Redesigning Schoolyards for Community Resilience: Engaging Partners at all Levels

Ellen Braff-Guajardo
Margaret Lamar
Jaime Zaplatosch
Meg Kelly
“I like to play indoors better because that’s where all the electrical outlets are.”

— a fourth-grader in San Diego
Risks and Trends in Children’s Health

• 60% of obese children (ages 5-10) have at least one cardiovascular risk factor (Centers for Disease Control).
• There is an upward trend in high blood pressure in children (ages 8-18) (Journal of American Medicine).
• There is a dramatic increase in diabetes in children and adolescents (National Institutes of Health).
• The prevalence of childhood asthma has increased significantly and is especially high in urban communities with high poverty (Journal of Epidemiology and Community Health).
Risks and Trends in Children’s Health

• In the past 30-40 years there has been a steep decline in children’s physical activity (PA).
• Approximately 50% of youth meet the recommended guidelines of PA.
• 48-69% of youth don’t attend PE or recess.
• Since NCLB almost 50% of school administrators have replaced P.E. or recess with more core subject learning.

(Institute of Medicine, 2013)
Green space is one promising strategy for reducing health disparities.

- Families and children who live in lower-income communities have significantly less access to recreational facilities than those in higher-income or predominately white communities. (Powel, 2006; Garcia, 2008; Moore, 2008)

- Access to parks and recreational facilities is associated with lower body mass index among children and increased physical activity among adults. (Wolsch, 2010)

- Communities with high poverty appear to benefit proportionally more from green space access than those with higher-income. (Mitchell, 2008)
American Public Health Association (APHA) released a policy statement in November 2013 that encourages “land use decisions that prioritize access to natural areas and green spaces for residents of all ages, abilities and income levels.”
in November 2013

“Abandoned lots and stray dogs make healthy living harder. I would not want to run or walk here.”

- Tarneisha J., Wheatley High School
Why schoolyards for increased access to green space?
During school children can have an enhanced recess and P.E. environment and learn all core subjects outdoors—math, science, reading, writing.
After school programs can enhance outdoor learning and play with a rich environment with a high variety in activities.
Children can increase physical activity on green schoolyards where they jump, climb, dig, lift, rake, build, and get more moderate PA in a non-competitive play environment.
Schools are community hubs for families and neighborhoods.
Physical Benefits of Green School Grounds: The Latest Research

Schoolyard designs that include natural elements increase moderate physical activity (Nedocic & Morrisey, 2013; Pagel et al., 2014; Brink et al. 2010).

Green schoolyards are more effective at engaging children of all fitness levels (Barton et al., 2014).

Settings with a mixture of green and built elements shows promise in increasing girls physical activity and children of mixed age levels (Pagel et al, 2014; Martensson et al., 2014).
Mental and Cognitive Benefits of Green School Grounds: The Latest Research

Green schoolyards significantly decrease stress levels and enhance psychological wellbeing (Kelx, Evand & Roderer, 2013).

Schoolyard natural areas enable students to escape stress, focus, build competence, and build supportive social groups. (Chawla, Keena, Pevec & Stanley, 2014).

Contact with school ground green open spaces is associated with better performances on tasks requiring direct attention (Carrus et al., 2012).

Children exhibit more positive social behaviors on green school grounds (Carrus et al., 2012).
**Academic Benefits of Green School Grounds: The Latest Research**

Academic performance is enhanced in **reading, writing, math, science** (Williams & Dixon, 2013; Blair 2014; Smith, 2013).

Natural environments increased **student engagement** in learning and **more time spent on task** (Smith, 2013; Rios & Brewer, 2014).

Views of nature-rich areas with trees and shrubs contrasted with views of fields, lawns and parking lots are positively associated with:

- **Standardized test scores**
- **Graduation rates**
- **Plans to attend 4-year college**

(Matsouka, 2010)
The Children & Nature Network is fueling the worldwide grassroots movement to create a future in which all children play, learn and grow with nature in their everyday lives.
How We Power the Movement

We train and convene the network to act in their communities

We change the system through partnerships and policy

We broadcast information to fuel grassroots social change

childrenandnature.org
C&NN Green School Grounds Project

Scientific Literature Review

Interviews with Key Leaders in the Field

Focus Groups with Community Stakeholders

Site Visits

Research in Best Practice Models
Successful Components of Green School Grounds

- Supporting Policy
- Sustainable Funding
- Strong Partnerships
- Community-Based Design
- School Administration Support
- Teacher Training
- Outdoor Learning Materials
- On-Going Maintenance

childrenandnature.org
Partnerships are key to creating green school grounds because schools can’t reach their goals alone.
connecting communities
to healthy food in the nation's capital
“The Healthy Schools Act of 2010 was a game changer. It ended up being a connector for all of us who had been doing school gardens for years.”

Sarah Holway, DC Greens
Groups have been working together for decades

Policy allows for sustainable funding

DCG convene groups to support schools

Non-profit orgs coordinate efforts

dcggreens

childrenandnature.org
School Park Program
Funding Partners include:

**Government**
- City of Houston Housing and Community Development Department (Federal Block Grants)
- City of Pasadena
- Houston City Council
- Houston Mayor’s Office (office space/supplies)
- Harris County Precincts 1, 2, 4

**Foundations**

**Corporations**

**School Districts**

**Non-Profits**
“We believe this funding model can be replicated, but there would be different players, different partners, and different systems in place to make it happen.”

Kathleen Ownby, Spark Park
Relationships building since 1983

Multi-Source funding with government dollars at the center

Long-standing commitment to projects by local non-profits

School and city set common goal of community access
Funding Partners

- Corporate
- Foundations
- Earned Income
- Individuals
“We want to be a partner in every sense of the word—beyond the check. We love to have opportunities to engage our employees in the community. And the garden addresses so many diseases, including physical activity.”

