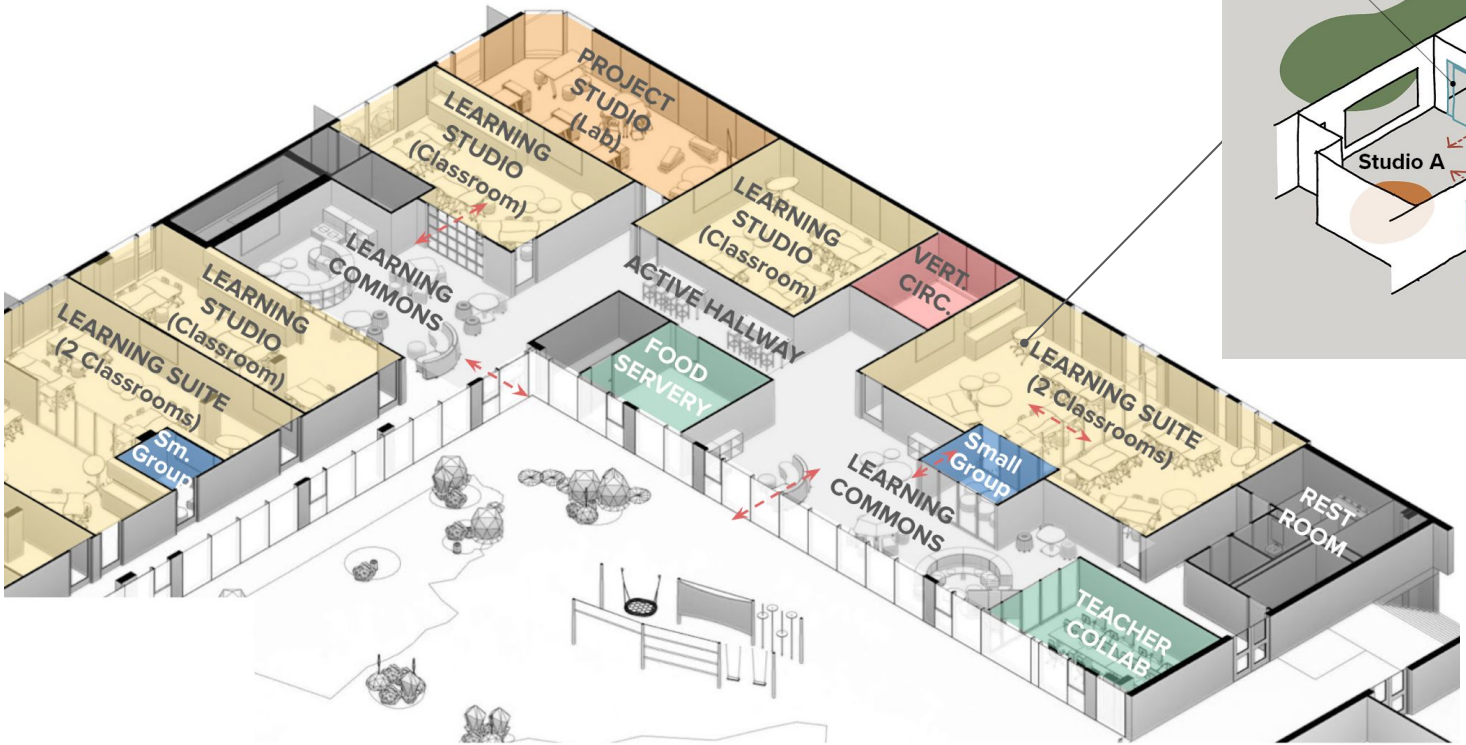


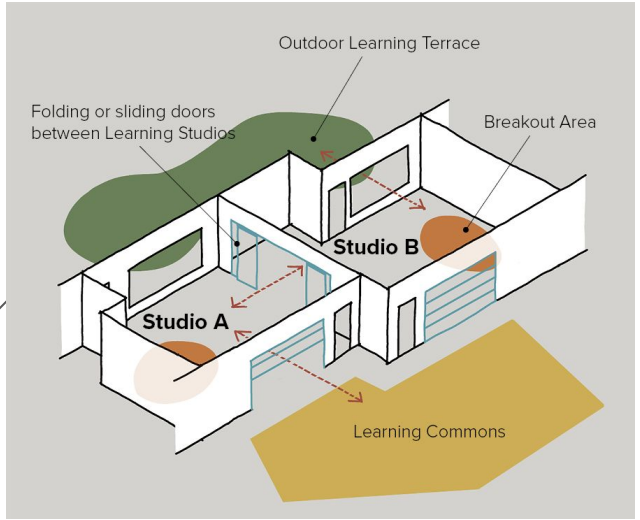
Learning Community:

Replaces the classroom model, where one teacher engages with 20-25 students in a single confined room, with a model in which 3-6 teachers engage up to 132 students in a variety of agile spaces.

