CONCEPT DESIGN

Board Presentation

LOWER MERION SCHOOL DISTRICT

01/28/2019

Overview | Our Work Together

Design Team Selection
09 / 2018

Board Approval of
Design Team

Outline of Ed Specs
11 / 2018

Refine Workshop Input
for Program; develop
Outline of Education
Specifications

Public Presentation
1 / 28 / 2019

Refine concepts and options,
proposed building floor plans,
and site concepts. Generate
construction cost estimates

Discovery Visit
11 / 2018

Workshops with LMSD
Administrators,
Professional Staff, and
Parents

Design Concepts
01 / 2019

Conceptual Floor
plans and draft of
Ed Specs

**End of Programming /
Ed Specs / Initial Design**
03 / 2019

Board Authorizes Initial
Concept Design and start of
Schematic Design,
Conceptual Construction Cost
presented to Board

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Overview | Discovery Visit Agenda

THURSDAY, NOVEMBER 1ST

8:30 - 10:30 a.m.   Vision and Project Goals

11:00 - 12:30 p.m.   Reverse Engineering Exemplary Programs

1:30 - 3:30 p.m.   Developing Guiding Principles

FRIDAY, NOVEMBER 2ND

8:30 - 11:30 a.m.   Design Patterns

11:45 - 12:30 p.m.   Student Focus Group

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Workshop Discoveries | Visioning & Goals Feedback

Through questions and discussion for the overall vision of the school, stakeholders highlighted ideal outcomes for students that would help them prepare for the 21st century. Some topics of conversation included:

Why are we designing an innovative school?

How has the technology explosion already changed the world?

What are the conversations you are having about the future cultural and work landscape in your district?

What are the skills and dispositions our students needs for success after high school in this 'future condition'?

From these questions, participants synthesized knowledge sets, skills, and dispositions that learners should have so they can succeed in their futures. These ideal outcomes began the starting point of an in-depth exploration of the Guiding Design Principles for the project:

Ethics	Problem Solving	Passion for Learning
Leadership	Critical Thinking	Curiosity
Creativity	Social Skills	Learning Agility
Cultural Competence	Fundamentals	Embrace Mistakes
Stewardship	Collaboration	Patience
Perseverance	Entrepreneurship	Technology
Daily Life Skills	Empathy	Growth Mindset
Feel Safe	Well Being	Emotional Intelligence
Community Minded		

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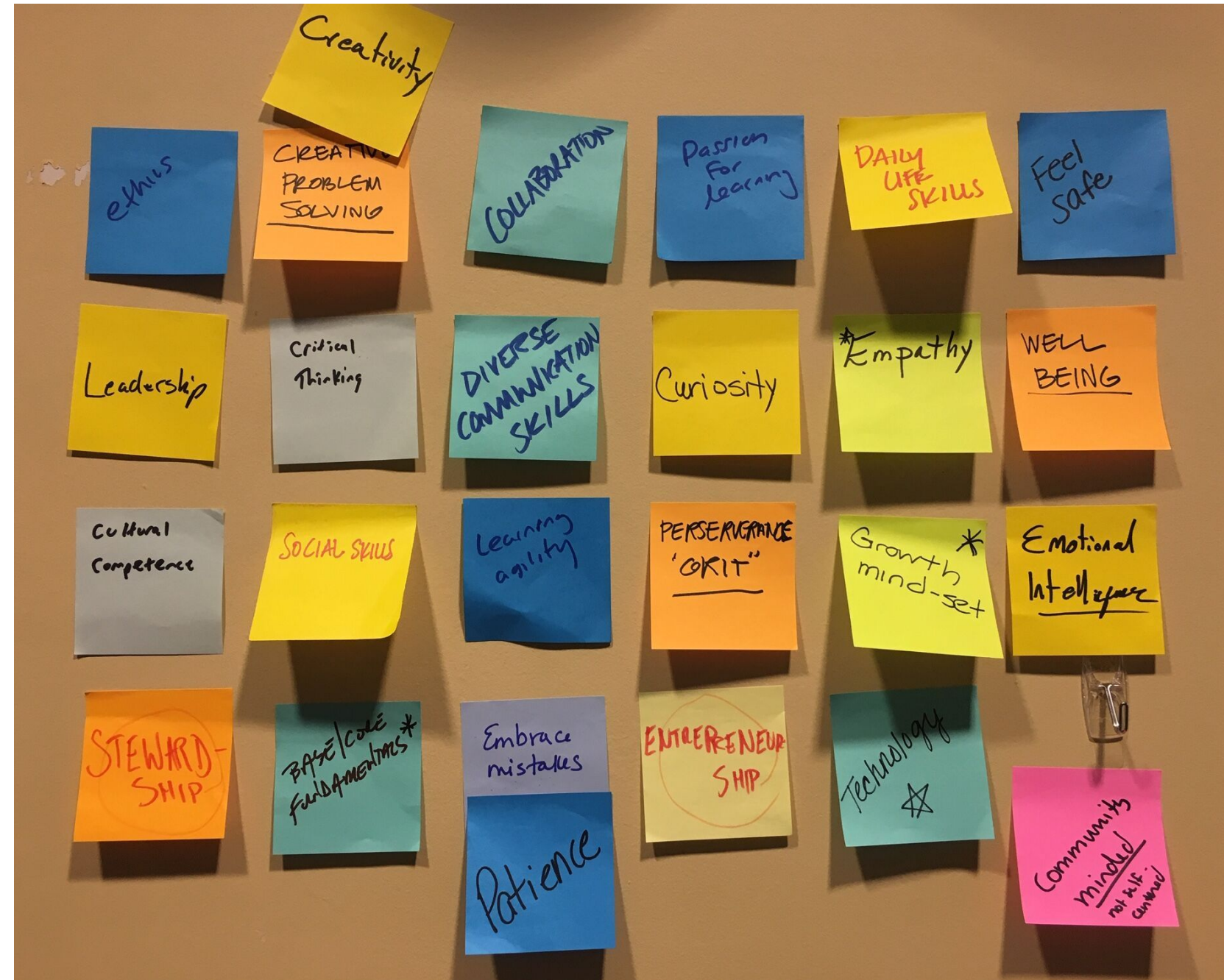
"The new school should stretch all learners to think outside of an individual comfort zone within a comfortable environment"

- Guiding Principles Workshop

Workshop Discoveries | Reverse Engineering Feedback

Participants explored exemplary Middle Schools currently offering high quality 21st century learning experiences to students. After watching videos that provided a high-level overview of these exemplars, discussion teams 'reverse engineered' Guiding Principles that seemed to exist at each of these programs or that characterized the schools. After listing these principles, teams were asked to categorize the guiding principles seen in other programs that might also guide school design for Lower Merion. The primary themes that emerged from the discussion are listed below. These themes were used as a reference point for developing Lower Merion's own Guiding Principles for Design.
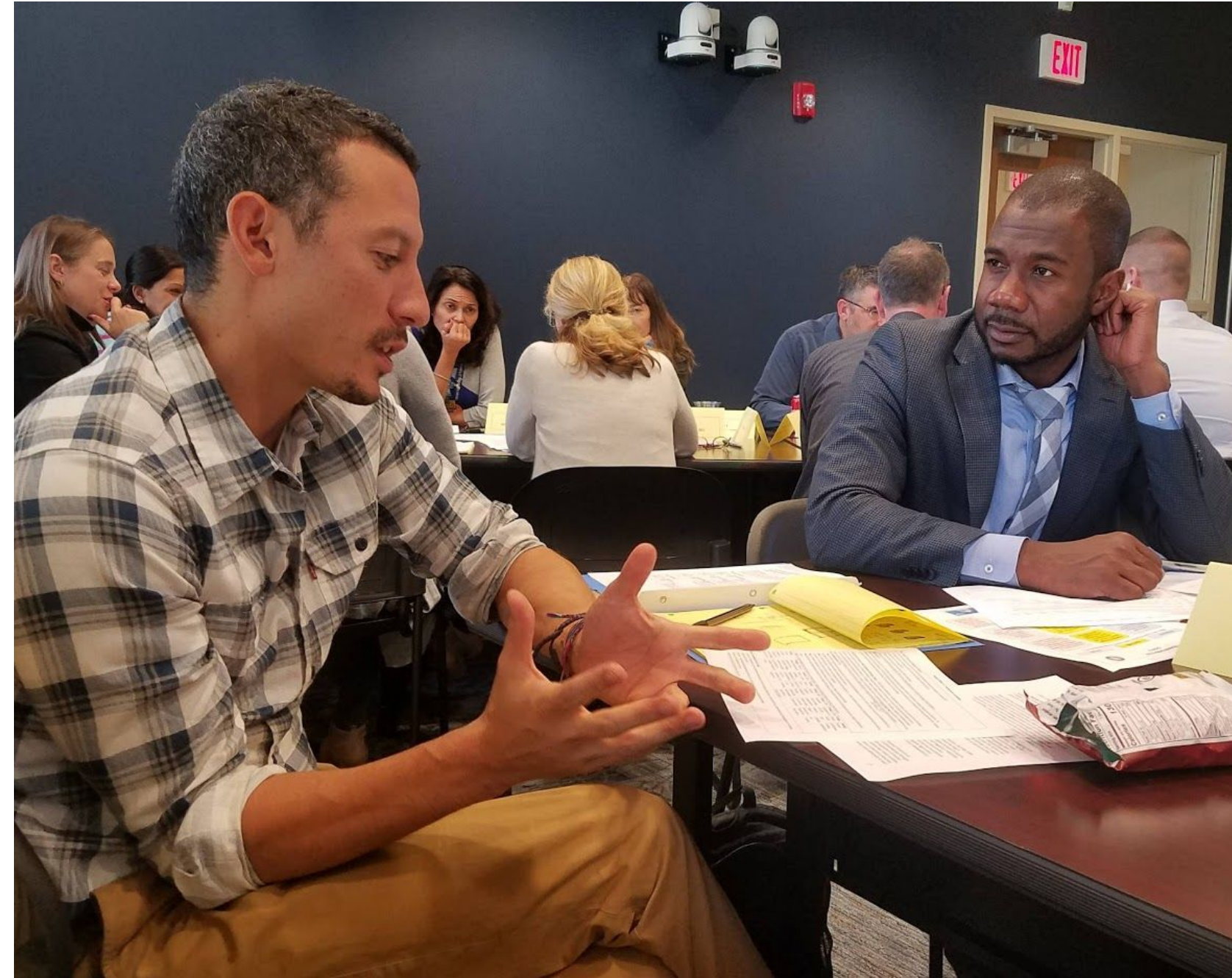
Guiding Principles trends:

Interdisciplinary Learning

Collaboration amongst teachers and students

Self directed Learning

Project Based Learning

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Workshop Discoveries | Student Focus Group Feedback

The Design team had a great conversation with Middle School students to find out what they want for the future of the new Lower Merion Middle School. After showing students examples of innovative school spaces, learners answered the questions "What do you like?", "What do you wish?"and "what do you wonder?" for your new school. Students were also asked what would make them like school more, and details surrounding the use of lockers.

