BENEFITS OF OUTDOOR EXPERIENCES FOR ALL CHILDREN

Compiled for the CPS Outside Impact Team
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(by info graphic)
NATURE PLAY CAN ENCOURAGE CARE FOR THE EARTH

THE ISSUE
Childhood has moved indoors, leaving kids disconnected from the natural world.

MEANINGFUL OUTDOOR EXPERIENCES BENEFIT CHILDREN AND INSPIRE THEM TO LOVE AND CARE FOR NATURE.

Children who are connected to nature have better health, higher satisfaction with life, and pro-environment behaviors. 2,13

HOW TO CREATE NATURE CHAMPIONS:

Provide fun, hands-on nature experiences

Take learning outside

Have kids note 3 good things in nature everyday to improve their connection to nature

Share your love of the outdoors with children

Repeat!

THE BENEFITS OF TIME IN NATURE:

Time outdoors in nature contributes to children’s care for nature while supporting their healthy development. 2,10,13

- Better social skills 3,13
- Enhanced health 2,15
- Increased self-esteem 2,13
- Improved grades 10,11
- Pro-environment behaviors 1,2,3,4,5,10,13
- Stronger emotional connections to people and nature 6,7,8,12

MEANINGFUL experiences in nature guide children, youth and adults toward care for nature 4

Time in nature during childhood and role models who care for nature are the two biggest factors that contribute to environmental stewardship in adulthood 4,5

ADDITIONAL RESEARCH ON THE BENEFITS OF NATURE AVAILABLE AT childrenandnature.org/research

SUPPORTING RESEARCH
NATURE CAN IMPROVE ACADEMIC OUTCOMES

Spending time in nature enhances educational outcomes by improving children’s academic performance, focus, behavior and love of learning.

**BETTER ACADEMIC PERFORMANCE**
Learning in natural environments can:

- **BOOST PERFORMANCE**
  - in reading, writing, math, science and social studies

- **ENHANCE**
  - creativity, critical thinking and problem solving

- **Seeing nature from school buildings can foster academic success**
  - 4, 7, 8

**ENHANCED ATTENTION**
Spending time in nature can help children focus their attention:

- **FOCUS AND ATTENTION**
  - 10, 11, 12, 13

- **ADHD SYMPTOMS**
  - 14, 15

- **The greener the setting, the better the focus**
  - 14, 15

**INCREASED ENGAGEMENT & ENTHUSIASM**
Exploration and discovery through outdoor experiences can promote motivation to learn:

- **INCREASED ENTHUSIASM FOR LEARNING**
  - 1, 6

- **GREATER ENGAGEMENT WITH LEARNING**
  - 17

**IMPROVED BEHAVIOR**
Nature-based learning is associated with reduced aggression and fewer discipline problems:

- **MORE IMPULSE CONTROL**
  - 10

- **LESS DISRUPTIVE BEHAVIOR**
  - 20

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**SUPPORTING RESEARCH**

7. Wu et al. (2016). Linking student performance in Massachusetts elementary schools with the “greenness” of school surroundings using remote sensing. PAQ, ONE (2016) e00145.

CANN recognizes that not all studies support causal statements.
NATURE CAN IMPROVE HEALTH AND WELLBEING

Spending time in nature provides children with a wide range of health benefits.

**HEALTHY BABIES**
Nature exposure for mothers can promote:

- **Better Fetal Growth**
- **Healthier Birth Weights**

**HEALTHY EYES AND VITAMIN D LEVELS**
Time spent in bright sunlight can:

- **Reduce NearSightedness**
- **Increase Vitamin D Levels**

**NATURE CONTACT IS**
especially beneficial for mothers of lower education and socio-economic levels. 3, 4

**INCREASED PHYSICAL ACTIVITY**
Access to parks and greenspace can foster:

- **Increased Physical Activity**
- **Reduced Risk of Obesity**

**OUTDOOR PLAY**
increases the likelihood that girls will remain active into adolescence. 6

**SOCIAL-EMOTIONAL WELLBEING**
Learning in nature can support:

- **Improved Relationship Skills**
- **Reduced Stress, Anger, and Aggression**

Children are better able to cope with stress when they live near trees and other greenery. 15, 16

SUPPORTING RESEARCH

- Markovych et al. (2014). Surrounding greenness and birth weight: Results from the GIMPus and LILAlps birth cohorts in Munich. Health Place, 31, 52-56.
- Wolch et al. (2013). Childhood obesity and proximity to urban parks and recreational resources: A longitudinal cohort study. Health Place, 33, 207-214.
- Chwals et al. (2014). Green schools/gyms as havens from stress and resources for resilience in childhood and adolescence. Health Place, 36, 113.