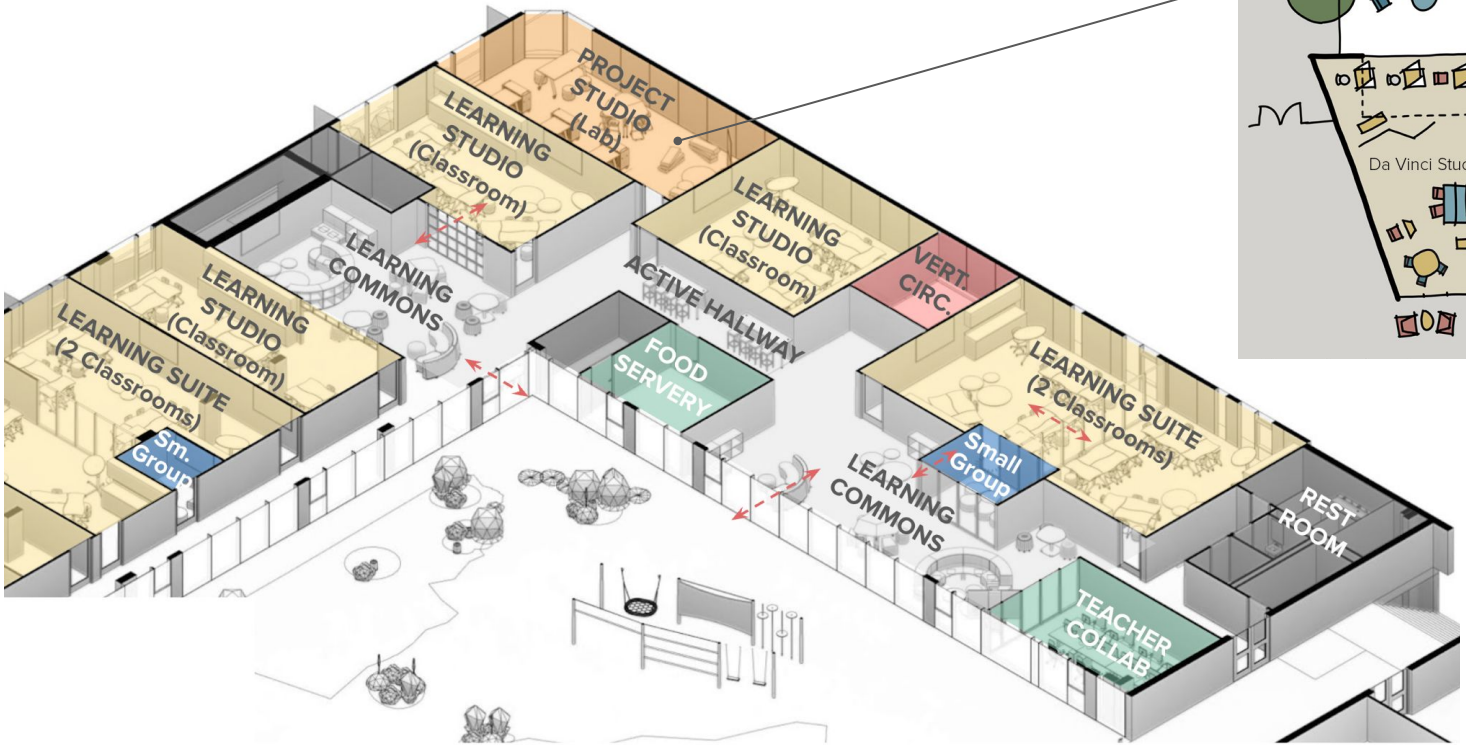


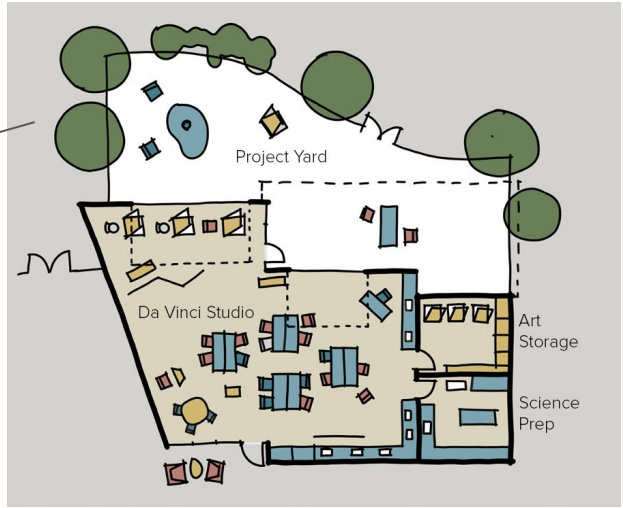
Learning Suite



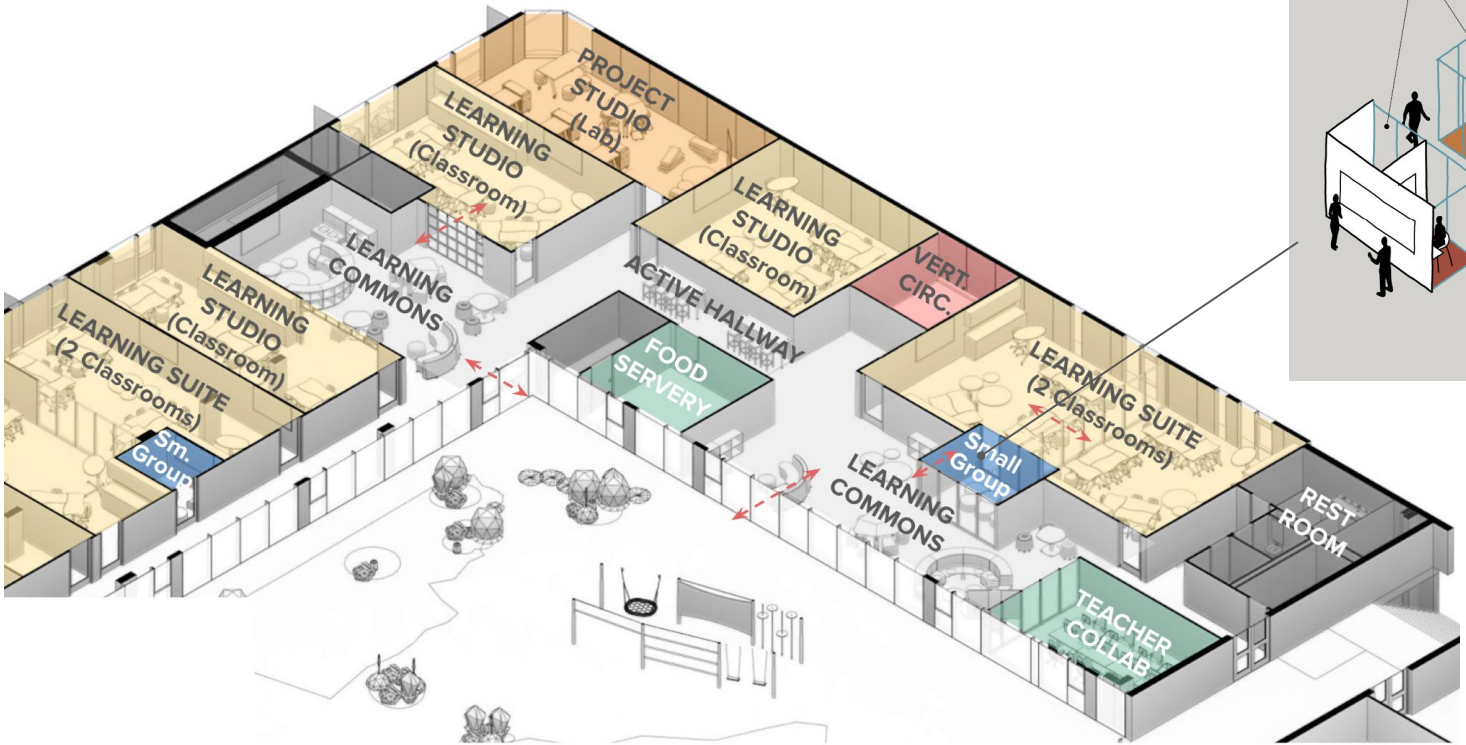


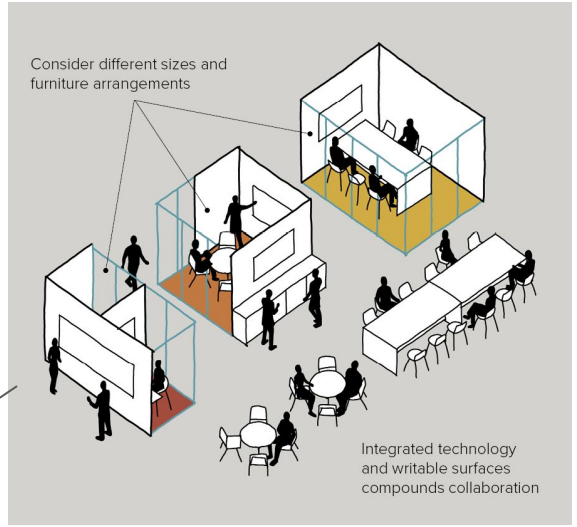
Project Studio



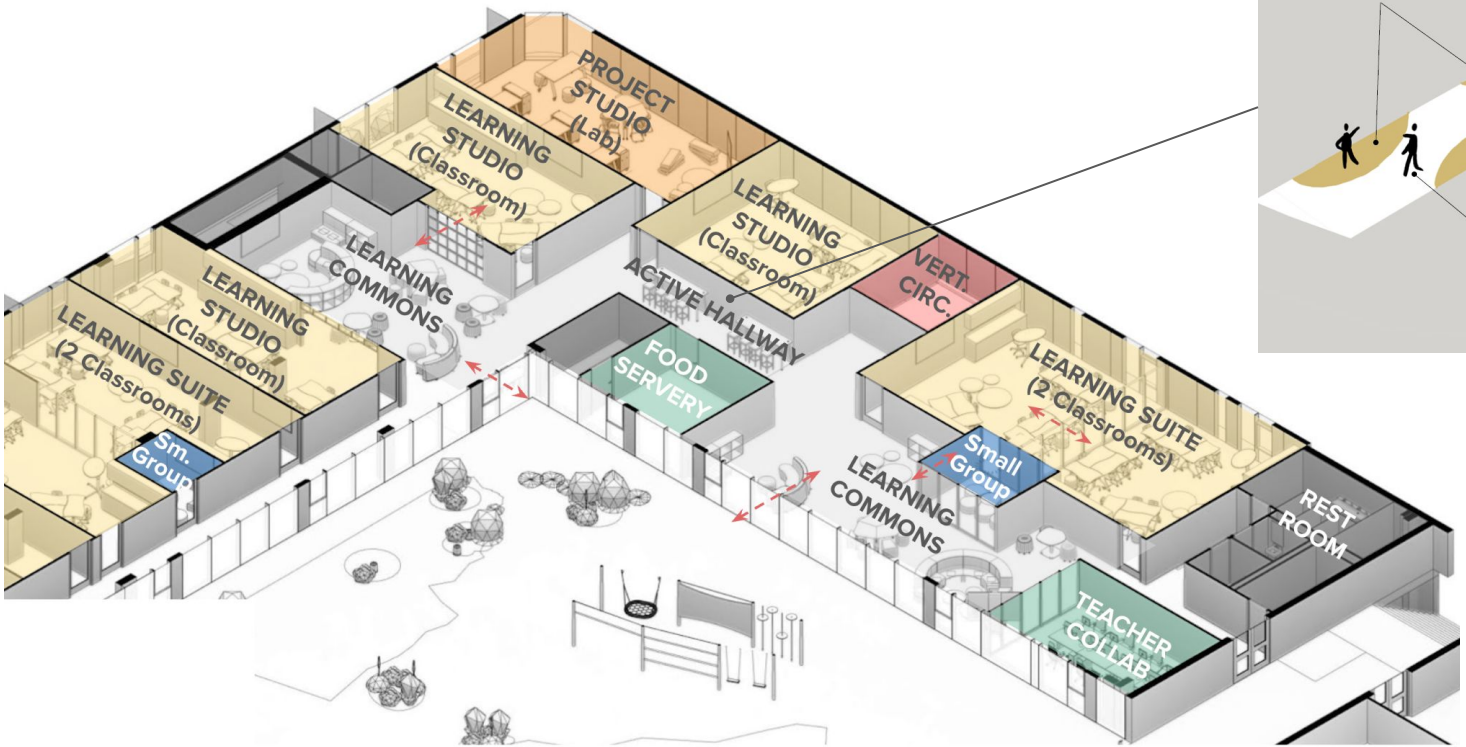


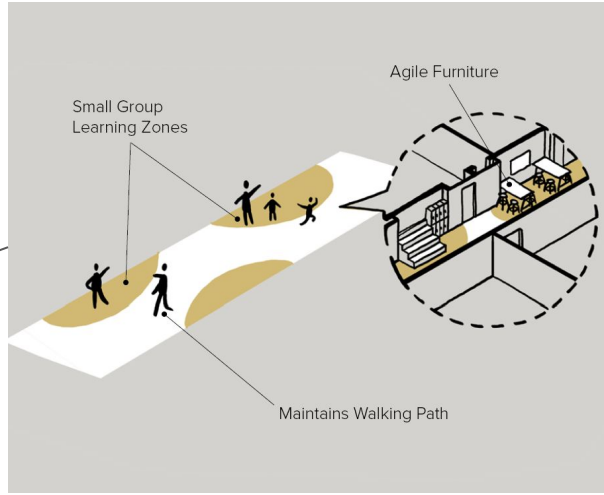
Small Group Rooms



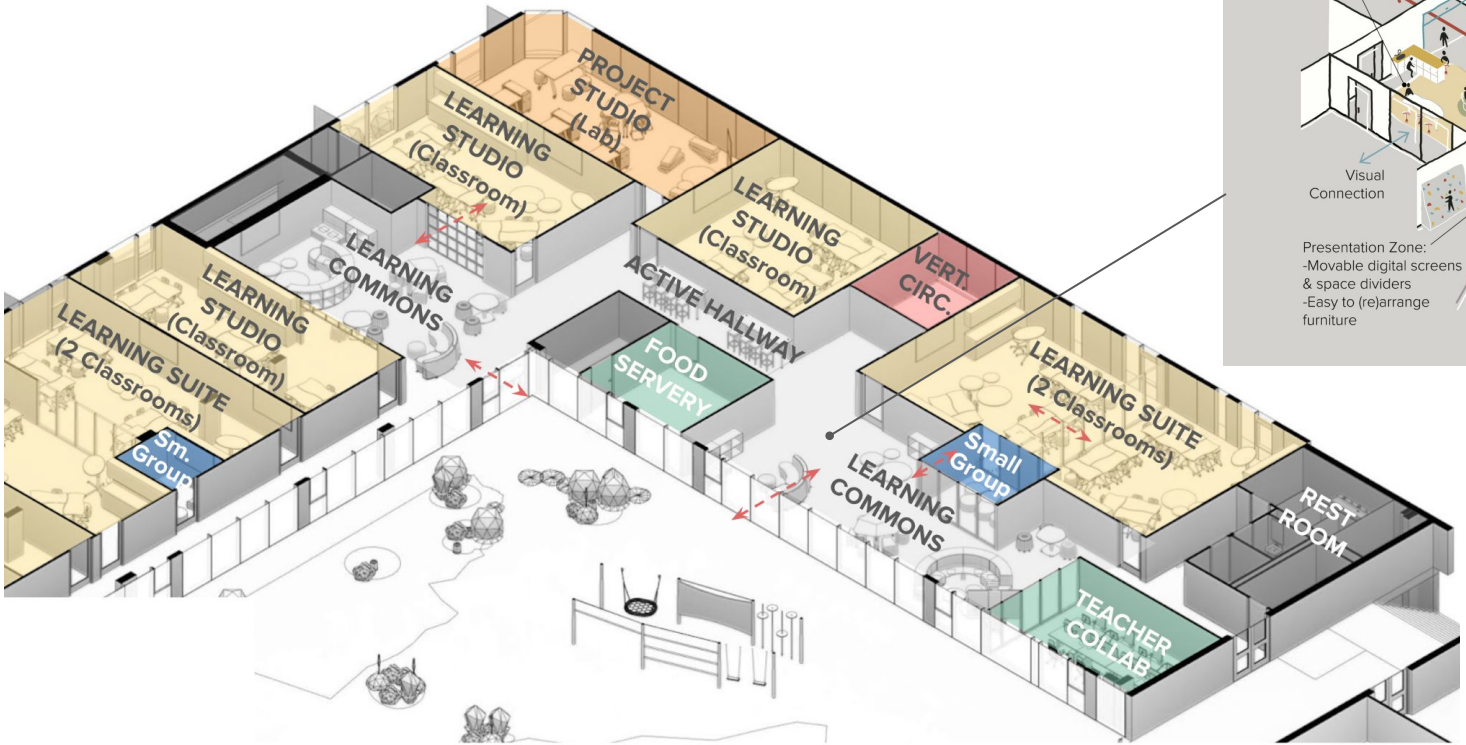


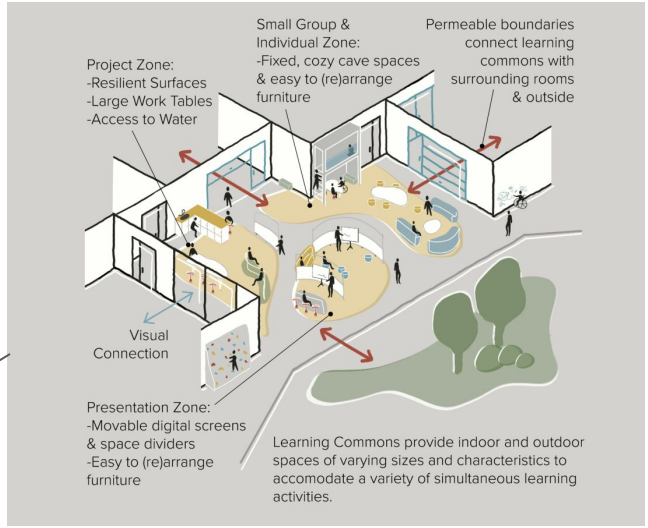
Active Hallway





Learning Commons





JEDDAH-A INTERNATIONAL

What resonates from the video?

PollEV.com/fieldingintl505

What resonates from the video?

Top

Start the presentation to see live content. For screen share software, share the entire screen. Get help at **pollev.com/app**

Spatial Paradigms for Schools

Conventional Paradigm							
The school building operates as a series of segregated, fixed learning spaces	A classroom-based approach to learning	Corridors function as arteries to get from one place to another	School safety is mostly focused on building security	Outdoor spaces are primarily used for recess and sports	Institutional, static furniture & fixtures that tend to support lots of sitting and obedience	Good lighting and acoustics are seen as a luxury	The physical environment lacks a strong sense of local ethos, often isolated from the rest of the surrounding community
Thriving Paradigm							
The school building operates as a fluid environment of connected, agile learning spaces	A community-based approach to learning	Circulation areas function as diverse learning spaces that foster connectivity end collaboration	School safety takes a holistic approach that addresses building security and each