--Dr. Catherine Oliveros, Blue Cross Blue Shield of Texas
RSG Staff works hard on school district administration relationships

Fulltime staff includes Director of Corporate Relations

Connect broad spectrum community partners to 5 school districts

Corporate funders get their objectives accomplished through the gardens with shared goals
Total of 475 Campaigns in 48 States and 16 Countries Worldwide

Campaigns listed include grassroots coalitions, family nature clubs, and youth-led community efforts.
For additional information, contact:
Margaret Lamar
Director of Strategic Partnerships
margaret@childrenandnature.org

www.childrenandnature.org
MANAGING PARTNERS
HEALTHY SCHOOLS CAMPAIGN + OPENLANDS
Openlands believes that nature is vital to all people.
Program Goal

Chicago’s outdated schoolyards can be reimagined as vibrant outdoor places that benefit students, communities, and the environment.

Health & Wellness

Outdoor Learning

Stormwater Management
Health & Wellness

- Support Chicago Public Schools wellness, recess and Physical Education policies
- Address high childhood obesity rates
- Create access to green space and play areas
Outdoor Learning

• Hands-on activities
• Increased awareness of environmental issues
• Improved cognitive development
• Daily connection to nature
Stormwater Management

• Addressing flooding & pollution issues
• Capturing rain where it falls
Space to Grow Partners

openlands
conserving nature for life

healthy schools campaign

Chicago Public Schools

The Kitchen community
Community Through Food

Consortium to Lower Obesity in Chicago Children
clocc
Creating healthy children, families, and communities
Building the Partnership: Steering Committee

- Managing Partners
- Capital Partners
- Nonprofit Partners
Building the Partnership

- Shared Vision
- Site Selection
- Leveraging Expertise
- Integrated Process
- Unique Financial Model
- Engaging New Partners
Site Selection: Three Stages

- **Stage 1: Minimum Criteria**
  - Invited to apply
- **Stage 2: Application Review/Rank**
  - Includes school readiness and community data
- **Stage 3: Final Partner Review**
  - Geographic equity, site suitability
Grissom
Grissom
Morrill School needed a safe playground...and Morrill has a safe playground!

We had recess around a field house with broken windows and graffiti.

Fences with gaping holes

The only “nature” we could play on was a corner-patch of dirt.

Tripping hazards

New fences!

Lots of nature to play in, explore, and learn about!
SCHOOLYARD PLANNING, BUILD + USE

**PLANNING**
- **OCTOBER**
  - ORIENTATION
- **NOVEMBER**
  - FIRST SCHOOL COMMUNITY MEETING
  - BRAINSTORMING PHOTO SURVEYS
- **DECEMBER**
  - SECOND SCHOOL COMMUNITY MEETING
  - REVIEW CONCEPTUAL DESIGNS
  - THIRD SCHOOL COMMUNITY MEETING
  - FINAL DESIGN

**BUILD**
- **DECEMBER-MAY**
  - DESIGNS GO THROUGH CHICAGO PUBLIC SCHOOLS CONSTRUCTION PROCESS
- **MAY-JUNE**
  - SCHOOL GROUNDBREAKING CELEBRATION
- **JUNE-OCTOBER**
  - MAJOR CONSTRUCTION, SCHOOLYARD BUILDS, RIBBON CUTTING CEREMONY

**USE**
- COMMUNITY STEWARDSHIP
- WORKSHOP ATTENDANCE
- SCHOOLYARD IS OPEN TO THE COMMUNITY
- EVALUATION AND RESEARCH
- ART

**2-YEAR SUPPORT PLAN**
- GREENING CHICAGO
- SPACE TO GROW
- SCHOOLYARDS
Engaging the School Community: Brainstorming & Visual Preference Survey
PHOTO SURVEY
Imagine the possibilities!
(Please circle one)

Student; Grade___    Teacher    Community Member
Parent               Staff      Community Organization

Please circle the top 5 things you want in your new schoolyard!

Shade Structure    Seating    Outdoor Classroom    Quiet Places    Vegetable Garden
Butterfly Garden    Native Plants    Sidewalk Games    Words & Quotes    Game Table
Artificial Turf Field    Walking/Running Track    Basketball    Baseball    Outcropping Stone
Swings    Play Mounds    Fitness Equipment    Play Structure

Write your own idea for the schoolyard!
Engaging the School Community: Initial Concept Designs
Engaging the School Community: Final Concept Presentation
**Schoolyard Planning, Build + Use**

### Planning
- **October**
  - Orientation
- **November**
  - First School Community Meeting
  - Brainstorming Photo Surveys
- **December**
  - Second School Community Meeting
  - Review Conceptual Designs
  - Third School Community Meeting
  - Final Design

### Build
- **December-May**
  - Designs go through Chicago Public Schools Construction Process
- **May-June**
  - School Groundbreaking Celebration
- **June-October**
  - Major construction, Schoolyard builds, ribbon cutting ceremony

### Use
- Community Stewardship
- Workshop Attendance
- Schoolyard is open to the community
- Evaluation and Research
- Art

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**2-Year Support Plan**

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**Greening Chicago: Space to Grow**
Two-Year Support Plan:
Professional Development & Trainings
Two-Year Support Plan: Community Engagement
Measuring Progress

• Evaluating the Impact
  – Students
  – Schools
  – Community

• Evaluating the Process

• Measuring Stormwater
  – Quantity
  – Quality
Evolving Process: Engaging New Partners
Achieving the Goal

- Dynamic Partnerships
- New Funding Model
- Inclusive Planning Process
- Innovative Stormwater Management
- Capacity Building
- Empowering the Community