I LIKE:

Variety of learning: Small group, presentation, open space, Learning Commons, gathering stairs

Specialty: Greenhouse, outdoor learning

Schedule Changes: time between classes

Creative space: Makerspace, Large Art rooms, Innovation Lab, Culinary Arts, green screen room

Flexible space: Writable Walls, sliding doors and walls

Comfort: Natural light, rugs, large Heart space, soothing color palette, modern, mix of materials, lots of nature

I WISH:

Operational: more bathrooms, gender neutral bathrooms, larger lockers, more water fountains, easy to navigate

Flexibility: Comfortable and mobile furniture

Outdoor connections: outdoor classrooms, natural light

Dining: more time for food, larger prioritization for cafes
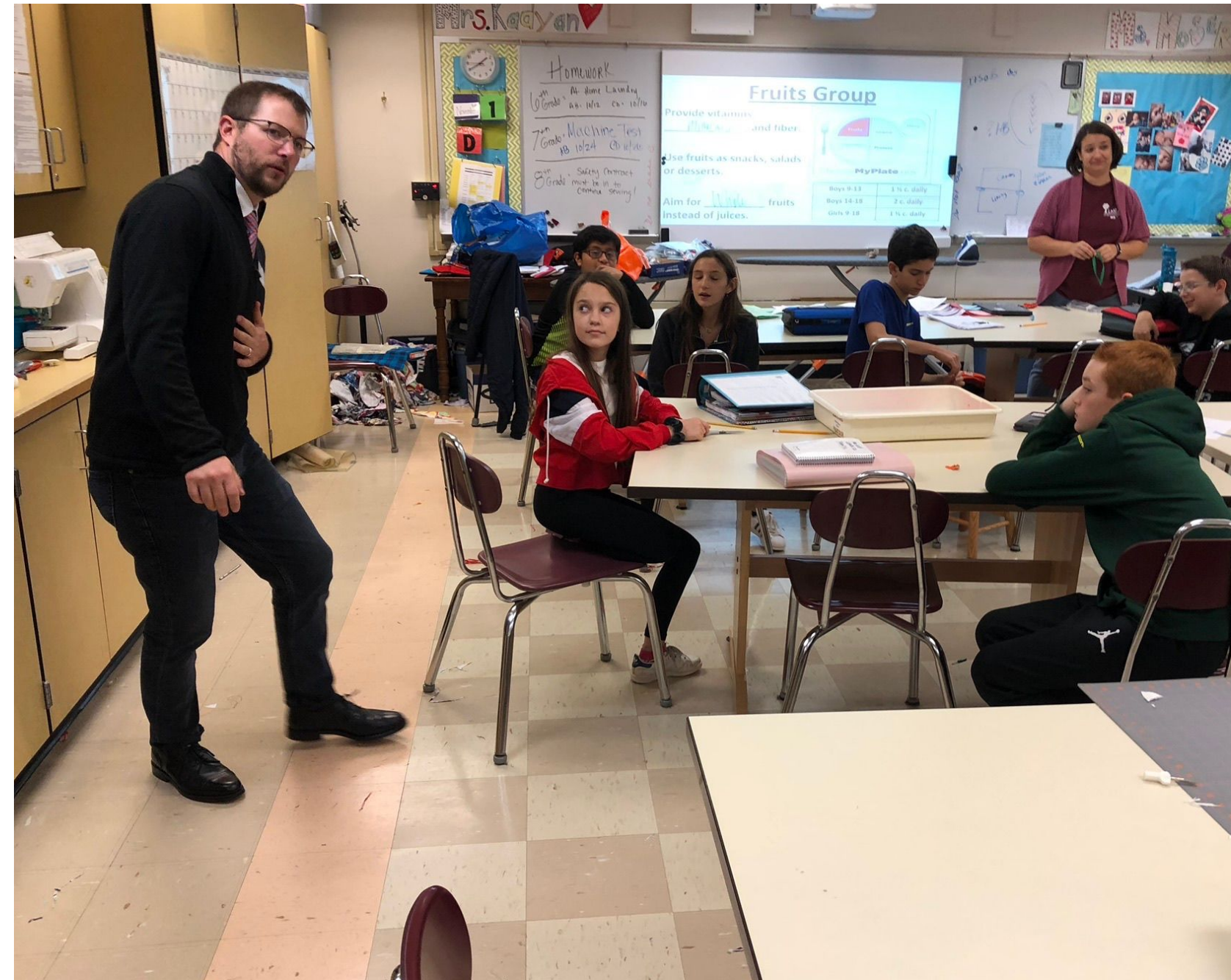
I WONDER:

Usability of outdoor space?   Amount of acoustics?

How schedules will change?   Best shape of a school?

Color choices (bright could be too much)?

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Workshop Discoveries | Student Focus Group Feedback

Tell me about a place/space you like:

Welsh Valley Tech Ed Room: Spacious, flexible spaces together, like the program and would be more inspired if the space was purpose built.

Space with friends: Comfortable and private space, Open area for freedom, Flexible furniture and natural daylight

I'd like school more if:

There were more projects with friends and less quizzes

I was able to have more hands on projects instead of straight forward packets of information to fill out

I was able to be outside more

There was less distance and more time between classes, along with wider hallways for less crowding

I was able to partake in more independent and creative things

We had a cafe space

We had less whole group lecture learning

We had more say in what we do with our learning and free time

Lockers

About 65% of students suggested they'd use lockers. Of that group, half said they would use lockers occasionally, while the other half said they would use lockers every day. Students expressed discomfort with leaving "valuables" like jackets or boots in the open. While witnessing student behaviors at school visits, student's things were left unattended throughout campus.

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"I'd like school more if I did more group projects with friends and if we worked outside"

- Student Focus Group

Workshop Discoveries | Guiding Principles Overview

1 Our school embodies and promotes inclusion, accessibility, agility and flexibility.

2 Our school fosters active local and global citizenship as well as cultural competency.

3 Our school promotes collaboration and iteration amongst all participants.

4 Our school encourages challenge, failure, and appropriate risks.

5 Our school crafts empowering experiences for young people.

6 Our school cultivates student voice, student choice, and student agency.

7 Our school elevates social, emotional, and physical safety and wellness.

8 Our school organizes learning to transcend foundational domains.

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Workshop Discoveries | Guiding Principles Connections

What We Heard from Workshops:
- The interdisciplinary teaming and learning is the heart of the middle school experience through project and inquiry based learning
- Flexible and adaptable classroom spacing will promote an interdisciplinary curriculum
- The space should accommodate many modes of learning, no barriers so that learning can follow its natural trajectory, learning and teaching is differentiated

LMSD Strategic Plan:
- Strategic Pathways:
  - Transformative Curriculum
  - Commitment to Professional Learning

LMSD Transformative goals:
- Cultural: Advocate for self and others by drawing on compassion and courage to speak up for what's right and just
- Global: Use processes (e.g.,design thinking, creative problem solving, and systems thinking) to develop solutions and to understand the role of failure in learning.

1 Our school embodies and promotes inclusion, accessibility, agility and flexibility.

Types of spaces:
- Learning Communities
- Dining hall (not cafeteria)
- Spaces designed for all users regardless of physical or cognitive disability
- Flexible, variable

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Workshop Discoveries | Guiding Principles Connections

What We Heard from Workshops:
- Learning experience should leverage local and community environment, resources, assets, and instructions to demonstrate relevance and authenticity of the learning
- Global awareness, cultural competency, diversity of culture and opinions
- Learners and teachers should be stewards of the communities and environments in which they exist

LMSD Strategic Plan:
- Strategic Pathways:
  - Transformative Curriculum
  - Spirit of Community

LMSD Transformative goals:
- Cultural: Navigate through diverse sources and perspectives to reach discerning and thoughtful understandings
- Cultural: Advocate for self and others by drawing on compassion and courage to speak up for what's right and just
- Global: Investigate challenging contemporary global and local issues by pursuing questions or lines of thinking

2 Our school fosters active local and global citizenship as well as cultural competency.

Types of spaces:
- Virtual Learning Space
- Large group Instruction / community gathering
- Greenhouse
- Community collaboration space

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Workshop Discoveries | Guiding Principles Connections

What We Heard from Workshops:
- Learners share work with each other regularly and work is visible
- Interdisciplinary teaming is critical
- Flexible collaborative learning space for interdisciplinary learning
- The new school should accommodate and inspire collaboration with common planning time and space for teachers

LMSD Strategic Plan:
- Strategic Pathways:
    - Transformative Curriculum
    - Commitment to Professional Learning
    - Student-Driven Schools

LMSD Transformative goals:
- Cultural: Share stories, ideas, and points of view while engaging others to think independently and act collectively
- Use processes (e.g., design thinking, creative problem solving, and systems thinking) to develop solutions and to understand the role of failure in learning.