C&N recognizes that not all studies support causal statements.
GREEN SCHOOLYARDS CAN PROVIDE MENTAL HEALTH BENEFITS

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

GREENER SCHOOLYARDS HELP KIDS FEEL:

- **CALMER & LESS STRESSED**
  Views of green landscapes from classroom windows helped high school students recover more quickly from stressful events.

- **POSITIVE & RESTORED**
  Forest schools enhanced positive and decreased negative emotions.

- **RESILIENT**
  Natural areas enhanced feelings of competence and increased supportive social relationships that help build resilience.

GREENER SCHOOLYARDS PROMOTE SOCIAL-EMOTIONAL SKILLS

- **RELATIONSHIP SKILLS**
  Children demonstrated more cooperative play, civil behavior and positive social relationships in green schoolyards.

- **SELF-AWARENESS & SELF-MANAGEMENT**
  Green schoolyards can reduce aggression and discipline problems.
  Gardening at school helped students feel proud, responsible & confident.

SUPPORTING RESEARCH


CANN recognizes that not all studies support causal statements.
GREEN SCHOOLYARDS CAN INCREASE PHYSICAL ACTIVITY

The Issue
Less than 3 in 10 high school students get 60 minutes of physical activity every day.1

Regular physical activity enhances well-being & attentiveness in the classroom.

Green schoolyards can promote physical activity by offering a variety of active play options that engage children of varying fitness levels, ages and genders.

85% of educators and parents said green schoolyards support a wider range of play activities than other types of schoolyards.2

More Options, More Activity

Promote running, climbing, lifting, jumping, trees, logs, shrubs, rocks

Variety in landscaping increases variety in active play.2

Meeting Diverse & Changing Needs

Green schoolyards complement conventional playgrounds with opportunities for light & moderate physical activity that are more appealing to some children.3,4

Green schoolyards can contribute to girls’ physical fitness

Physical activity decreases as children grow, especially for girls. Green schoolyards sustain activity as children age and preferences change.5,6,7

Supporting Research


Additional Research Used for This Infographic Available At

childrenandnature.org/guidelines/bibliographies

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C&NN recognizes that not all studies support causal statements.
GREEN SCHOOLYARDS ENCOURAGE BENEFICIAL PLAY

8-18 year olds in the U.S. spend an average of 7.5 hrs per day using entertainment media.1

KIDS NEED TO PLAY: PLAY SUPPORTS PHYSICAL, SOCIAL & EMOTIONAL WELL-BEING.

Natural areas promote child-directed free play that is imaginative, constructive, sensory rich and cooperative.

ENCOURAGING IMAGINATIVE, COOPERATIVE FREE PLAY

1. Accommodate different ages & abilities
2. Offer a variety of options that appeal to a wide range of play interests
3. Sustain children’s interest
4. Strengthen links between play & learning
5. Promote cooperation & negotiation

GREEN SCHOOLYARDS CAN SUPPORT DIFFERENT TYPES OF PLAY 2, 4, 7, 8

DRAMATIC PLAY
Loose parts—such as sticks, stones, acorns & pinecones—engage the imagination.

EXPLORATORY PLAY
Natural areas provide opportunities for children to explore.

SOLITARY PLAY
Areas under bushes or other nooks allow children to engage in alone time and contemplation.

CONSTRUCTIVE PLAY
Building things out of natural materials helps children learn hands-on skills.

LOCOMOTOR PLAY
Natural items such as logs and rocks can be carried. Looping paths allow walking, running and biking.

SUPPORTING RESEARCH

C&NN recognizes that not all studies support causal statements.

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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. 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.

Improved outcomes in science, math & language arts.

Green Schoolyards Can
- Help students focus attention and regulate behavior.
- Enhance attitudes and engagement with school.
- Support creativity, critical thinking and problem solving.

Better grades, higher test scores, enhanced knowledge across several subjects.

Room with a View
Seeing nature and greenery from school buildings can foster positive academic outcomes.

High schoolers with views of trees had:
- Higher standardized test scores
- Higher graduation rates
- Higher % of students planning to attend a 4-yr college

Supporting Research
1. www.nationreportcard.gov
References
Nature Play Can Encourage Care for the Earth


Nature Can Improve Academic Outcomes


Nature Can Improve Health and Wellbeing


Green Schoolyards Can Provide Mental Health Benefits


Green Schoolyards Can Increase Physical Activity


Center for Disease Control and Prevention Physical Activity Data and Statistics (link)


Green Schoolyards Encourage Beneficial Play


Green Schoolyards Can Improve Academic Outcomes


The Nation's Report Card: https://www.nationsreportcard.gov/