student's mental, physical & social-emotional health	Outdoor spaces are seen as essential places to learn, connect with nature, and engage in physical activity	Comfortable, diverse, and agile furniture & fixtures that tends to support more movement and choice	Good lighting (especially natural light throughout the school) and acoustics are prioritized	The physical environment embodies local values and context often aiming to become more of a whole community asset

This is why we do the work

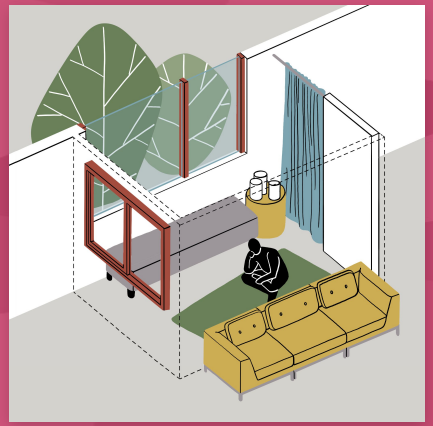
Activity:

*Choose one the six thriving elements

*Move to the associated poster around the room

*As a group, discuss ways we can foster your element in learning environments

*Assign a spokesperson



Safety & Wellness

Autonomy & Opportunity

Love & Belonging

Curiosity & Mastery

Nature & Beauty

Purpose & Joy

Ask any question

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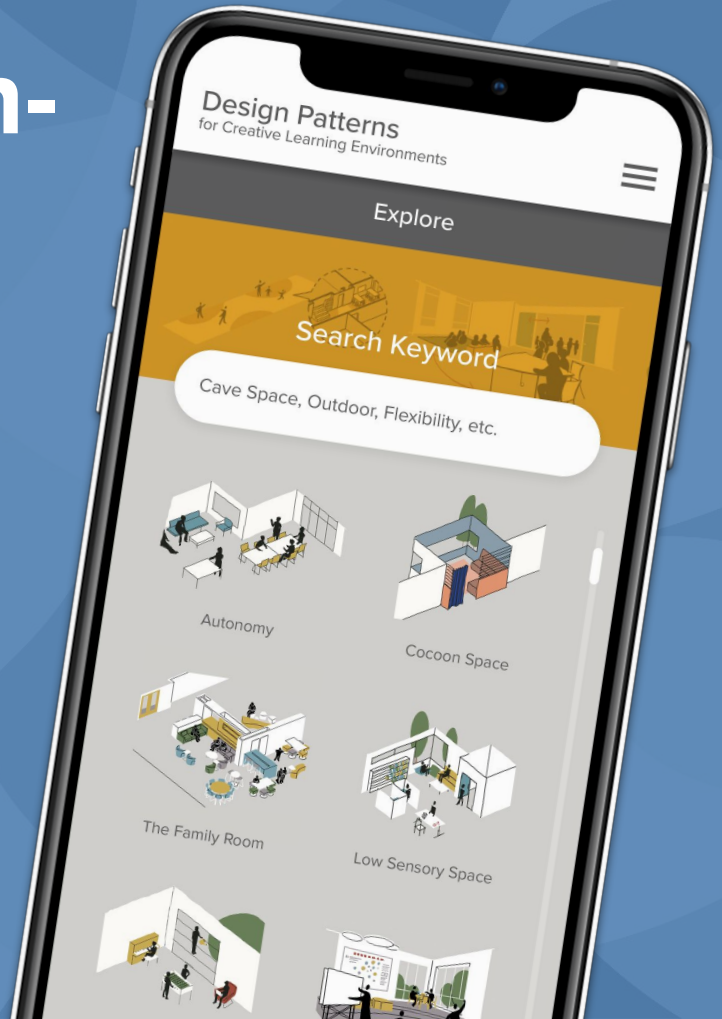
A Tool for Human-Centered Design

SchoolPatterns.com



Explore

Search Keyword

Cave Space, Outdoor, Flexibility, etc.

Explore by Category

Safety & Wellness | Purpose & Joy | Curiosity & Mastery | Love & Belonging | Autonomy & Opportunity | Nature & Beauty

Safety & Wellness

Humans of sound mind, body, and spirit. Safety through physical security and emotional intelligence. Holistic wellbeing - that is having our complete personal hierarchy of needs met - is a foundation for a curious mind and compassionate soul. We want our school environments to be secure from external threats while providing active places for personal safety, health, and wellness.