3 Our school promotes collaboration and iteration amongst all participants.

Types of spaces:
- Teacher Collaboration Rooms
- Small Group Rooms
- Seminar Rooms
- Makerspaces and workshop environments

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Workshop Discoveries | Guiding Principles Connections

What We Heard from Workshops:
- Learners can self assess and monitor their own growth or the habits of mind, instructional and curricular experiences have to support resilience, embrace failure as a learning opportunity, and inspire students
- Learners feel safe, learners are comfortable and given guidance to take risks, willingness to make mistakes, learn through making mistakes

LMSD Strategic Plan:
- Strategic Pathways:
  - Redefining Success
  - Student-Driven Schools

LMSD Transformative goals:
- Global: Use processes (e.g. design thinking, creative problem solving, and systems thinking) to develop solutions and to understand the role of failure in learning

4 Our school encourages challenge, failure, and appropriate risks.

Types of spaces:
- Presentation Space
- Makerspaces
- Independent learning Opportunities/Spaces

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Workshop Discoveries | Guiding Principles Connections

What We Heard from Workshops:
- Ensuring kids have an adult they trust in the building
- Learning must be meaningful and relevant to the students, not just work for the sake of creating work.
- Through a culturally responsive, restorative environment, all students will know they are respected, and appreciated

LMSD Strategic Plan:
- Strategic Pathways:
  - Transformative Curriculum
  - Spirit of Community

LMSD Transformative goals:
- Cultural: Advocate for self and others by drawing on compassion and courage to speak up for what's right and just
- Global: Investigate challenging contemporary global and local issues by pursuing questions or lines of thinking.

5 Our school crafts empowering experiences for young people.

Types of spaces:
- Multiple places to present work and celebrate growth
- Large gathering areas
- Green room
- Collaborative spaces
- Hands-on workshops

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Workshop Discoveries | Guiding Principles Connections

What We Heard from Workshops:
- All students should have equitable access and the opportunities to be successful learners
- Student driven learning - Student choice, flexible and varied space

LMSD Strategic Plan:
- Strategic Pathways:
  - Student-Driven Schools
  - Transformative Curriculum

LMSD Transformative goals:
- Personal: Explore and develop personal interests, inquires, and passions
- Personal: Set learning goal(s) that are pursued and evaluated until the goal(s) are realized or new ideas emerge

6 Our school cultivates student voice, student choice, and student agency.

Types of spaces:
- Flexible room configurations
- Outdoor areas
- Café or dining hall with seat and food options
- Small and large group rooms

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Workshop Discoveries | Guiding Principles Connections

What We Heard from Workshops:
- Through culturally responsive, restorative environment, all students will know they are respected, and appreciated
- New middle school will encourage an individual's wellness
- Learners will have a safe learning environment for physical, emotional, and social growth

LMSD Strategic Plan:
- Strategic Pathways:
    - Redefining Success
    - Transformative Curriculum

LMSD Transformative goals:
- Global: Make informed choices that support social, emotional, and personal healthy and well-being.

7 Our school elevates social, emotional, and physical safety and wellness.

Types of spaces:
- Distributed Counseling
- Yoga and Dance Studios
- Quality dining options
- Large group gathering spaces
- Secure, comfortable

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Workshop Discoveries | Guiding Principles Connections

What We Heard from Workshops:
- Interdisciplinary education that incorporates multiple domains of knowledge and skills are the most powerful learning experiences.
- The new middle school will measure student achievement through a variety of methods

LMSD Strategic Plan:
- Strategic Pathways:
    - Redefining Success
    - Transformative Curriculum
    - Student Driven Schools

LMSD Transformative goals:
- Personal: Explore and develop personal interests, inquiries and passions.
- Personal: Set learning goal(s) that are pursued and evaluated until the goal(s) are realized or new ideas emerge.

8 Our school organizes learning to transcend foundational domains.

Types of spaces:
- Co-teaching capable
- Teacher collaboration space
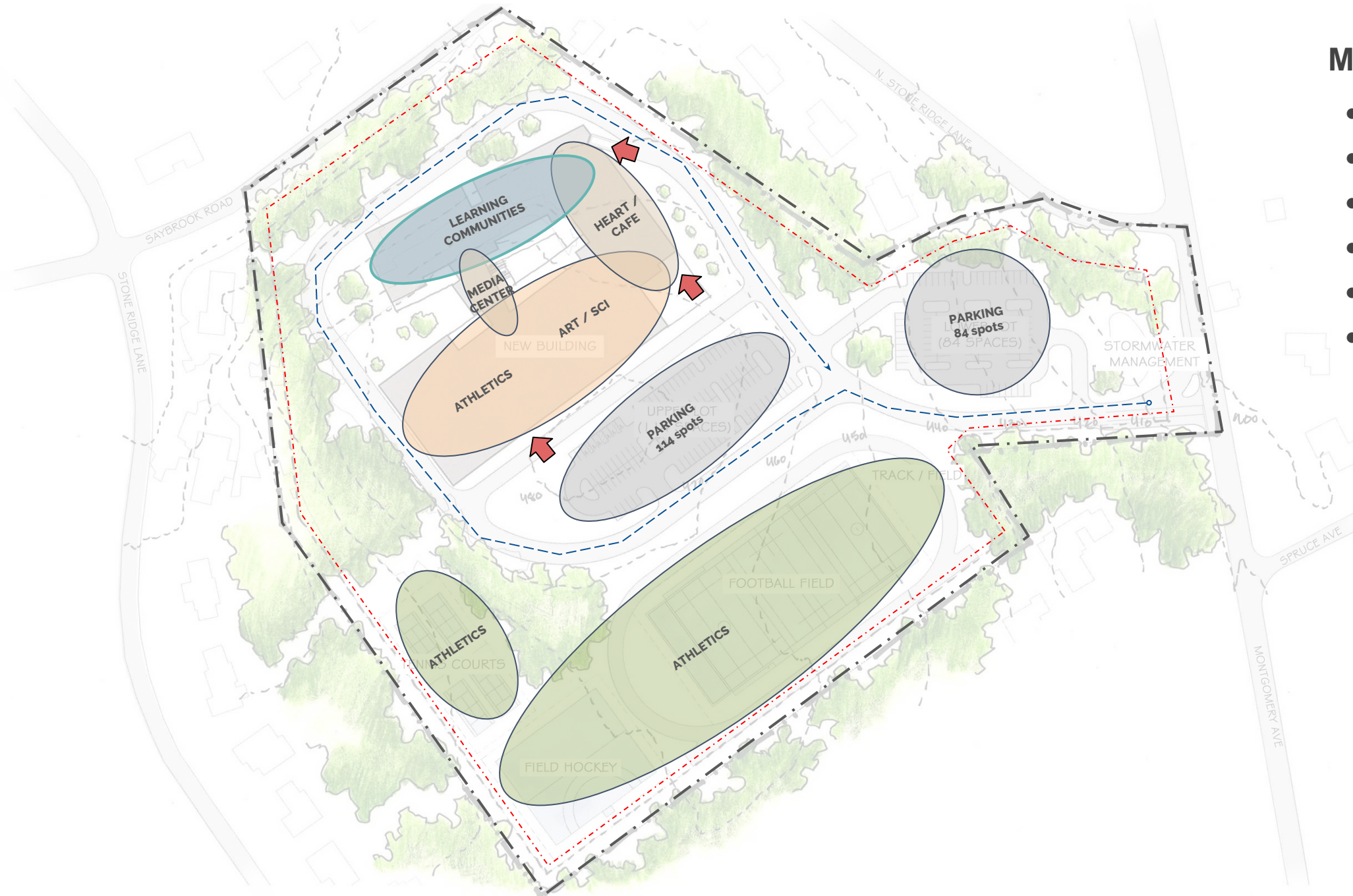- Multiple modes of instruction easily accessible
- Learning Communities

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Workshop Discoveries | Design Patterns Feedback

After reviewing and recommending changes to the Emerging Guiding Principles, the group was tasked to make connections between each principle and the qualities or types of spaces needed in the new school. Participants were shown examples of 21st century learning environments during a slide presentation and then formed groups to create simple bubble diagrams of the school. Common themes found in multiple bubble diagrams are listed below:

- School heart - welcoming meeting place for many to gather together
- Centrally located curiosity center / production space
- Performance space
- 5th and 6th grade studios separated from 7th and 8th grade studios
- Specialty spaces located centrally and on 1st floor (not tucked away or hidden)
- Variable environments in learning pods
- Outdoor learning environments desired

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Programming Strategies | Site

