



Growing a Healthier DC: Greening Our Schools



In a healthier D.C., schoolyards are green

Children walk or bike to school on shaded, tree-lined streets. Trees and gardens are seen from classrooms. School grounds give children places to play games on courts, run on grass, swing on equipment and quietly enjoy open areas shaded with a canopy of trees. School grounds have gardens and natural areas where children can experience hands-on learning and stewardship of the natural environment in their neighborhood. Schoolyards are places for fresh air and sunshine breaks, and for playing with parents and friends after the school day is over.



Green schoolyards

- Improve children’s ability to focus in class and concentrate on homework
- Provide a local context for science, math and technology lessons
- Provide opportunities for outdoor environmental education
- Help fight childhood obesity and diabetes
- Reduce ADHD symptoms
- Increase community green space and opportunities for recreation
- Reduce facilities energy costs
- Foster environmentally responsible behaviors in youth

Schoolyards are an important part of the learning environment.



Kids thrive in green environments

Improved academic performance. In DC, 67% of 4th graders performed “below basic” on recent standardized tests and 69% of eighth graders were “below basic” in math.¹ Environment-based learning and green schoolyards provide substantial academic, developmental and social benefits to children, leading to improved reading and math scores; classroom discipline problems also decline.²

A natural treatment for ADHD. Attention Deficit Hyperactivity Disorder affects 6.7% of the District’s youth.³ This disorder contributes to family conflict, peer rejection and academic failure. Recent studies reveal that ADHD symptoms are relieved after contact with nature – the greener the setting, the more the relief.⁴



Community green space. In many neighborhoods, school grounds function as community parks providing important public open space for active and passive recreation. This is the case in neighborhoods east of the Anacostia River where there are fewer public fields and playgrounds.⁵





DC school properties occupy an area more than twice the size of the National Mall.

The Challenge and Opportunity

School grounds are important resources for the health and education of our children and for our communities. Studies and experience tell us that students are healthier and more prepared to learn when they have green space in which to play and relax. In addition to contributing to improved academic performance, green schoolyards are important neighborhood assets, providing cooling shade and space for community recreation and gatherings.

Public school properties in DC occupy about 650 acres, an area two times larger than the National Mall. The trees and green space on these properties make important contributions to the overall tree canopy of the District, reducing air pollution that triggers asthma attacks, stormwater runoff that pollutes our rivers and summer temperatures which increase smog and air conditioning costs.

As the District proceeds with its multi-billion dollar facilities renovation and replacement effort for the approximately 150 DC Public Schools, it is essential that the schoolyards be included as integral components of both the facilities infrastructure and learning environment. As properties are modernized, consolidated and disposed of, it is important to recognize the community and environmental benefits that schoolyards currently provide and those that could be provided in the future. These concepts also apply to the District's 80-plus private and 50-plus charter schools.

Recommendations

- Recognize that the learning environment extends beyond school buildings to outdoor study sites, to the places where children gather and play, and even includes the views from school windows.
- Offer outdoor learning and recreation programs in all schools to provide substantial academic, developmental, physical and social benefits to children.
- Fully integrate school grounds into the evaluation, planning and budgeting processes for school construction, modernization and property disposition.
- Provide dedicated funding for ongoing maintenance of school grounds.
- Recognize that school grounds also serve the open space, recreation and health needs of surrounding neighborhoods and the District.

DC's school renovations should include green, healthy schoolyards.

¹ *Test Scores Move Little in Math, Reading* by Lois Romano, The Washington Post p. A3, Oct 19, 2005.

² *Environment-based Education: Creating High Performance Schools and Students*, The National Environmental Education & Training Foundation, Sept 2000.

³ *Prevalence of Diagnosed and Medicated Attention-Deficit/Hyperactivity Disorder: United States, 2003*, Centers for Disease Control, Morbidity and Mortality Weekly Report 54(34); Sept 2, 2005.

⁴ *Coping with ADD: The Surprising Connection to Green Play Settings* by Andrea Faber Taylor, Frances E. Kuo, and William C. Sullivan, Environment and Behavior 33(1), Jan 2001.

⁵ CapitalSpace planning process, coordinated by the National Capital Planning Commission, www.capitalspace.gov, 2007.

Greening Our Schools is one in a series of issue briefs from Casey Trees. The *Growing a Healthier DC* series is a product of conversations with a panel of national and local experts convened in cooperation with District agencies, organizations and foundations. The panel examined how green infrastructure could be used to maximize social, economic and ecological benefits in the District of Columbia.

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