Show All

Safety & Wellness

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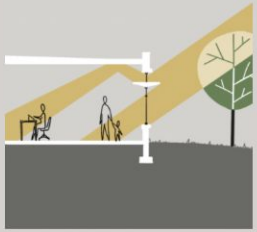
Sensory Control

Layered Access

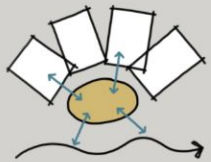
Quiet Zone

Engage the Senses



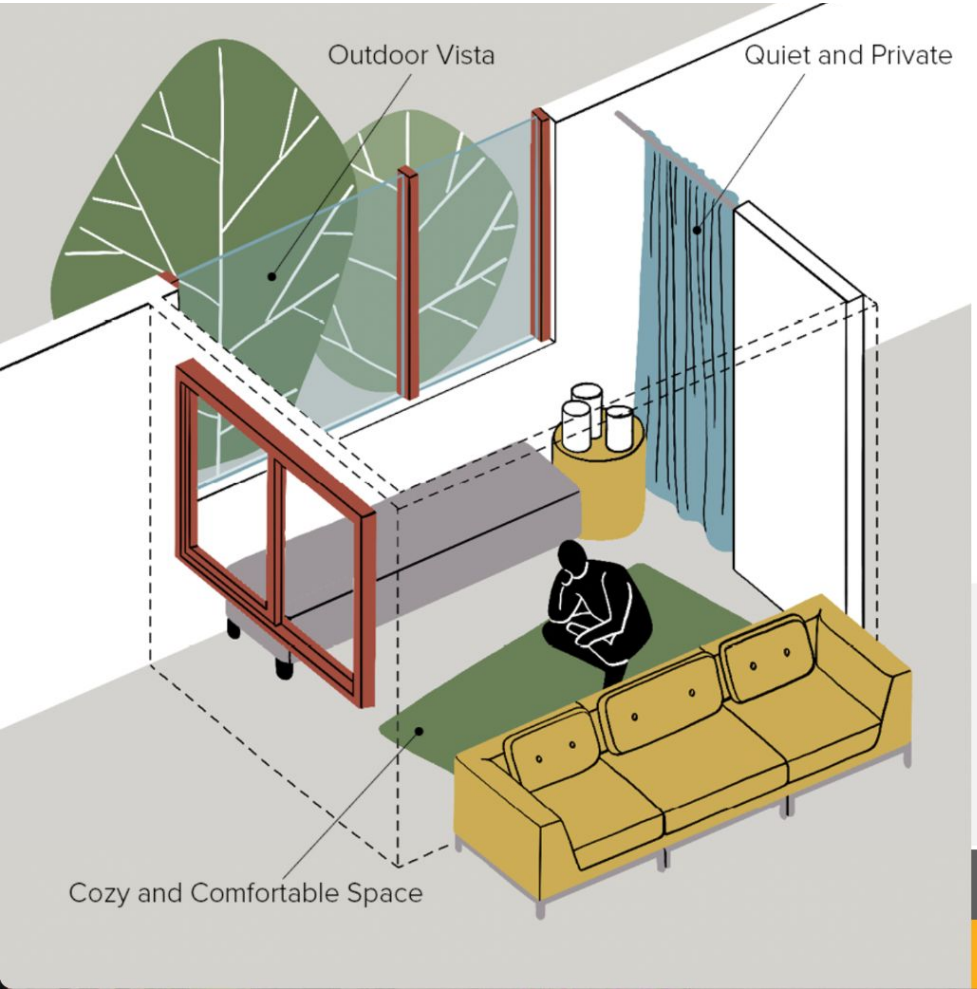
Daylighting

Considering Sound



Transparency

Calming Retreat



Calming Retreat

Problem

Spaces appropriate for SEL and self-regulation need to be made accessible. Whether for meditative reflection, guided self-regulation, or simple “brain breaks,” these spaces serve as a resource for the school to build resilience and mindful practices.

Solution

Distribute dedicated spaces for individual reflection, mindfulness practices, and emotional regulation. Specific aspects of these types of spaces include the following: views to outside, comfortable seating for up to three people, space for personal movement, proximity to communal spaces for ease of access, and partitions for privacy and group activities.

Related Patterns Student Lounge, Low Sensory Space, Cave Space

Comfort | Color | Variety | Holistic | Acoustic | SEL | 21st Century

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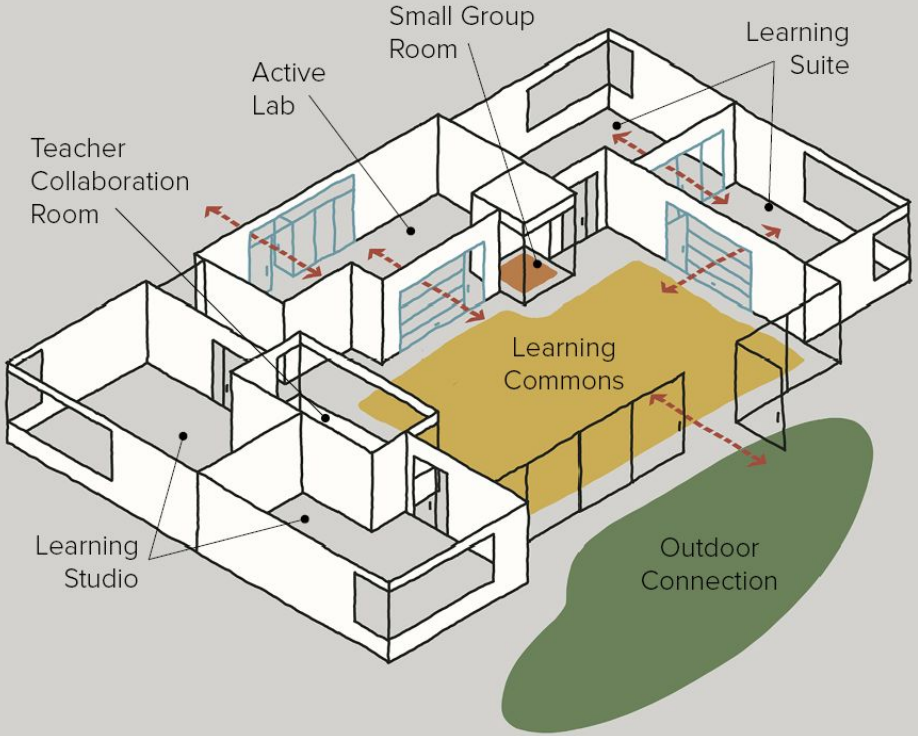
View Image Gallery

Learn More

Calming Retreat

Anne Frank Inspire Academy
San Antonio, TX

Design Patterns | Learning Communities



A Learning Community replaces the classroom model, where one teacher engages with 15-40 students in a single confined room, with a model in which 3-6 teachers engage up to 150 students in a variety of agile spaces.

GETTING SMART

Randy Fielding Nov 11, 2021

Learning Communities Change the Paradigm

Place Based Education

Key Points

- **A Learning Community forms a spatial paradigm shift away from the conventional "cells-and-bells" classroom model.**
- **Learning Communities create a system of diverse and agile spaces that are meant to foster collaboration, creativity, and wellness.**
- **Creating a microschool using the Learning Community Design Pattern as a spatial model is a wonderful approach for a school or district wanting to be more innovative, equitable, and learner-centered.**