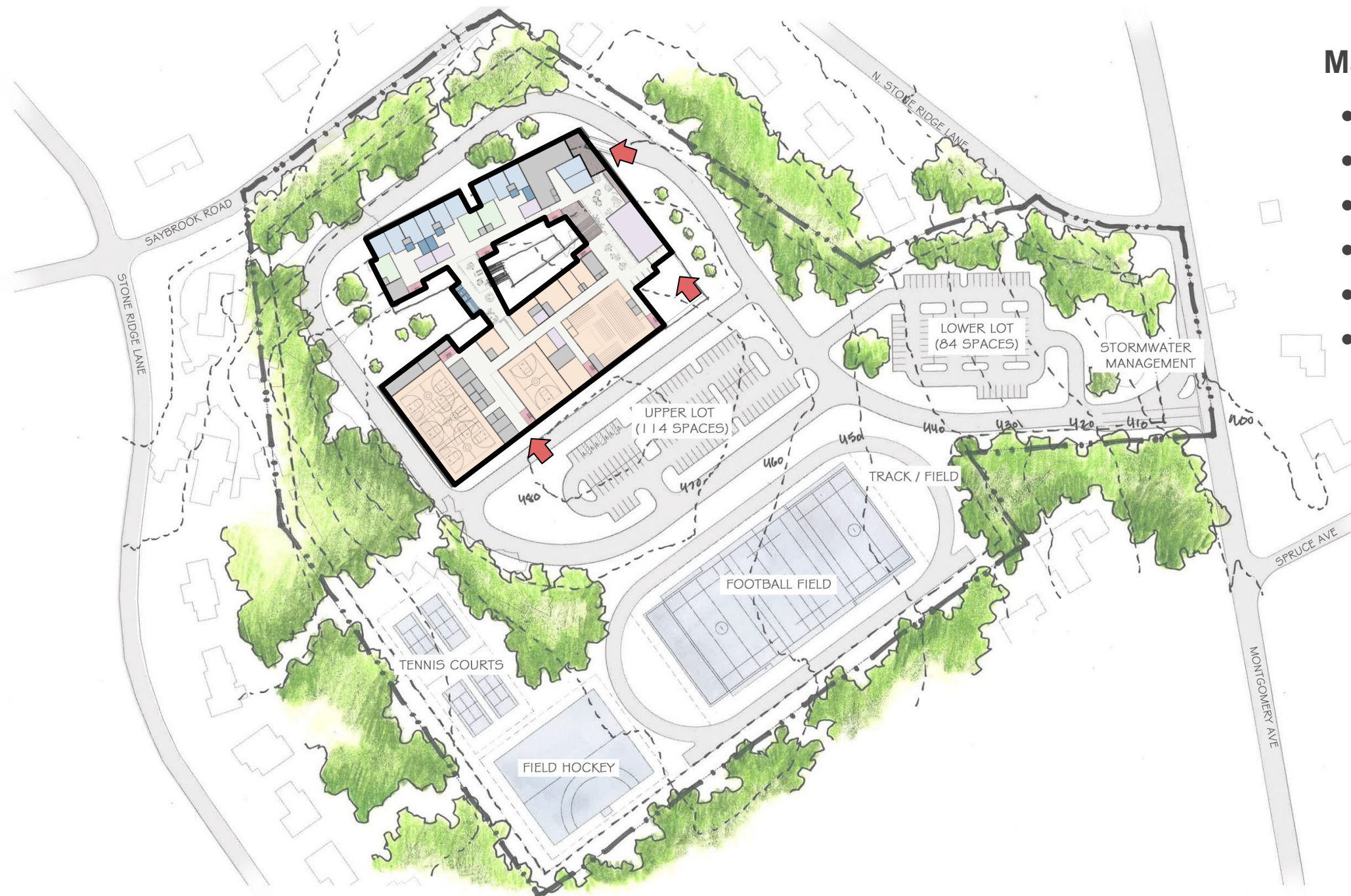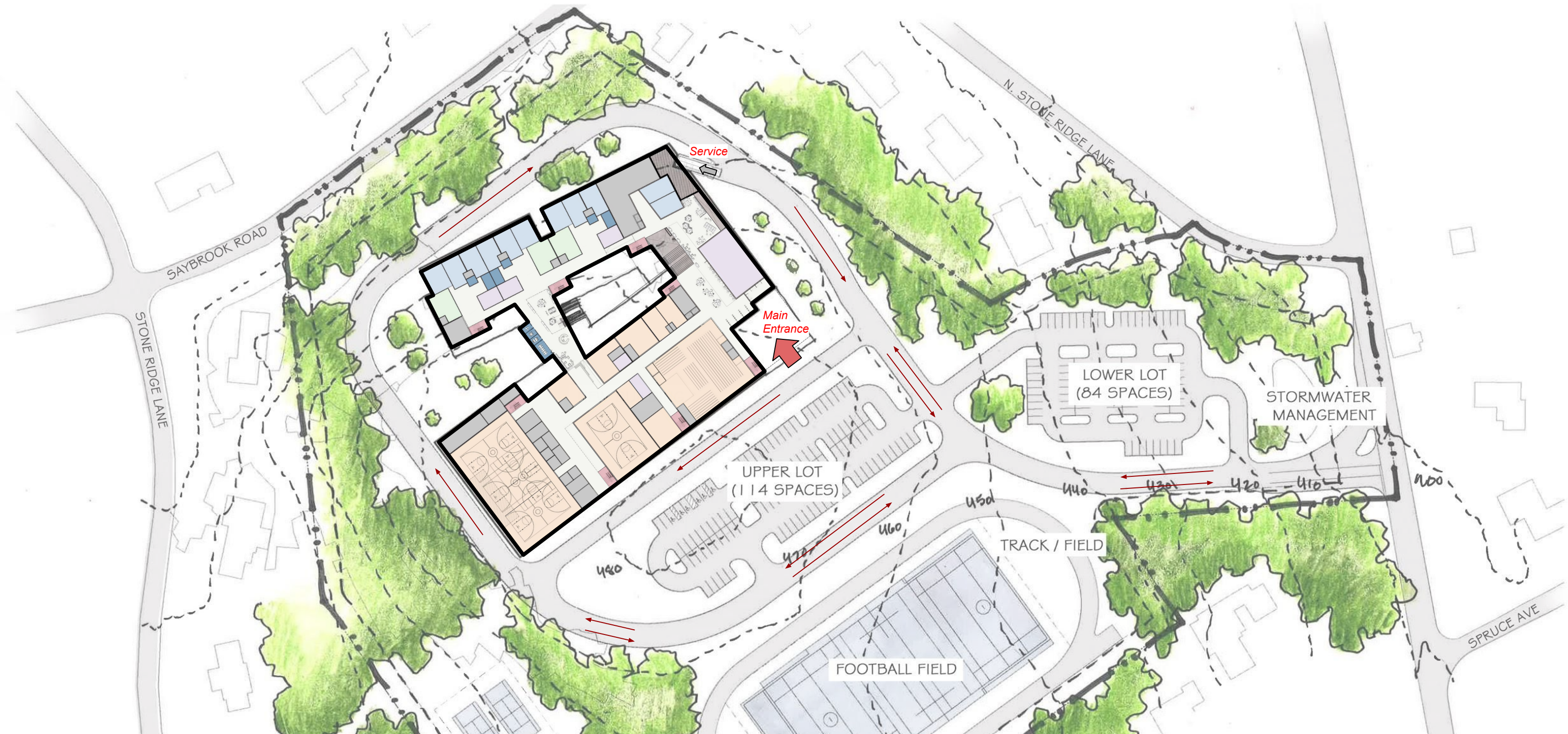

Main Features

- Building takes advantage of <u>slope</u> of the site
- <u>Public</u> areas of landscape and building are visible from entry
- Separate <u>public</u> and <u>private</u> designated building entrances
- Learning Communities in <u>private</u> location toward back of site
- U-shape layout creates centralized outdoor <u>courtyard</u>
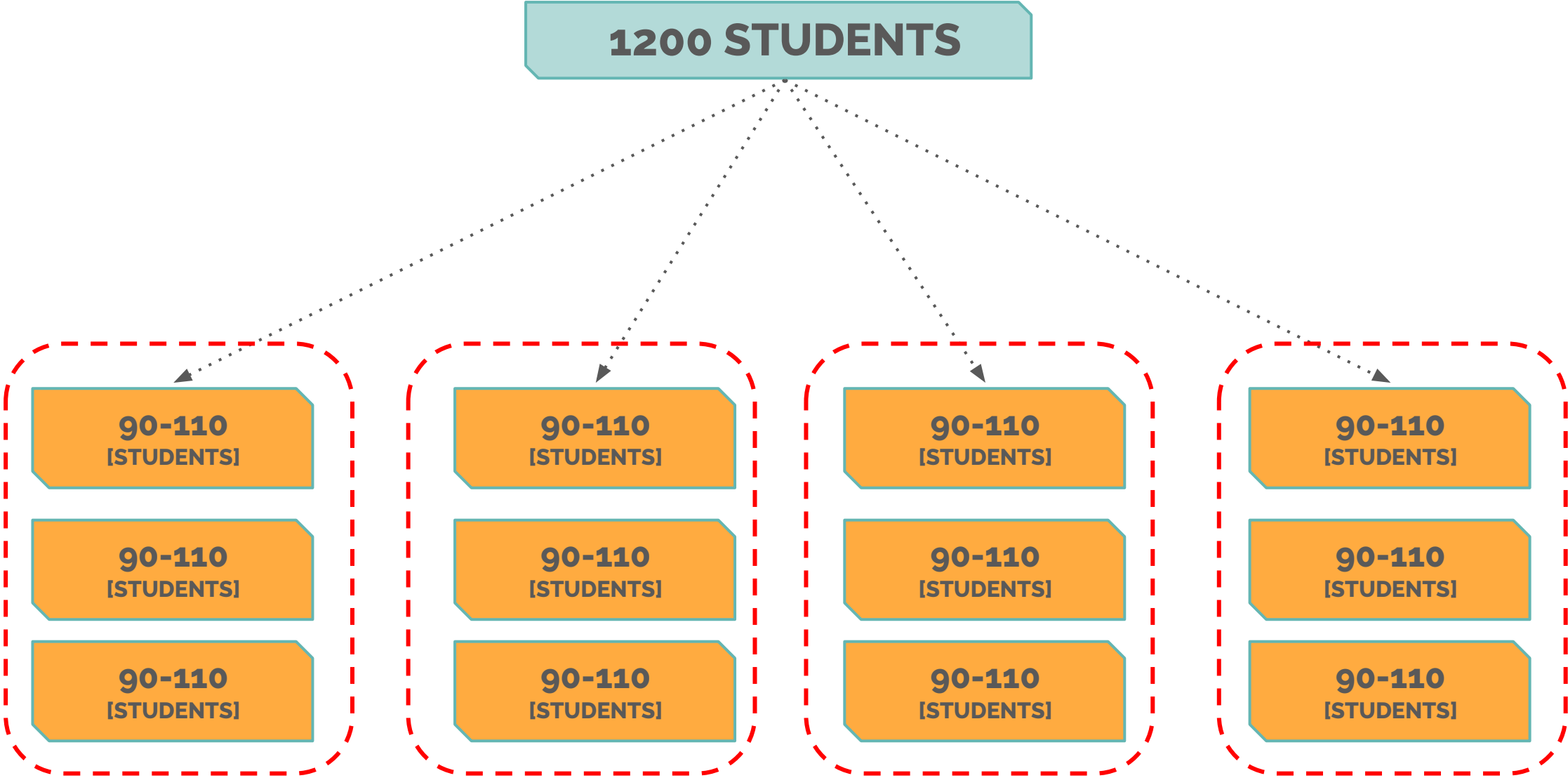- Outdoor <u>athletic fields</u> are concentrated to one area of site

