

Living Schoolyards

An overview collaboration of Living Classroom and Canopy

- About Living Schoolyards
- Benefits to Students
- Why Living Schoolyards Matter
- Building Successful Living Schoolyards



About Living Schoolyards

Living school grounds are richly layered outdoor environments.

They can include:

- Native and pollinator gardens
- Edible gardens
- Trees
- Outdoor classrooms
- Nature play areas
- Traditional play equipment
- Stormwater capture
- Trails



About Living Schoolyards

Characteristics include:

- Ample space to plant, to nurture, and to harvest fresh, organic vegetables, fruits and grains from their school edible garden.
- Edible gardens that allow students to learn where food comes from, possibly creating healthier eating habits, and sharing the *excitement* about fresh vegetables and fruit with their families.
- Support mental *and* physical health.



Benefits of Living Schoolyards

Living Schoolyards provide site-based, hands-on nature-centric learning resources for children.

They are:

- Child-centered
- Foster empathy, exploration, adventure and a wide range of play and social opportunities
- Enhance health and well-being
- Strengthen local ecological systems



GREEN SCHOOLYARDS CAN PROVIDE MENTAL HEALTH BENEFITS



THE ISSUE

1 in 5 children has, or has had, a serious mental health disorder at some point in their lives.¹

MENTAL HEALTH PLAYS A CRITICAL ROLE IN THE COGNITIVE, EMOTIONAL, & SOCIAL DEVELOPMENT OF CHILDREN AND YOUTH.

Green schoolyards can enhance mental health and well-being and promote social-emotional skill development.

GREEN SCHOOLYARDS HELP KIDS FEEL:

- CALMER & LESS STRESSED²⁻³**
Views of green landscapes from classroom windows helped high school students recover more quickly from stressful events.⁴
- POSITIVE & RESTORED³**
Forest schools enhanced positive and decreased negative emotions.⁵
- RESILIENT²**
Natural areas enhanced feelings of competence and increased supportive social relationships that help build resilience.²

GREEN SCHOOLYARDS PROMOTE SOCIAL-EMOTIONAL SKILLS

- PRACTICE RELATIONSHIP SKILLS²** ☆☆☆☆☆
Children demonstrated more cooperative play, civil behavior and positive social relationships in green schoolyards.^{6,7}
- DEVELOP SELF-AWARENESS & SELF-MANAGEMENT**
Green schoolyards can reduce aggression and discipline problems.^{6,7}
Gardening at school helped students feel proud, responsible & confident.²

GREEN SCHOOLYARDS CAN IMPROVE ACADEMIC OUTCOMES



THE ISSUE

Only 1/3 of U.S. 8th graders perform at or above standards for science and math.¹

SCHOOLS ACROSS THE NATION ARE SEEKING WAYS TO IMPROVE ACADEMIC OUTCOMES FOR ALL STUDENTS

Green schoolyards promote academic achievement through hands-on, experiential learning and by enhancing the cognitive and emotional processes important for learning.

ENHANCING LEARNING

Green schoolyards provide **experiential learning across many subjects.**^{2,3}



33 of 40 school garden studies (83%) found

IMPROVED OUTCOMES in science, math & language arts.²

BETTER GRADES



HIGHER TEST SCORES



ENHANCED KNOWLEDGE



ACROSS SEVERAL SUBJECTS

2, 3, 4

- GREEN SCHOOLYARDS CAN**
- ★ Help students focus attention and regulate behavior^{5,6}
 - ★ Enhance attitudes and engagement with school^{7,8}
 - ★ Support creativity, critical thinking and problem solving⁹

ROOM WITH A VIEW

Seeing nature and greenery from school buildings can foster positive academic outcomes.^{10,11}

HIGH SCHOOLERS WITH VIEWS OF TREES HAD:¹²



HIGHER standardized test scores



HIGHER graduation rates



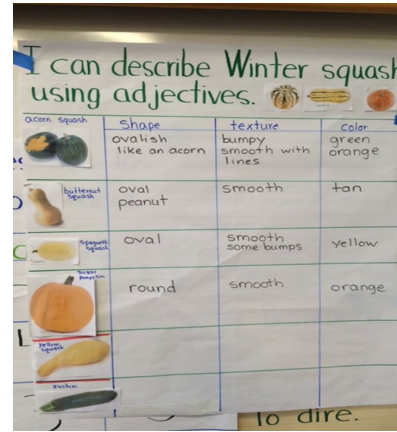
HIGHER % of students planning to attend a 4-yr college



Benefits of Living Schoolyards

- Learning is tactile, sensory and based on observation;
- Learning is relevant to students' lives;
- Learning incorporates *art, language arts, math and social studies.*

Learning happens outside the classroom walls as well as inside.



Why Living Schoolyards Matter

- Students can observe and interact with *living systems* regularly and in their own schoolyard. **No field trips required!**
- Ecological - *living* - schoolyards provide a vehicle for meeting spaces outside.
- Traditional classroom lessons *in every subject* are enriched and enhanced with hands-on learning resources.



Why Living Schoolyards Matter

Ecological = *living* schoolyards. Living schoolyards also seek to encourage local wildlife populations by using **native plants**, sometimes creating entire wildlife habitat zones onsite.

Living Schoolyards enable the experience of growing and preparing your own food - and that experience is not forgotten!



URBAN
GREENNESS

ENVIRONMENTAL
MEDIATORS

PHYSIOLOGICAL
MEDIATORS

CARDIOVASCULAR
DISEASE
RISK FACTORS

CARDIOVASCULAR
DISEASE ↓



Air Pollution ↓
Light Pollution ↓
Noise Pollution ↓
Area Characteristics ↑
(walkability, neighborhood quality)

Physical Activity ↑
Pollution Exposure ↓
Stress ↓
Sleep ↑
Immune Challenge ↑
Social Cohesion / Interactions ↑

Blood Pressure ↓
Cholesterol ↓
Insulin Resistance ↓
Diabetes ↓
Obesity ↓

Process Map for Building Successful Living Schoolyard Programs



Best Practices for Building Living Schoolyards

- **Community outreach**, visioning, goal setting, comprehensive planning for the whole district.
- **Equitable** resource allocation across schools.
- Consult **experts in the community**: green schoolyard designers, arborists, environmental literacy educators, environmental nonprofits, community leaders.
- **Process and result** are both important.



Best Practices for Trees

- Choose the right tree for the right place.
- Plant trees in healthy conditions to promote growth.
- Ensure 5 years of healthy conditions for establishment.
- Engage the community.
- Enjoy the trees for decades!



In Summary, Living Schoolyards:

- Improve students' educational outcomes.
- Enhance student's physical, mental, and social-emotional health.
- Provide equitable educational environments and opportunities.
- Support District's LCAP goals.
- Benefit ecosystem and mitigate climate change.