Learning Community

Norma Rose Point School
Vancouver, CA

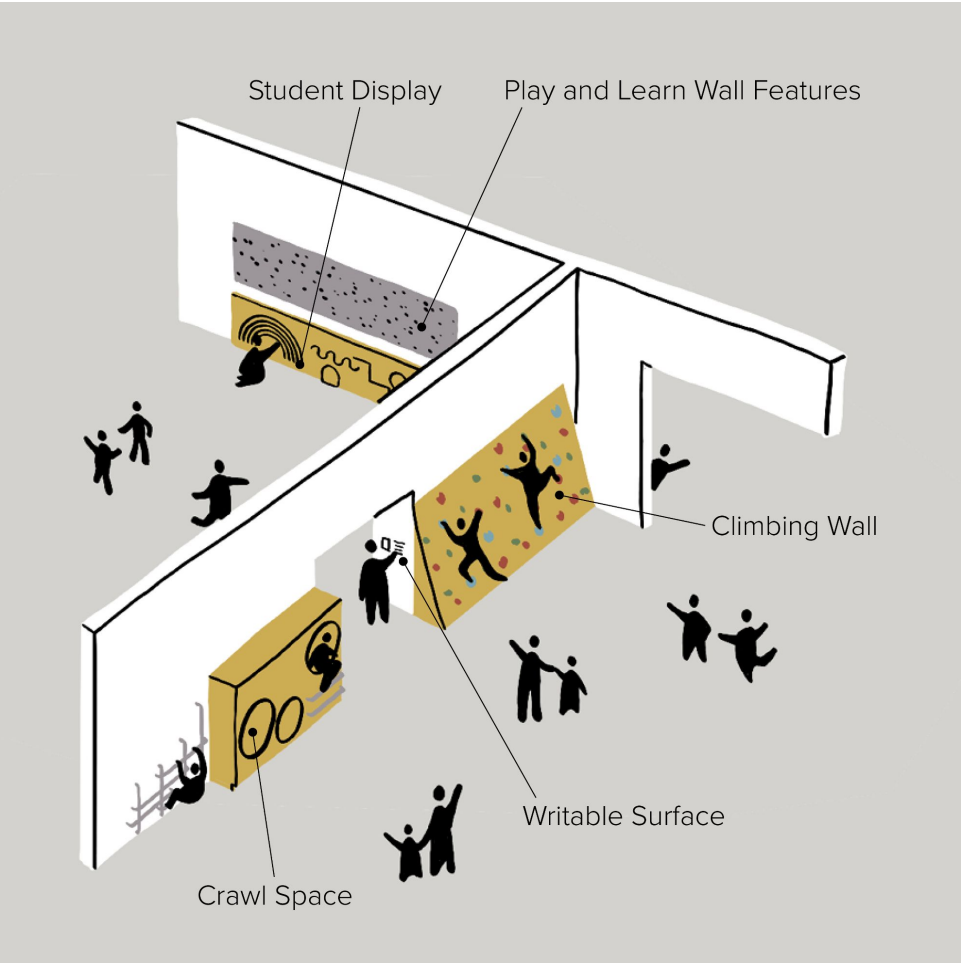
Learning Community

Schiffer Collaborative School
Sheridan, Wyoming

Learning Community

Eden Park Elementary
Cranston, Rhode Island

Design Patterns | Learning Walls



GETTING SMART

Randy Fielding Dec 9, 2021

Learning Walls Versus Teaching Walls

TWEET SHARE EMAIL

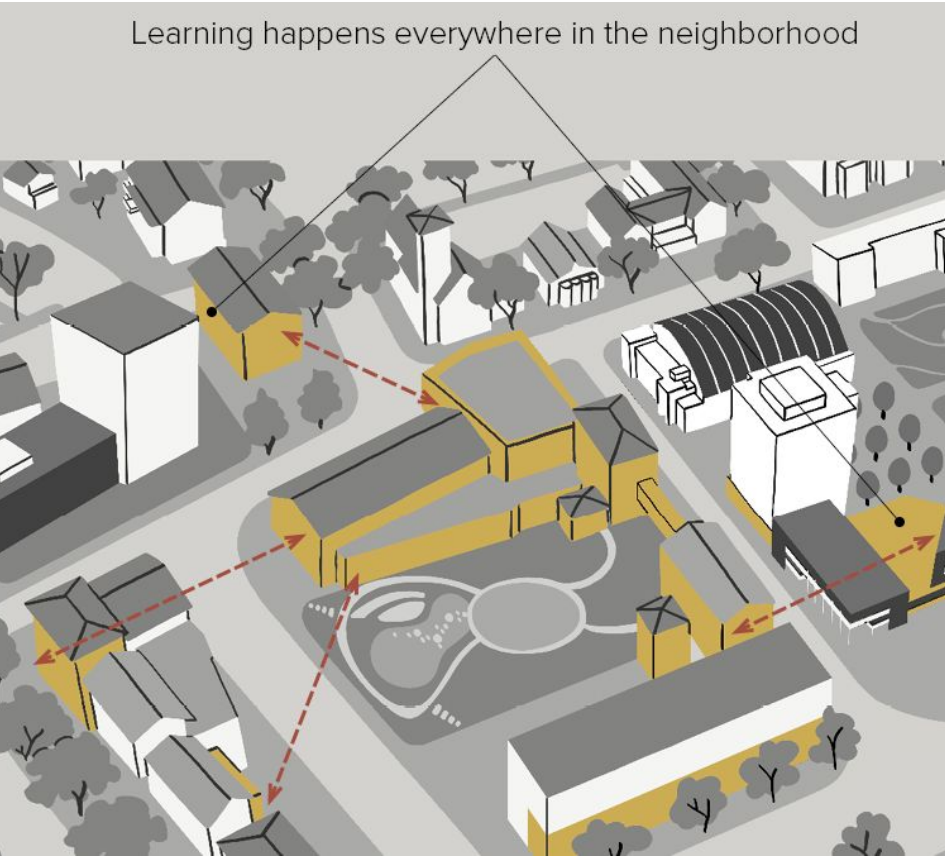
Place Based Education

Key Points

- **Learning Walls is a Design Pattern that can help schools "Defront the Classroom".**
- **Ways to make walls more of an asset for learning include making them writable and more permeable.**
- **Being thoughtful about what goes on (and doesn't go on) walls is important to consider.**

Learning Walls

Design Patterns | Neighborhood as School



GETTING SMART

Randy Fielding Dec 2, 2021

Learning In Community– What Does it Look Like?

TWEET SHARE EMAIL

Place Based Education

Key Points

- **Neighborhood as School Design Pattern aims to make learning more authentic, relevant, and community-connected.**
- **If communities are willing to rethink when, where, and how learning happens, they will find many of the spaces for learning already exist.**
- **This builds on the emerging ecosystem work being led by Education Reimagined.**

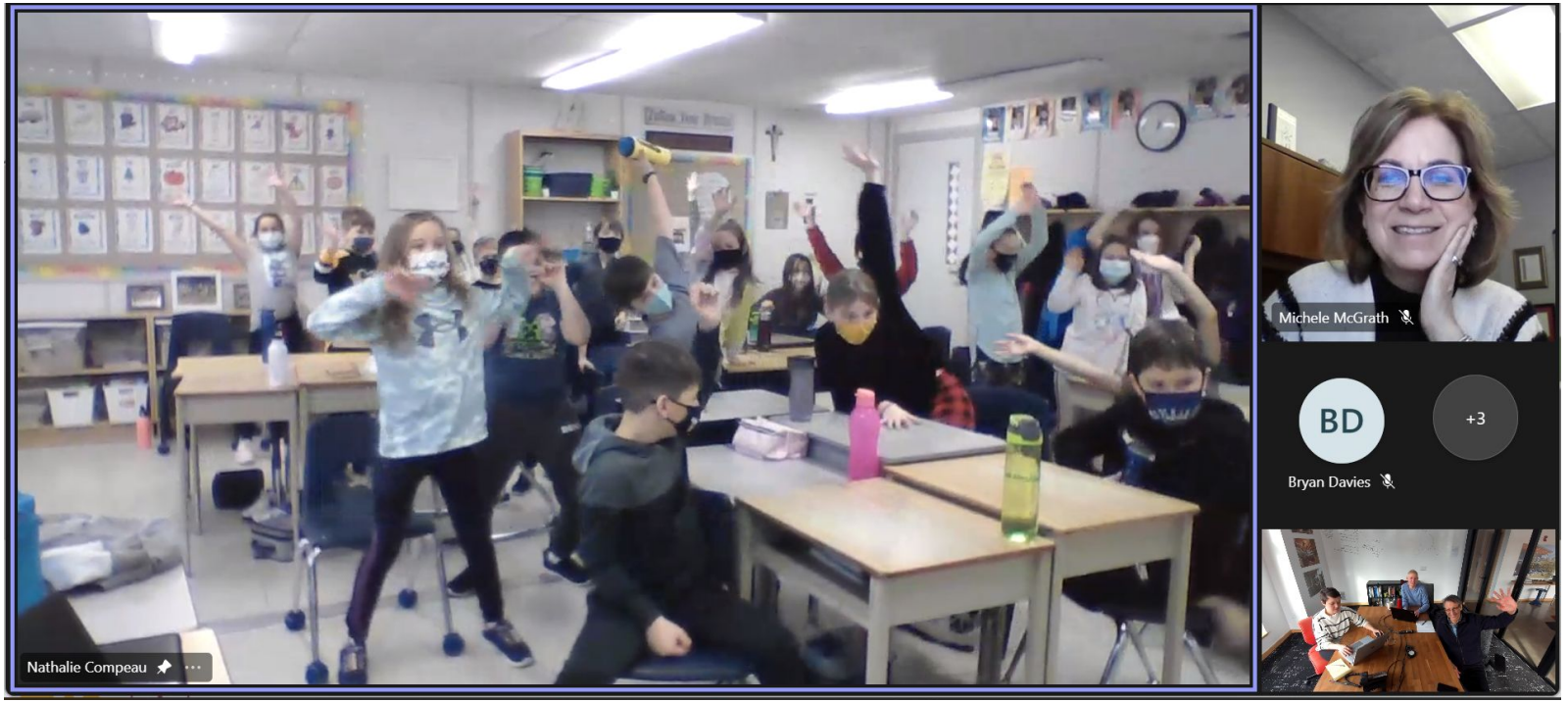
METROPOLIS

This pattern featured in Metropolis in April 2022: [You Can't Lift Up America's Schools Without Lifting Up the Neighborhoods Where They Operate]

Visioning Process: 2 Case Studies

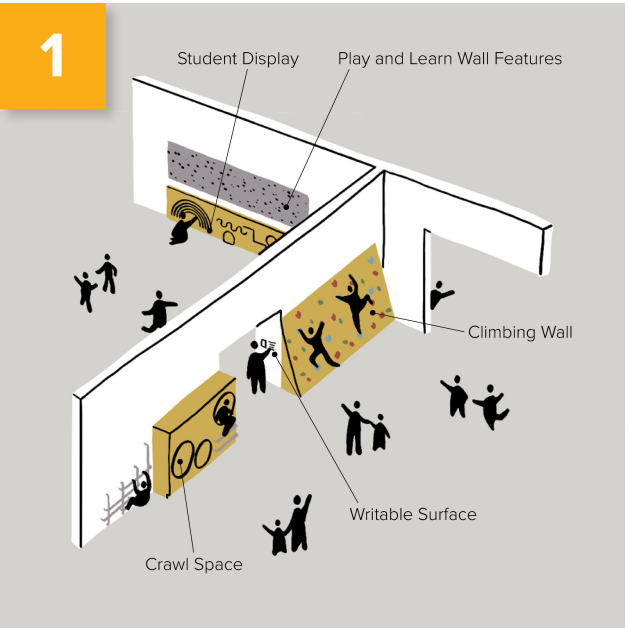
Visioning Process

Our Lady of Mount Carmel | Student Focus Groups



Which of the following Design Patterns resonate with you the most?