Programming Strategies | Site

Main Features

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- Outdoor <u>athletic fields</u> are concentrated to one area of site

Programming Strategies | Site

# Master Planning | Strategies for Organization

BUILDING CAPACITY

STUDENT ORGANIZATION

1200 STUDENTS

90-110 [STUDENTS]

90-110 [STUDENTS]

90-110 [STUDENTS]

90-110 [STUDENTS]

90-110 [STUDENTS]

90-110 [STUDENTS]

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Test Fits | All Levels

TOTAL GROSS AREA (229,000 SF)

(3) Learning Communities

Delivery

(3) Learning Communities

(3) Learning Communities

(3) Learning Communities

Main Entrance

Specialty Entrance
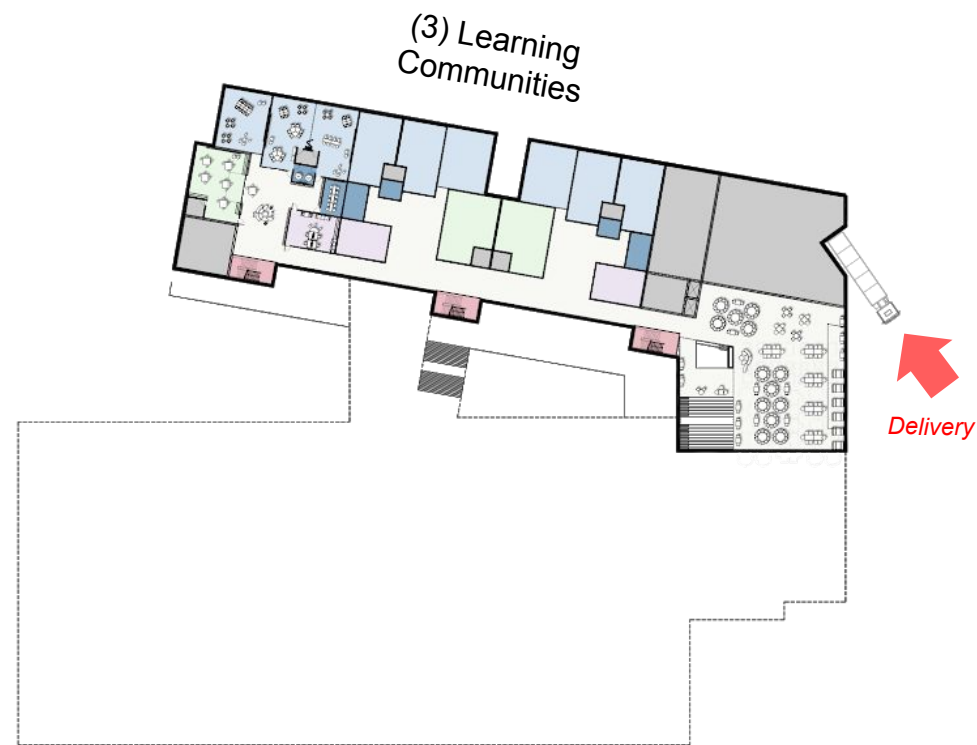
LOWER LEVEL (40,000 SF)

1 grade level
90-110 Students per Community
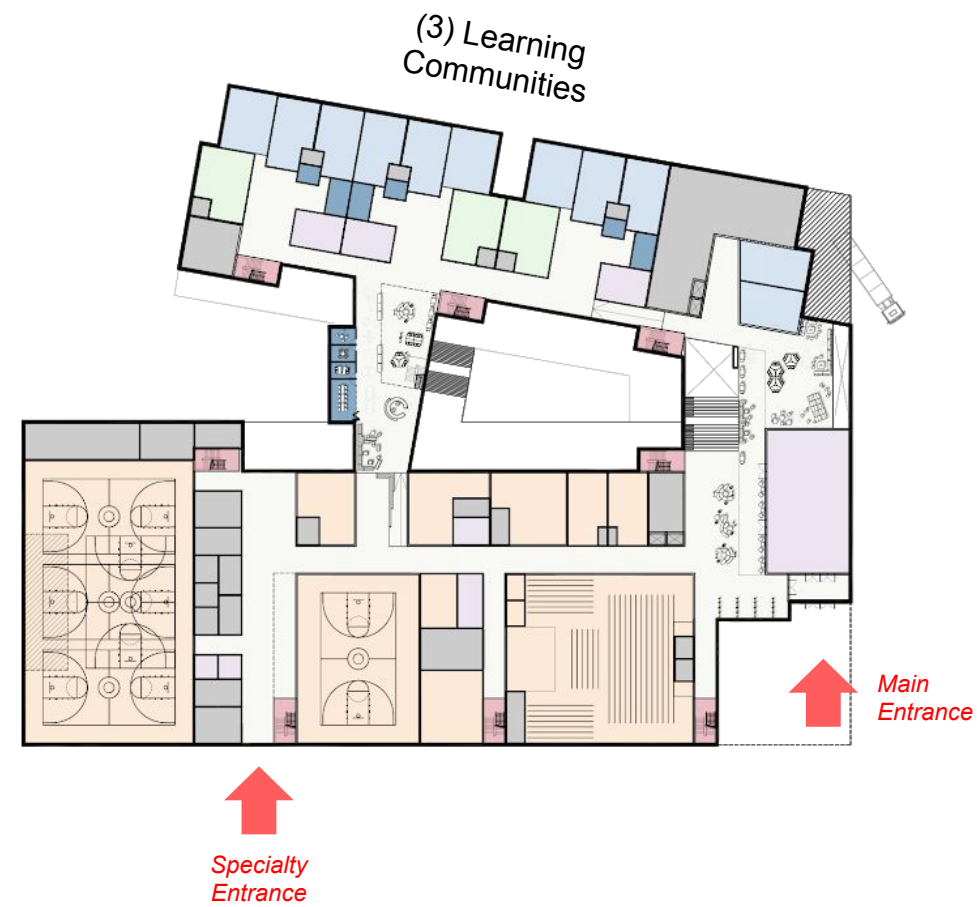
MAIN LEVEL (113,000 SF)

1 grade level
90-110 Students per Community

UPPER LEVEL (76,500 SF)

2 grade levels
90-110 Students per Community

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Test Fits | Main Level

Library

Copenhagen International School Nordhavn, C.F. Møller

Open to students throughout the day

Welcoming Entry / Gallery / Heart

Emerald Elementary, FNI

Learning Community
Learning Community
Learning Community

Mech.

Sp. Ed.

T.

Media Center

Outdoor Play

Outdoor Project Patio

Heart

Mech. / Maint.

Art
Project Commons
Workshop
Tech
World Language
T.
Admin.

Gymnasium
T.
Event Hall
Aux. Gym
Digital Lab
Theater (700+ seats)

Gallery

Instrument Room

Main Entrance

Specialty Entrance

MAIN LEVEL (113,000 SF)

1 grade level
90-110 Students per Community

N

0 10 20   50   100

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Test Fits | Lower Level

Connections to Play

Anne Frank Inspire Academy, FNI
Natural Play Areas

Learning Community

Learning Community

Learning Community

Mech.

Kitchen / Service

T.

T.

Delivery

Outdoor Cafe

Dining Hall

Gathering Stair to Heart

Ravenswood School for Girls, BVN

Connections between the Heart and Dining areas

Dining Hall + Outdoor Cafe

Golden West College Math and Science Building, HMC
Dining overlooks outdoor nature and play

LOWER LEVEL (40,000 SF)

1 grade level
90-110 Students per Community

0 10 20   50   100

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Test Fits | Upper Level

Library Loft

Emerald Elementary, FNI

Learning Community

Learning Community

Learning Community

Learning Community

Learning Community

Learning Community

T.

Movement Arts

M.A. Commons

Art

Project Commons

Workshop

Tech

World Language

T.

T.

Fitness Studio

Choir

Music

UPPER LEVEL (76,500 SF)

2 grade levels
90-110 Students per Community

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SPECIALTY
ENTRANCE

DELIVERY

MEDIA
CENTER

GYM

THEATER

GALLERY

ENTRY

LEARNING COMM.

ADMIN.

HEART

DINING

KITCH.

MAIN
ENTRANCE

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Learning Communities

Special Ed.

