A NEW AMERICAN HIGH SCHOOL
typical American high school trends: large, dense, sprawling
More lessons from High School precedents
TAKEAWAY:
Core communal area
TAKEAWAY:
SLC “Small learning community” or cluster
- Each school is self contained with counseling, computers, admin, gathering areas
TAKEAWAY:
balance of informal and formal spaces
- Classrooms surrounding working studios
- Labs surrounding working yards
- Grade level separation
“makerspace”
“makerspace”

community
“makerspace”

community

+

tools
“makerspace”

community
+

tools
+

education
experience learning access to expensive equipment classes to learn tools prototyping ideas with tools

tutoring gathering spaces small group work brainstorming ideas chance meetings

conference rooms flexible, informal spaces

demonstration areas safe zone for creativity

relating across disciplines individual workspaces

individual workspaces

education community tools

attributes
Access to experiential learning classes to learn tools prototyping ideas with tools.

Noise, air quality, ventilations, smell, light, noise issues, crowding, access to large materials, access to tools, classes to learn tools, prototyping ideas with tools.

Safe zone for creativity, brainstorming ideas, small group work, flexible, informal spaces, conference rooms, gathering spaces, chance meetings, access to expensive equipment, tutoring, gathering spaces, brainstorming ideas.

Brainstorming ideas, conference rooms, small group work, flexible, informal spaces, chance meetings, access to expensive equipment, brainstorming ideas.

Individual workspaces, relaying across disciplines, demonstration areas, tutoring, education, community, tools, access to tools, interior environment, community, tools.

Brainstorming ideas, education, flexible, informal spaces, small group work, conference rooms, gathering spaces, chance meetings, access to expensive equipment, brainstorming ideas.

Conference rooms, small group work, gathering spaces, chance meetings, access to expensive equipment, brainstorming ideas, flexible, informal spaces.

Flexible, informal spaces, small group work, conference rooms, brainstorming ideas, chance meetings, access to expensive equipment, brainstorming ideas.

Brainstorming ideas, conference rooms, small group work, flexible, informal spaces, chance meetings, access to expensive equipment, brainstorming ideas.

Community, tools, access to tools, interior environment, community, tools, access to tools, interior environment.

Experiential learning, individual workspaces, relaying across disciplines, demonstration areas, tutoring, brainstorming ideas, brainstorming ideas, brainstorming ideas.
My project reimagines the design and planning of prototypical American high schools through the lens of makerspace research.

Unlike the traditional shop class, separated to a different building or secluded to a corner of the school, the makerspace will be fully integrated into the high school both spatially and visually to encourage students to learn experientially, rather than solely in a lecture format.
I believe that such a combination will result in an educational experience that will enable students to learn in a **personalized learning community**, where the student can customize the way in which they learn.

My aim is for this type of school to **cross disciplines**: applying topics learned from one class to other fields, ultimately promoting innovation and collaboration, which is usually found in makerspaces.
CONCERN #1
“these spaces are ignored”
SOLUTION:
stacked maker “core”
SOLUTION:
stacked maker “core”
SOLUTION:
stacked maker “core”
CONCERN #2
makerspace interior environment drawbacks:
noisy, ventilation, poor lighting, smells
SOLUTION:
buffer zone
noise, smell & ventilation buffer and skylight
SOLUTION:
buffer zone
noise, smell & ventilation buffer and skylight
SOLUTION:
buffer zone
noise, smell & ventilation buffer and skylight
SOLUTION:
buffer zone
noise, smell & ventilation buffer and skylight
SOLUTION:
buffer zone
noise, smell & ventilation buffer and skylight
CONCERN #3

curriculum connectivity

visual and spatial connections
CONCERN 3:
visual and spatial connectivity
CONCERN 3: visual and spatial connectivity
CONCERN 3:
visual and spatial connectivity
SOLUTION:
communal areas surround core
SOLUTION:
Communal areas surround core
SOLUTION:
communal areas surround core
SOLUTION:
communal areas surround core
SOLUTION:
communal areas surround core
SOLUTION:
service and circulation for outer shell
program basics:
grades 9-12
200 students
maker core
elevator for material movement in maker core
maker core

DIGITAL FAB

ROBOTICS & ASSEMBLY HALL

THEATER

METAL SHOP

WOOD SHOP

CNC

office for instructor/attendant
maker core
maker core + buffer zone
maker core + buffer zone
maker core + buffer zone

- gym entrance
- floating perforated stairs
maker core + buffer zone

art and ceramic entrance
maker core + buffer zone

wood and metal shop entrance
maker core + buffer zone
maker core + buffer zone
maker core + buffer zone
maker core + buffer zone + outer shell
maker core + buffer zone + outer shell
maker core + buffer zone + outer shell
maker core + buffer zone + outer shell
maker core + buffer zone + outer shell

informal learning zone

formal learning zone
maker core + buffer zone + outer shell
-1 FLOOR PLAN
1/8" = 1'-0"