1

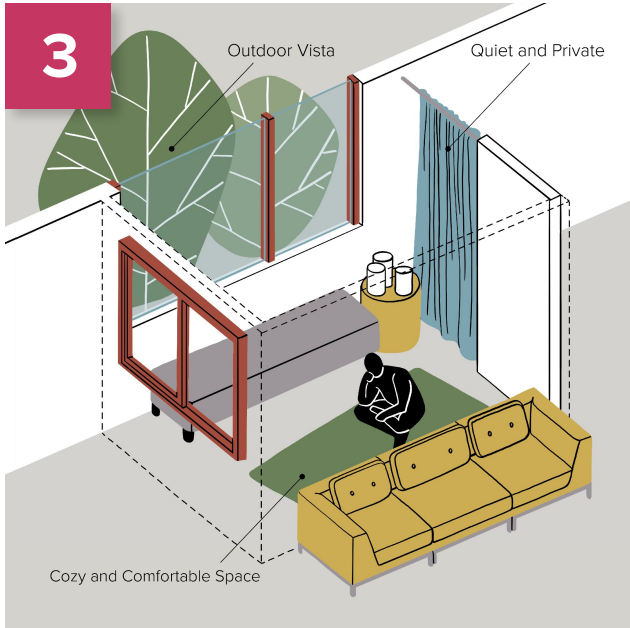


Learning Walls

2

Outdoor Classroom

3



Calming Retreat

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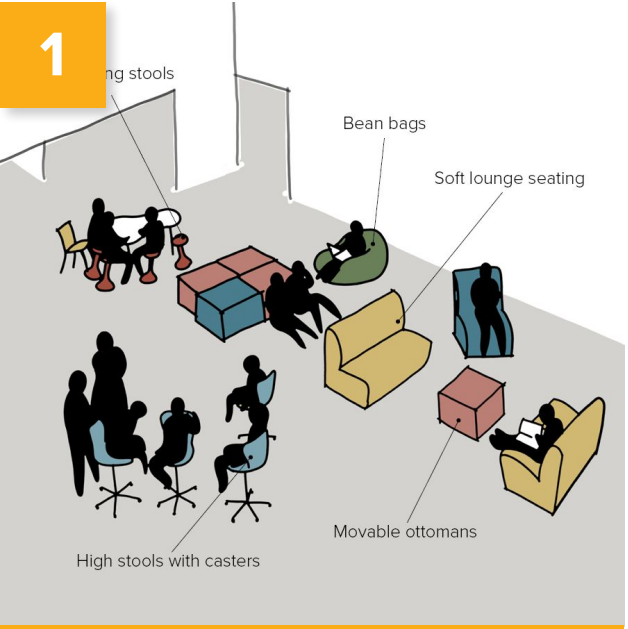
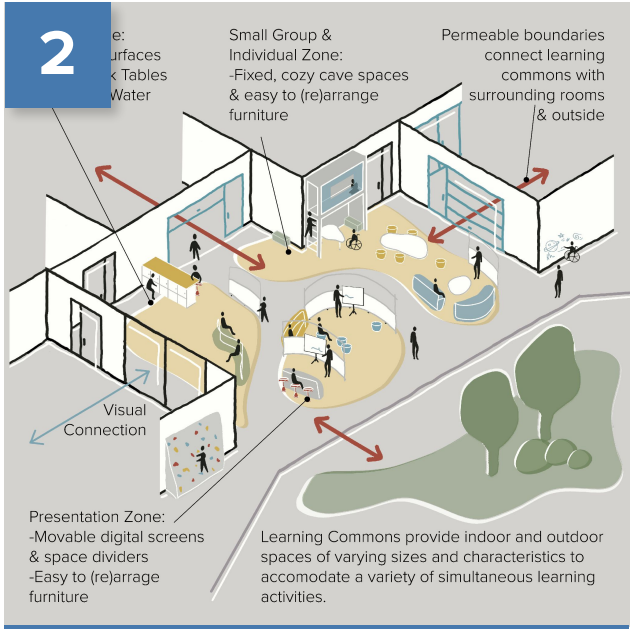
1



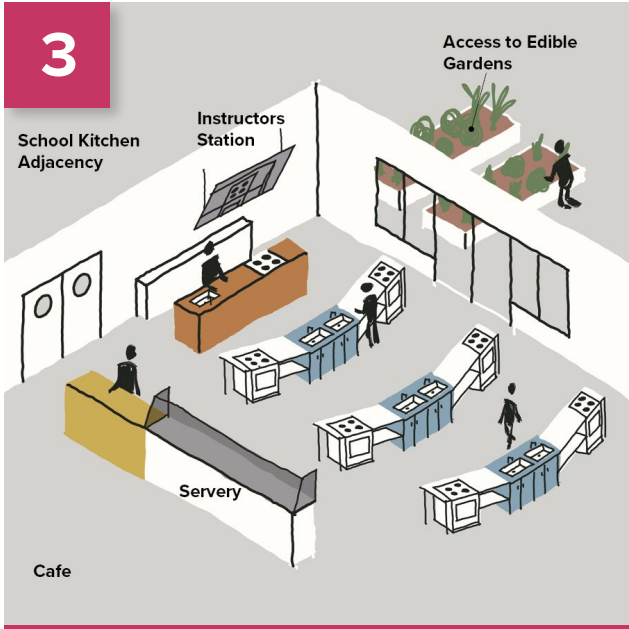
Variable Furniture

2



Learning Commons

3

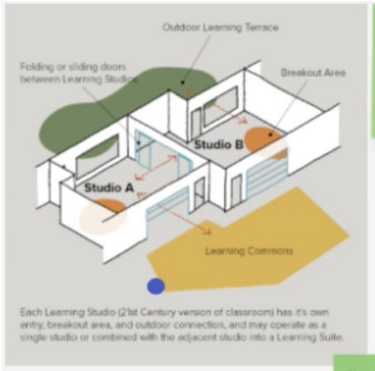


Culinary Arts Kitchen

Visioning Process

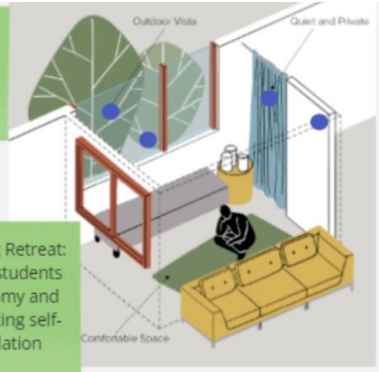
OLMC | Student Focus Groups

Teachers contributed by identifying barriers that get in the way of mission-aligned learning and exploring design patterns that would support and adapt to the unique needs of every child.



Provides a space to calm or de-escalate but still allows educators to keep an eye on the student

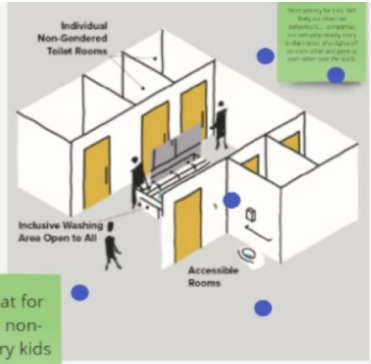
Learning Suite



Calming Retreat: Giving students autonomy and promoting self-regulation

Would be great to have items built in rather than having to source/order individual sensory items for specific students (good for all)

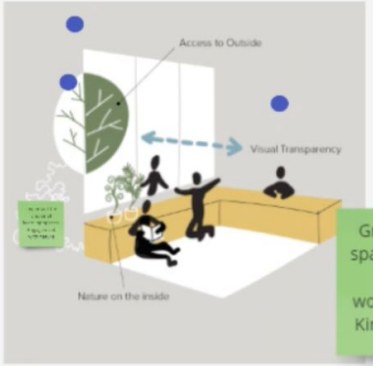
Calming Retreat



Great for our non-binary kids

Home-like Bathrooms

Love to learn more about this space for the FI program



Great way to spark inquiries and wonderings in Kindergarten!

Indoor Outdoor Connections

Would love to see how language studio/suite can be utilized in French Immersion learning

Language Studio

Language Suite

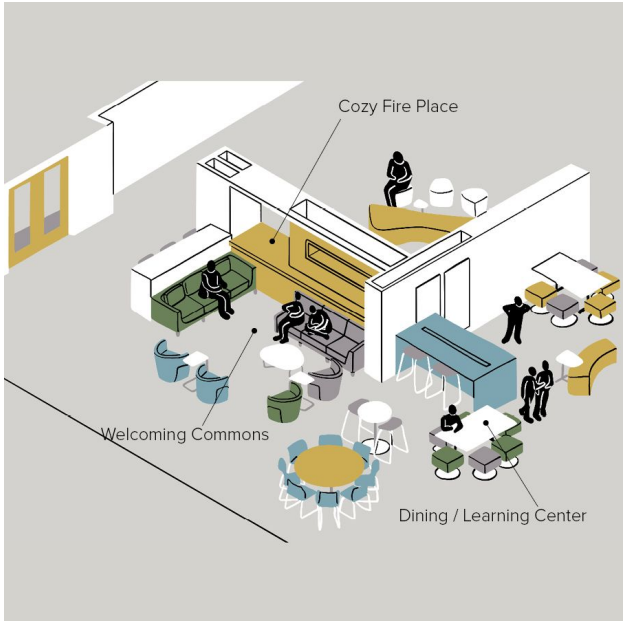
San Miguel High School

DISCOVERY REPORT

May 2022

When You're Here You're Family

Building on a strength of a relationship-centered school that creates welcoming places of belonging.

