Elementary School
Harlem, New York

School Characteristics

Students
• 350 students in grades PK-5
• 20 PK-5 classes. Classes to be broken into 3 cohorts of 8 students each, to be onsite part time
• Need 10 small breakout areas for 8 students each
• Provide a trauma-informed design approach (likely for all urban schools)

School Grounds
• Urban location, almost 1 acre
• High levels of noise from car stereos, ambulances, construction
• Odors from animal waste, garbage piles, smoking
• School staff does daily walk-around cleanup of perimeter sidewalks.
• Minimal outdoor storage available.
• 5-minute walk to Central Park

Climate
• Four distinct seasons: crisp fall, cold winter with snowfall, warm wet spring, and hot, humid summers. Heavy rain, high wind, snow, extreme heat, extreme cold, and poor air quality are all factors.
• Historically ~80 days/year indoor recess. School working to change weather mindset to reduce this to ~20 days.
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Site Photographs

Photographs, top row to bottom row

1. Recent playground improvements include new asphalt and play structures
2. Mature trees provide shade around the perimeter of the schoolyard
3. A series of classrooms with bathrooms open into the schoolyard—opportunity to pull seats and desks right outside
4. A garden area with trees and planters provides hands-on learning opportunities

Photos: Cara Sclafani
Potential Outdoor Seating Areas
Use Existing Tree Canopy and Morning/Afternoon Shade for Outdoor Learning When the Weather is Clear and Mild

Elementary School Harlem, New York
Scenario #1: Low Cost

Climate Considerations
• Local climate varies seasonally
• Classes will require protection from sun, rain, and snow and appropriate clothing to keep everyone warm and dry

Climate Adaptation Strategies
• Use outdoor classrooms as “Plan A” when the weather is nice; go inside or online when it is raining or too cold
• Place seating in areas where existing tree canopies provide morning or afternoon shade, and away from street to reduce noise

Use and Augment Existing Infrastructure
• Use 4 areas with shade trees and add low cost seating (mats, stumps, benches, and/or existing desks/tables)
• Place 6 seating circles outside doors
• Add storage sheds for class materials
• Preserve space for gardening and nature play

Scenario #1: Outdoor Capacity
• Max: 92 students in 10 seating areas
• Max: 16 students in active garden areas
• Capacity: 31% of enrolled students
Potential Outdoor Seating Areas
Provide Shade/Rain Tents in Same or Additional Locations for Outdoor Learning in Mild Weather, Light Rain, or Snow

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Scenario #2: Moderate Cost

Climate Considerations
Build on Scenario #1
- Install shelters to protect from rain, snow, and sun. Ideal shelters could be adjustable in height to allow winter sun.
- Add outdoor heaters and/or provide rain and snow gear so students will be dry and warm when weather is wet and cold

Climate Adaptation Strategies
- Use outdoor classrooms as “Plan A” when the weather is nice or in mild rain and snow; go inside or online when it is too cold or harsh

Use and Augment Existing Infrastructure
- Add low cost seating (mats, stumps, benches, and/or existing desks/tables)
- Install shelters to protect from rain, snow, and sun in areas away from street
- Add storage sheds for class materials
- Preserve and activate space for gardening and nature play

Scenario #2: Outdoor Capacity
- Max: 112 students in 14 covered seating areas
- Max: 16 students in active garden areas
- Capacity: 37% of enrolled students
Potential Outdoor Seating Areas
Use Existing Seating and Tree Canopy for Outdoor Learning
When the Weather is Clear and Mild

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Scenario #3: Green Infrastructure Investment

Climate Considerations
Build on Scenario #2
- Add low, planted hills (hugels) on top of asphalt or grass along fence line to reduce noise and odors from street
- Provide potted trees for green views and to divide outdoor class areas, to be replanted in ground later

Climate Adaptation Strategies
- Use outdoor classrooms as “Plan A” when the weather is nice or in mild rain and snow; go inside or online when it is too cold or harsh

Use and Augment Existing Infrastructure
- Preserve and activate space for gardening and nature play
- Leave room and flexibility for long-term outdoor classroom vision ideas

Scenario #3: Outdoor Capacity
- Max: 112 students in 14 covered seating areas
- Max: 16 students in active garden areas
- Capacity: 37% of enrolled students