Dining Hall

Heart

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Learning Communities

Media Center

Meeting Rooms

Aux. Gym

Project Commons

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Learning Communities

Movement Arts

Event Hall

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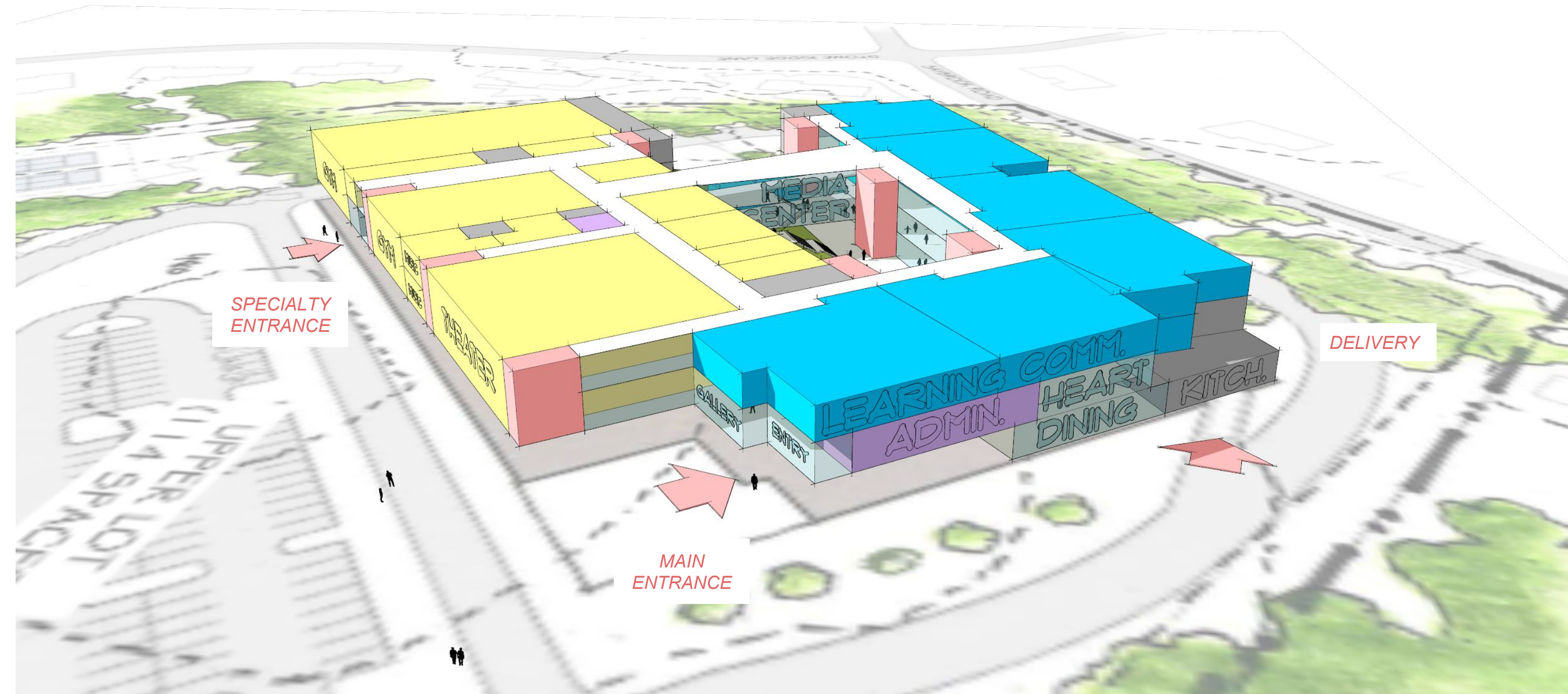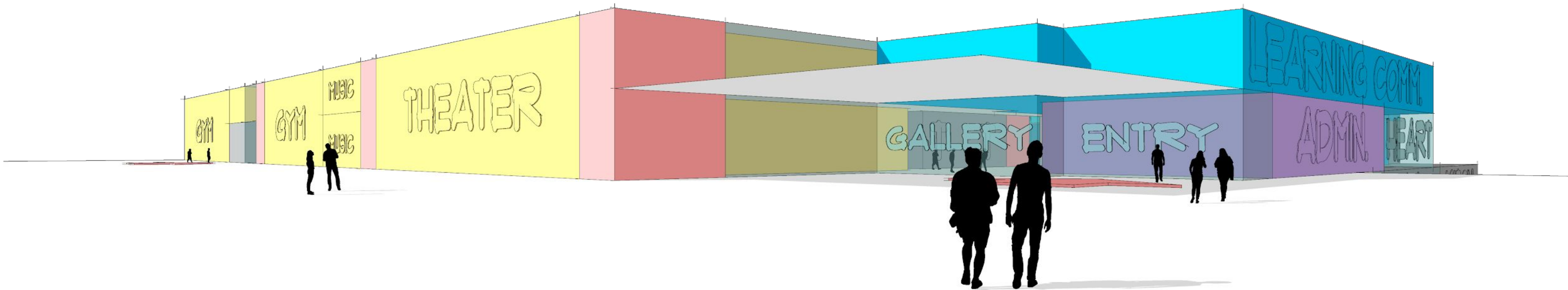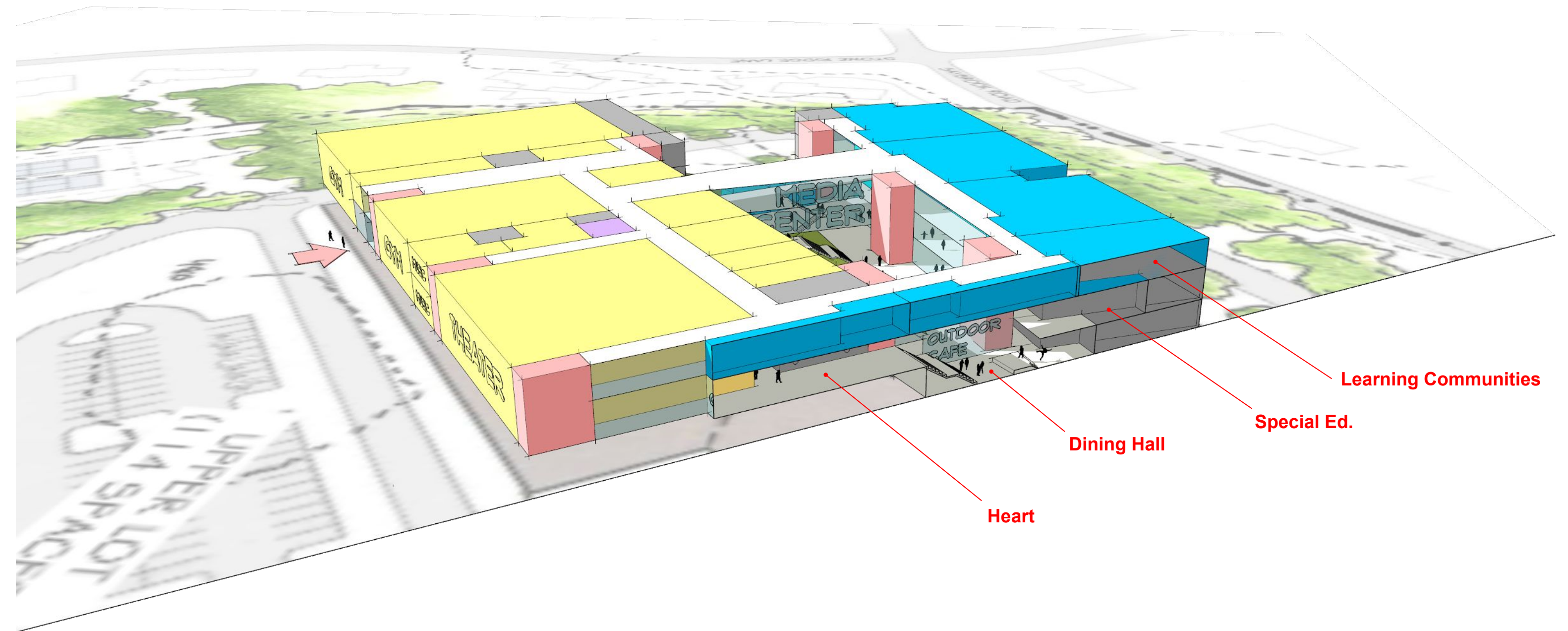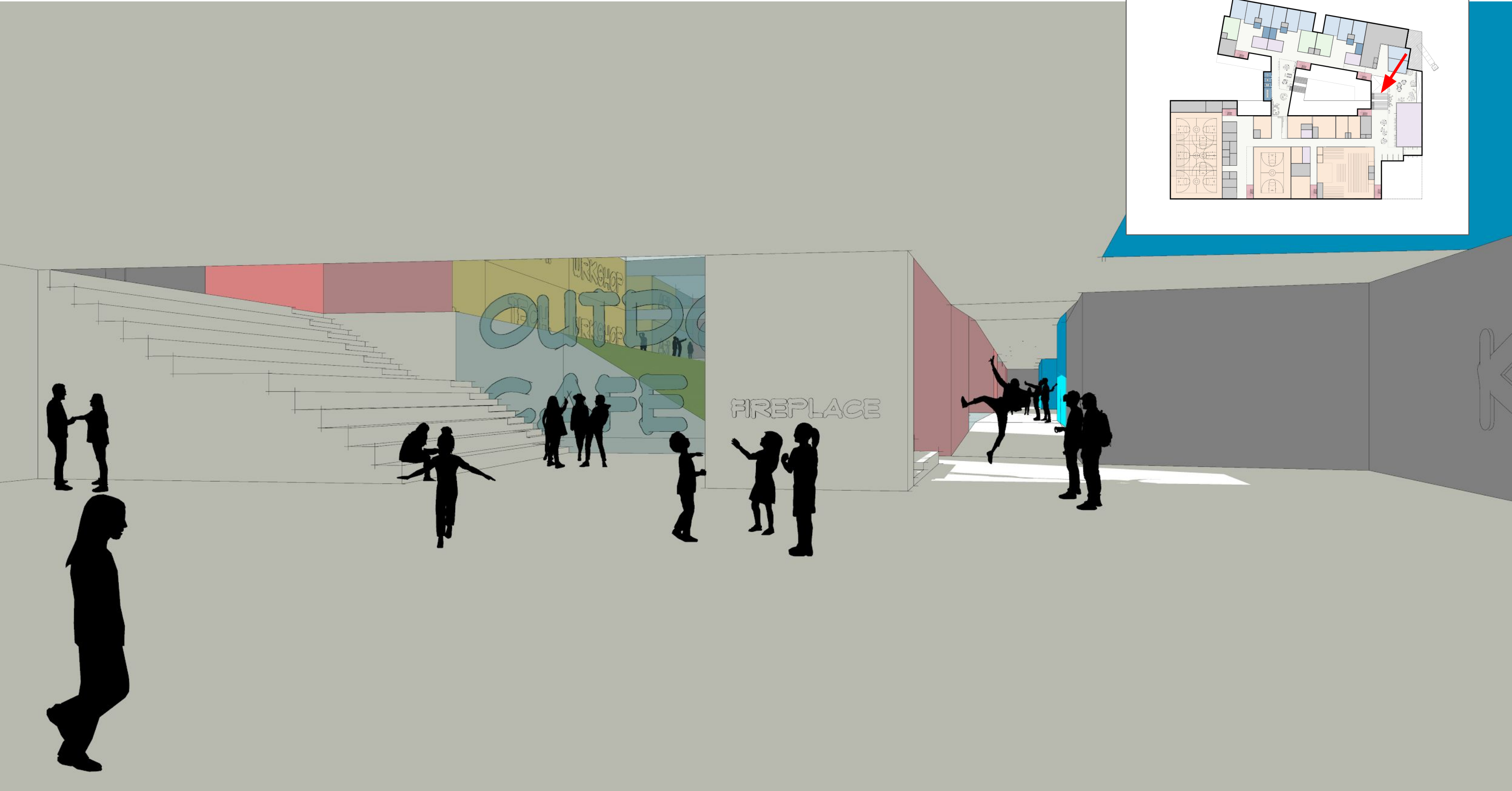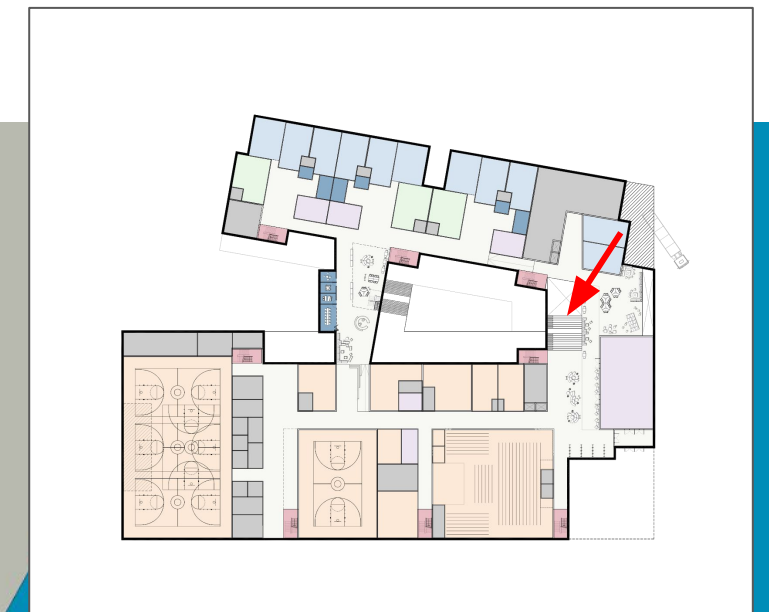