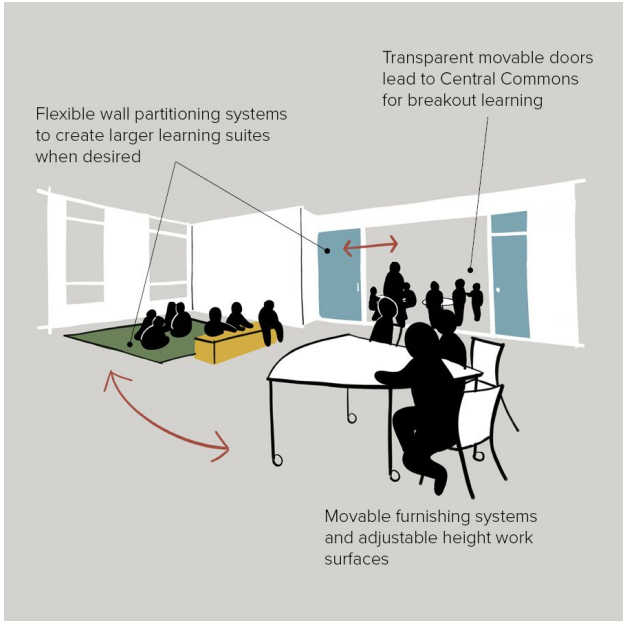


The Family Room

Welcoming Entry

Places to Find Myself

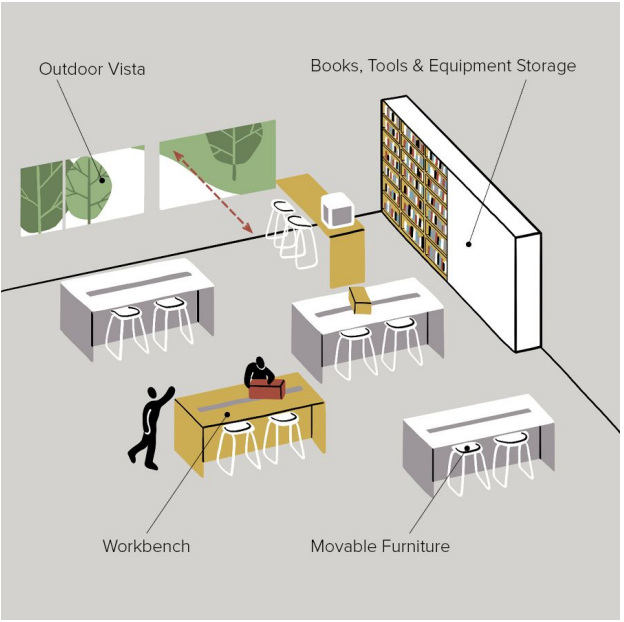
Creating environments where individuals can relax, reflect, have fun, and discovery who they are.



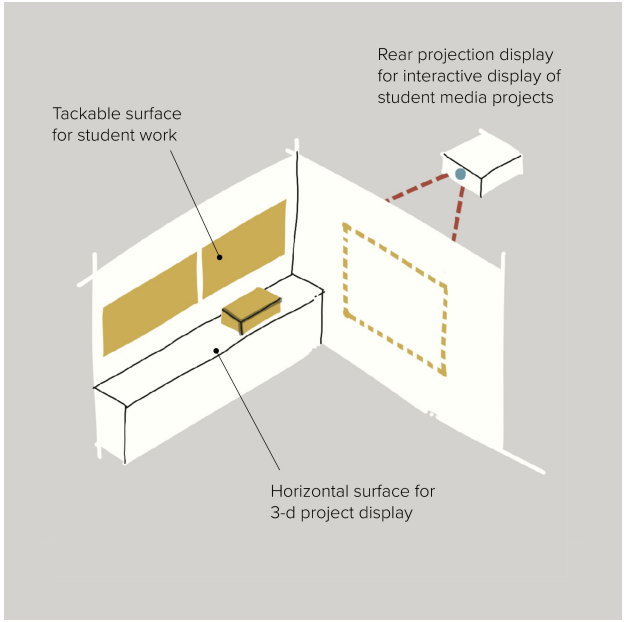
Agile Spaces

Creativity Across Disciplines

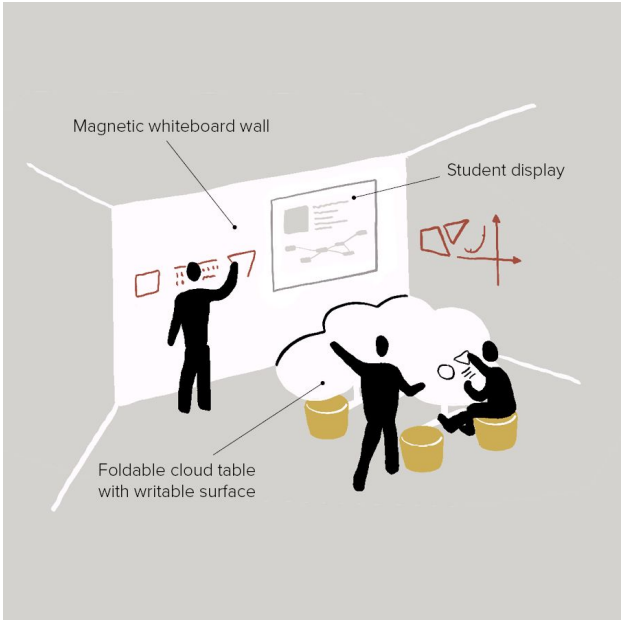
Places to design, make, and share the ways we are all creative in and across many learning domains.



STEAM Workshop



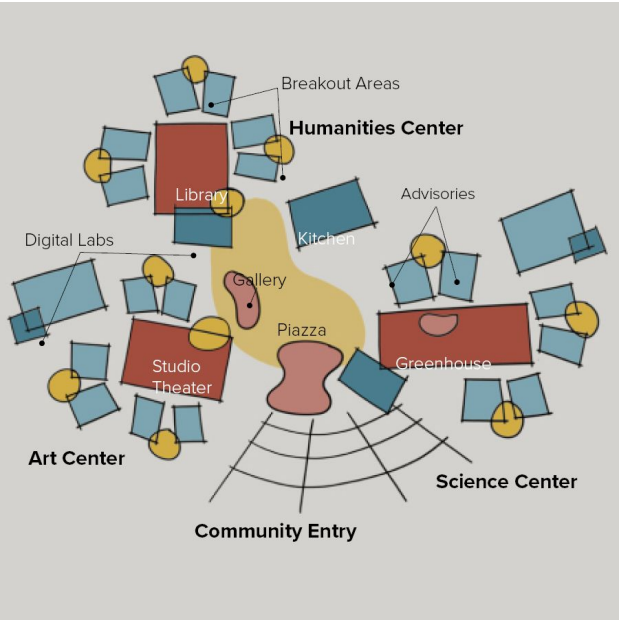
Student Display Space



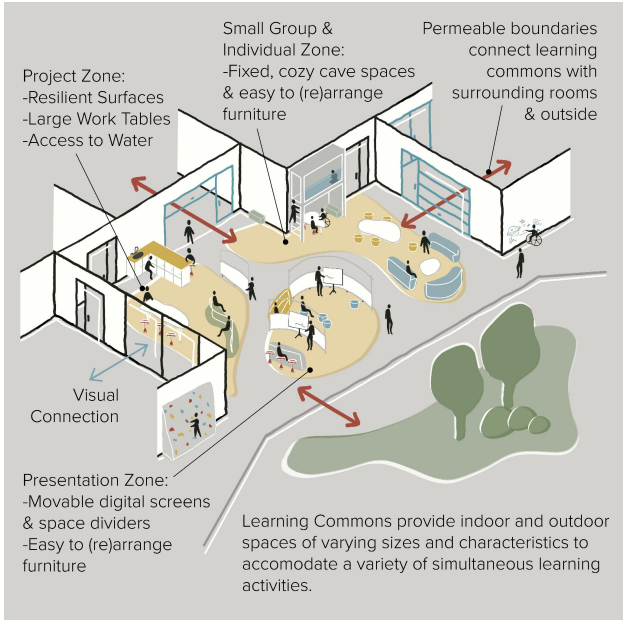
Writable Surfaces

Diversity of Inclusive Spaces

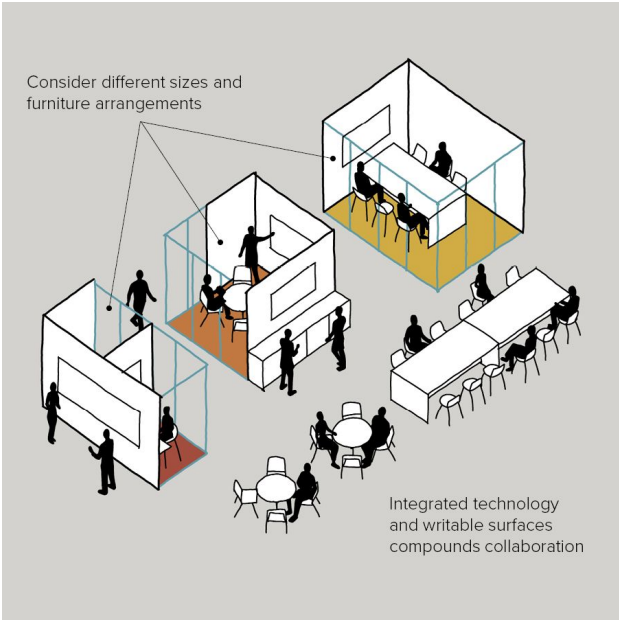
A variety of functional environments creates the conditions for every learner to have agency.



Connected Campus



Learning Commons



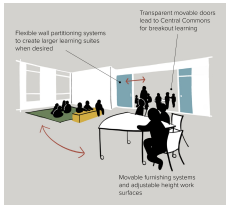
Small Group Rooms

Aesthetically Beautiful Campus

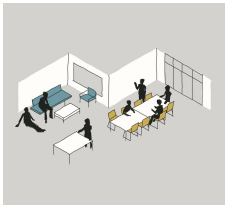
The campus brings you alive through a sense of beauty, artistry, and local identity.

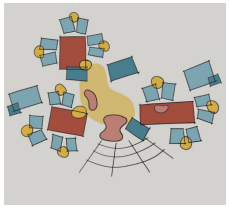
Design Patterns | San Miguel High School

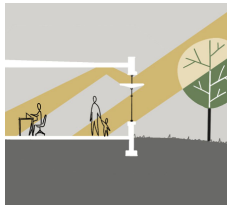
Using Human Centered Design Systems: A Future Measuring Stick

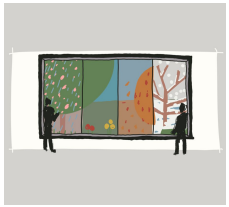


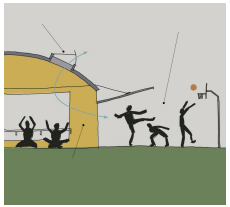
Agile Spaces

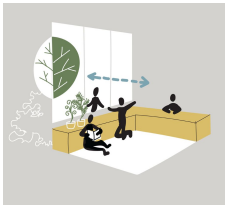

Choice in Environment

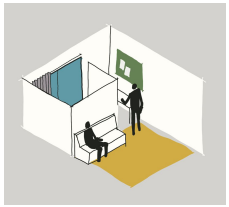

Connected Campus

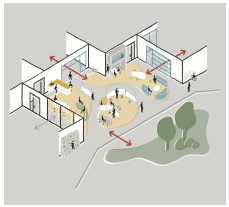

Daylighting

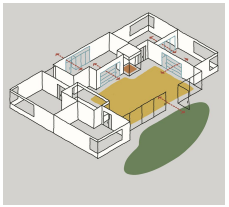

Flow of Nature

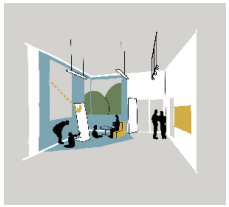

Health, and Wellness


Indoor-Outdoor


Layers of Privacy

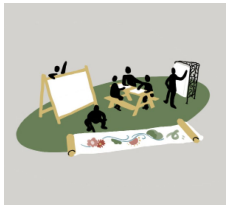

Learning Commons

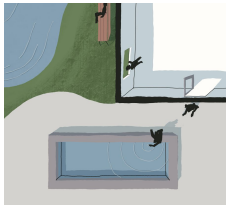

Learning Community

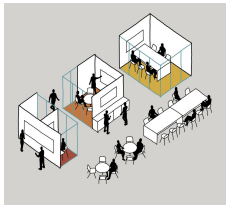

Lighting & Color

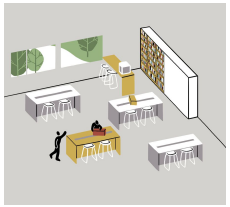
Local Signature

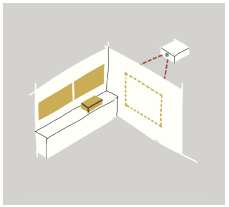
Meandering Path

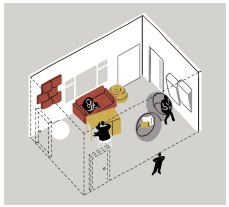

Outdoor Art

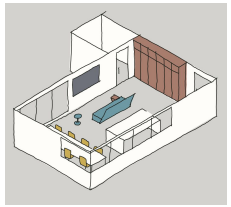

Presence of Water

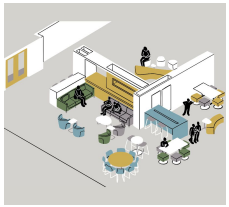

Small Group Rooms


STEAM Workshop

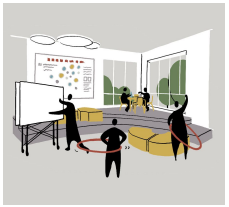

Student Display

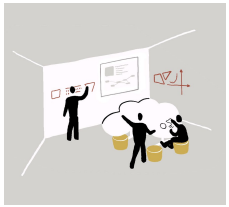

Student Lounge


Teacher Collaboration


The Family Room

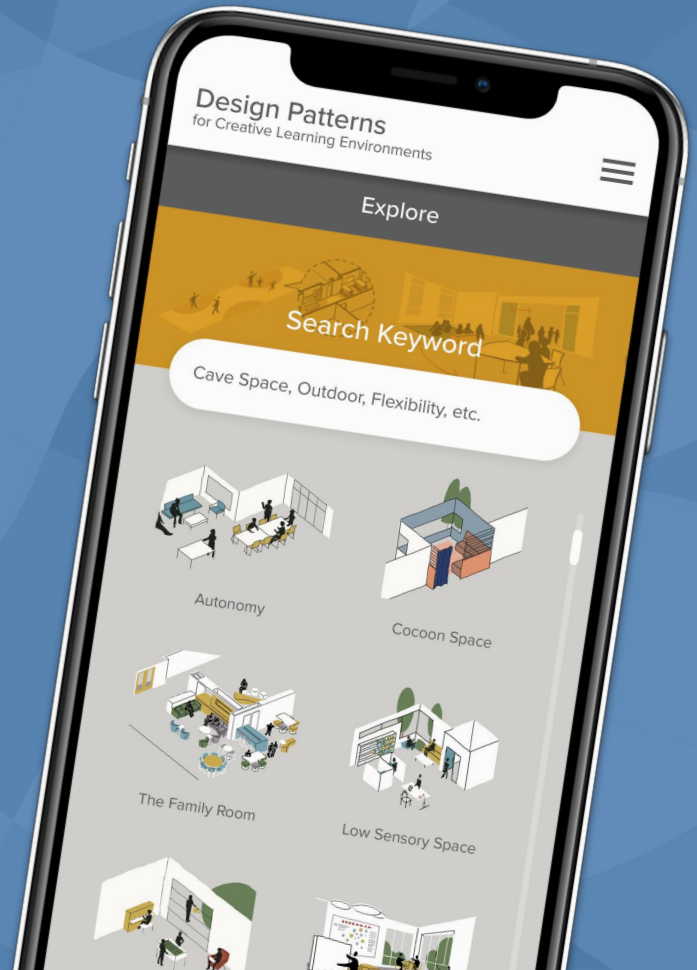
Welcoming Entry


Whole Body Learning


Writable Surfaces

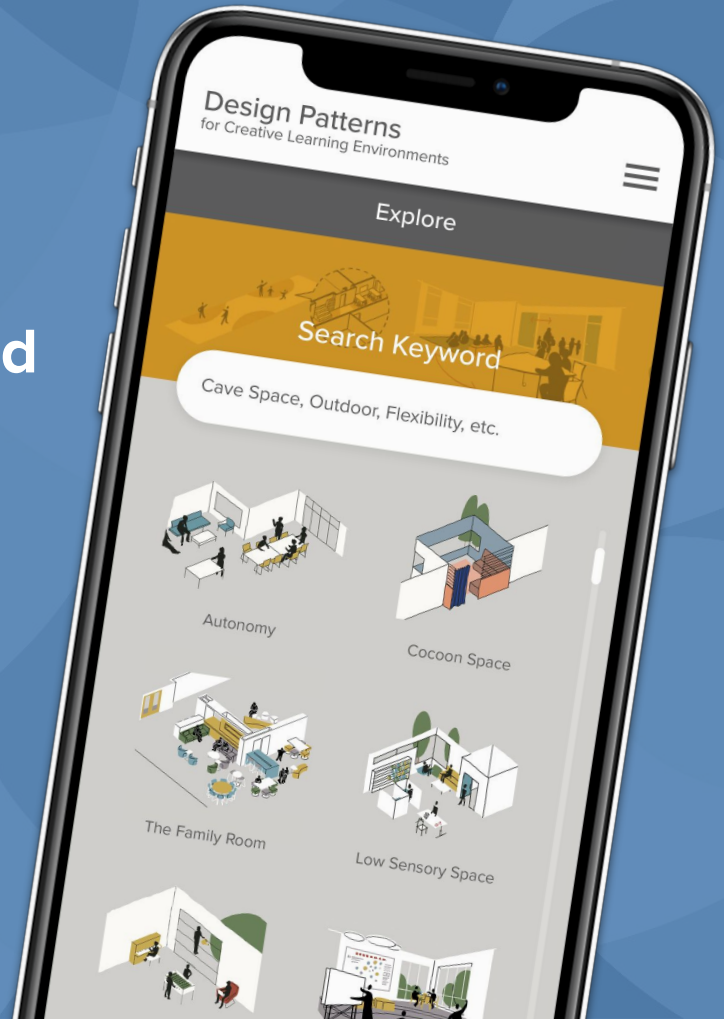
Go Explore

SchoolPatterns.com



A Call to Action

How might you be able to use this tool to help create a shared design language in your context?



Ask any question

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Designing schools where learners thrive

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