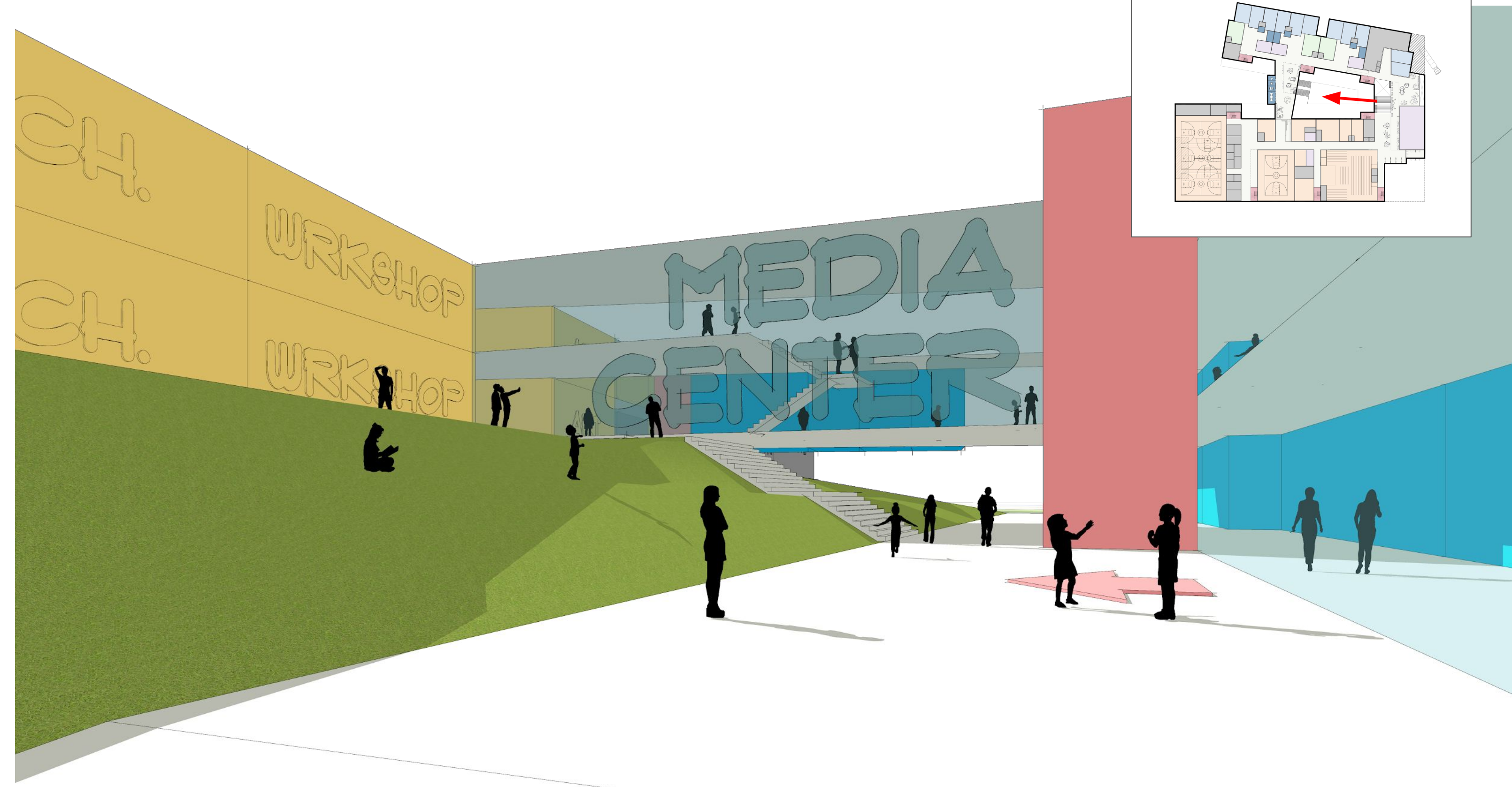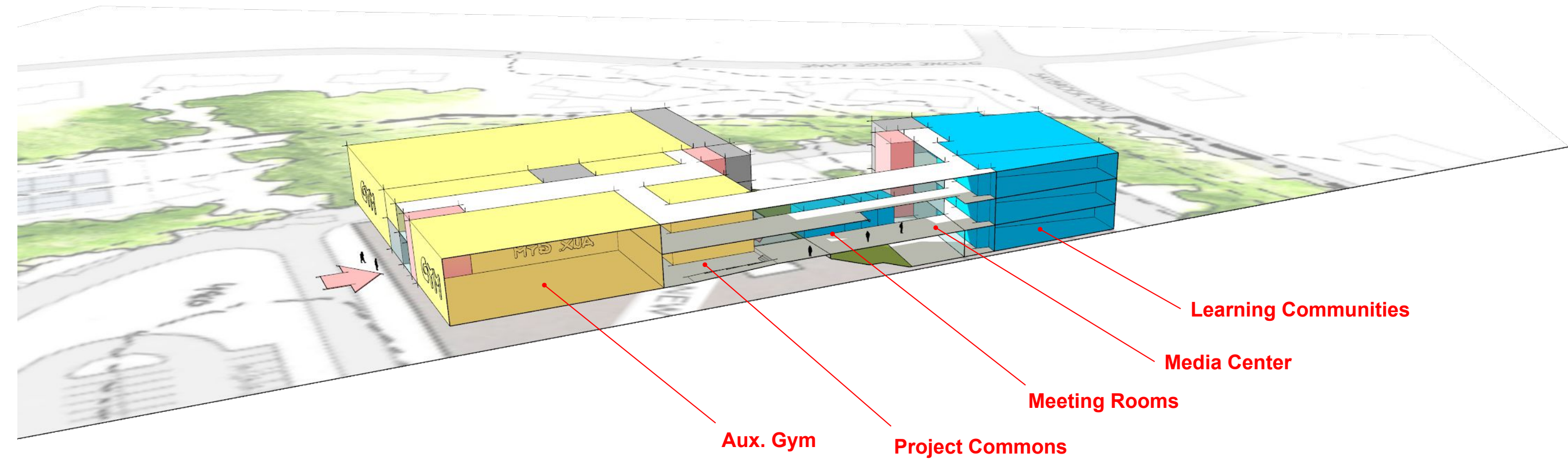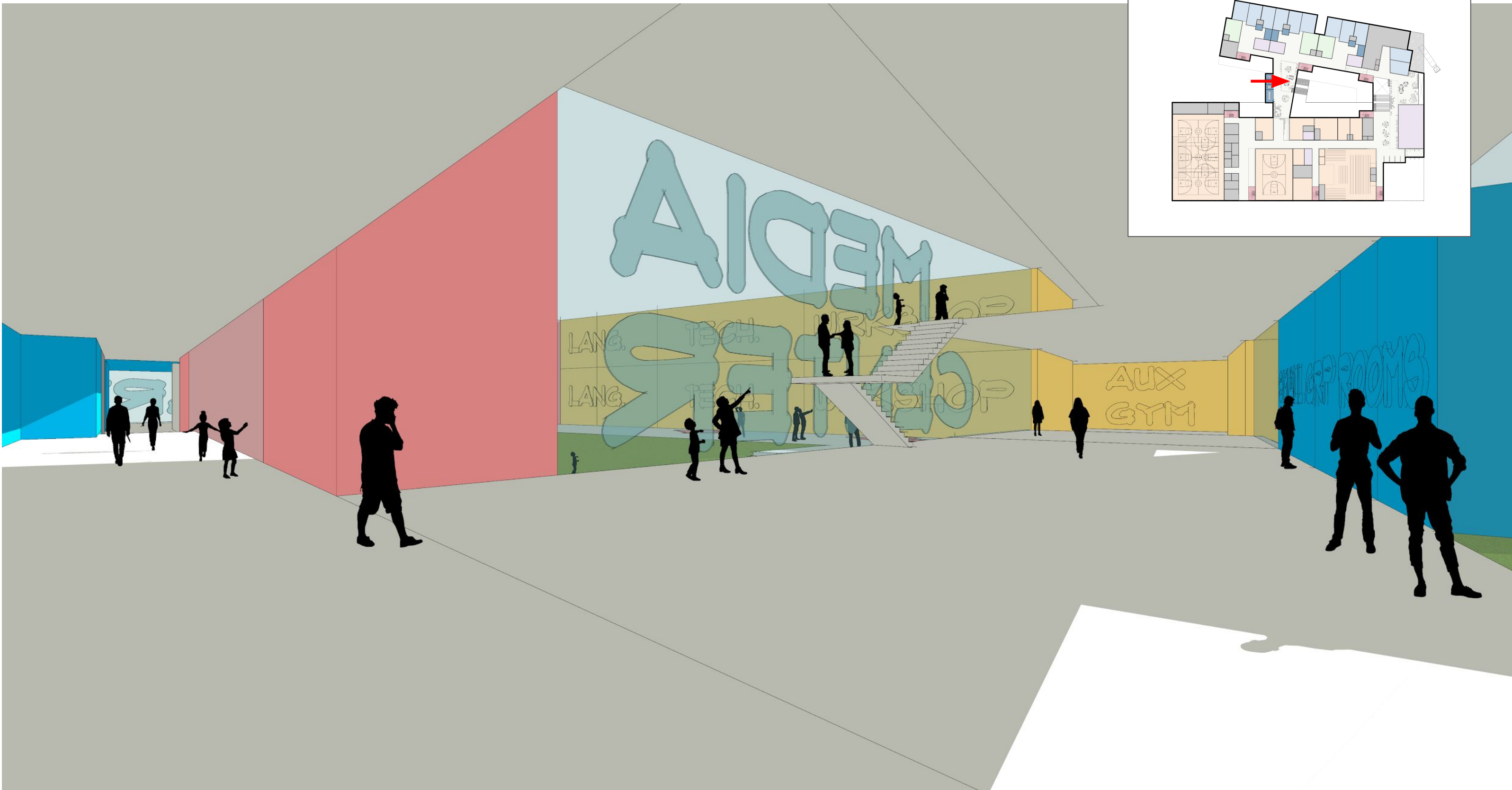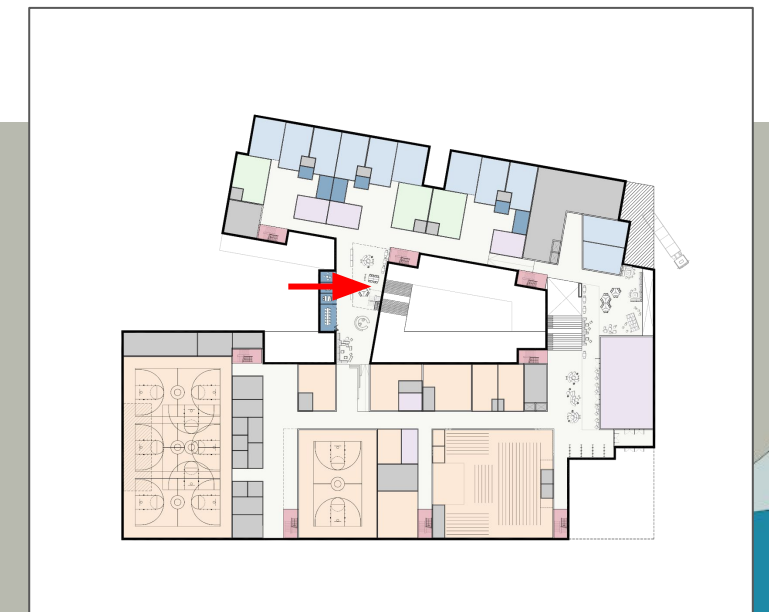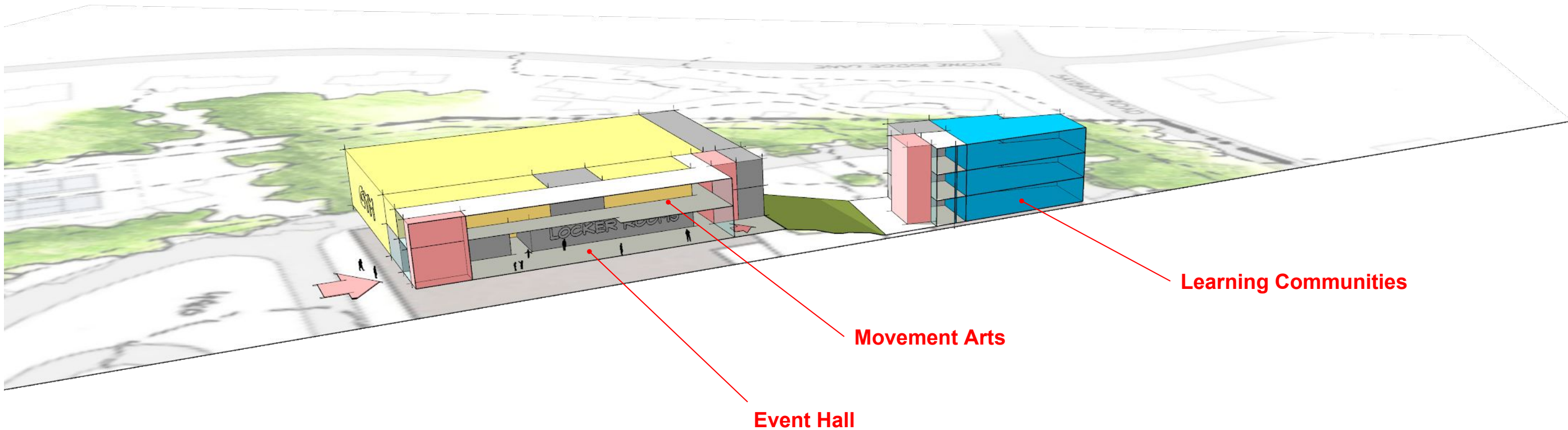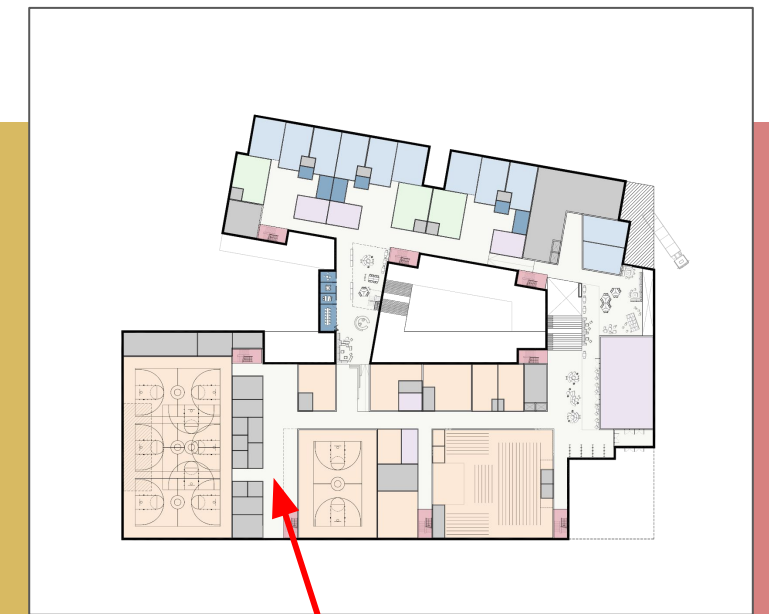
Test Fits | 3D Vignette - Animation