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Afterschool and the Environment: A Natural Fit

Bringing afterschool outdoors has the potential to create the next generation of environmental stewards and provides numerous benefits to schools, communities and the planet that will have long-lasting effects.

-- Lucille Davy, Commissioner, New Jersey Department of Education

Many believe that children exhibit a natural curiosity about nature and their surrounding environment. Research is backing up that belief. In a recent study, elementary school children told researchers that they wanted to learn more about the environment and science. Most had a real interest in environmental issues, concern about the planet and a desire to know more about what we can do to protect it. But they had little real information about these issues because they weren't being adequately taught about them in school. As a result, few showed much understanding of the science behind environmental concerns, and the solutions that may be on the horizon.ⁱ

With environmental issues a pressing concern—for our economy, our health and our planet—children need to experience nature firsthand, see the ways our lifestyles are affecting the climate, and understand the impact of the choices they will make.

That kind of exploration and engagement will heighten awareness, promote social responsibility and create opportunities for more physical activity. All of that is important. Today's children are the first generation at risk of having a shorter lifespan than their parents.ⁱⁱ Sedentary lifestyle and physical inactivity have contributed greatly to numerous health problems plaguing children today including childhood obesity. According to the Institute of Medicine, childhood obesity has doubled over the past 30 years for preschoolers and adolescents, and more than tripled for children aged six to 11.ⁱⁱⁱ Chronic conditions related to childhood obesity such as type-2 diabetes, asthma, hypertension and cardiovascular disease have all increased over the past few decades.^{iv}

In an effort to address these issues, in September 2008 the U.S. House of Representatives passed the *No Child Left Inside Act* to strengthen K-12 environmental education and teacher training. The bill states that incorporating environmental education into the curriculum will enhance learning and problem-solving skills and prepare students for the challenges and opportunities likely to arise in coming years due to environmental changes. It can also improve academic performance, self-esteem, personal responsibility, and community involvement, and address childhood obesity.^v

The benefits associated with engaging children in environmental education are significant and well-documented.

Yet, most children have little chance for direct contact with nature and the outdoors, which have taken a back seat to television, video games and computers. At the same time, academically demanding schoolwork has all but eliminated physical education and recess. Today's children are losing contact with the natural environment, and their health and well-being is suffering as a result. The American Academy of Pediatrics encourages children to get outside not only for their physical development, but also for their emotional, social and cognitive development. Being outdoors can:

- Increase levels of physical activity^{vi}
- Reduce stress^{vii}
- Aid in healthy development^{viii}
- Serve as a coping mechanism for children with attention disorders such as attention-deficit disorder^{ix}

Going outdoors and learning about the environment promote children's intellectual, emotional and physical health by allowing them to work outside the classroom and gain a greater understanding of the world around them. Fostering greater environmental

awareness has the potential to prepare future generations of environmental stewards and leaders—such as scientists and entrepreneurs—who will help meet the economic and environmental challenges that lie ahead. Environmental education also can increase awareness and knowledge about our planet while strengthening critical thinking, problem-solving and effective decision-making skills.

Time in nature is not leisure time; it's an essential investment in our children's health.

--Richard Louv, author of Last Child in the Woods: Saving our Children from Nature-Deficit Disorder

Right now, educators are striving to incorporate

environmental instruction into existing curriculum, as well as get children outside for hands-on, experiential learning and play. Environmental education can help produce motivated students, high-performance learners, effective future workers and problem solvers, thoughtful community leaders and people who care about the people, creatures and places around them.

Afterschool provides the perfect platform for environmental education.

Educators need to create learning experiences that benefit children's health and mold the next generation of environmentalists. But classroom teachers who want to create opportunities for students to learn about the environment often lack support in the form of resources, funding, time and ideas about how to integrate environmental education into classroom learning.

But several states, most notably New Jersey, are taking fresh approaches to incorporating environmental education via afterschool programs. The New Jersey Environmental Education Commission and the New Jersey Department of Environmental Protection have teamed up to start a multi-year initiative to connect children and nature. Using nature as a teaching tool, they are building connections between afterschool programs

and communities while engaging children as stewards of the environment. Other related initiatives in New Jersey include:

- The New Jersey School Age Care Coalition (NJSACC) is launching a campaign called Celebrate Afterschool! Outdoors in the Garden State to promote afterschool and to link it with children's experience outdoors. In May 2009, there will be a week-long celebration to bring afterschool programs outside and connect them with their communities through environmentally conscious activities like planting gardens and designing playgrounds. The campaign will offer afterschool programs important opportunities to develop new partnerships and build relationships within their communities.^x
- In February 2008, the New Jersey Department of Education unveiled a new science project for afterschool programs under 21st Century Community Learning Centers. In collaboration with the Liberty Science Center in Jersey City and the New Jersey School-Age Coalition, the program gives students in grades 4 through 8 hands-on experiences with science projects in their afterschool programs. The programs will focus on the properties of water, the vital role water plays in our lives, and how vulnerable earth's aquatic ecosystems are to human impact.^{xi}

Afterschool programs are at the forefront of the environmental education movement. They provide innovative environmental programming that bolsters academic achievement and boosts the physical and emotional health of children. In part, this is because afterschool programs partner with community based organizations, corporations and other groups to benefit children and, communities.

- The Heritage Project in rural Woodlake, California allows 2,500 K-12 students to participate in environmentally focused afterschool programs. Eighty-five percent of students in the district qualify for free or reduced meals, and many don't have the opportunity to explore the nearby Sequoia and Kings Canyon National Parks. The program includes classes and activities that combine learning with recreation and exercise. Students learn about river ecology while rafting, kayaking and hiking around the local lake. They regularly meet with park rangers and visit the parks to learn about cycles of forest fires and the adaptations of local animals to their habitats. Nearly three-quarters of district students now participate in the program, which yielded many successes:

- Increased test scores in both language and math
- Decreased behavioral problems in the classroom
- Increased number of parents engaged in the school^{xii}

The garden is a great tool to connect kids to the outside world and how they are involved in it. It teaches responsibility, achievement, accomplishment, and gives them something to look forward to.

-- Carla Chilton, 4th Grade Teacher, Seeds of Solidarity

- The Massachusetts-based Seeds of Solidarity teaches young people lessons about the importance of energy conservation and preserving the natural environment through school gardens. During school and in afterschool programs, students learn about gardening and cultivating food, gain hands-on experience with alternative energy and fuel, and discover appropriate ways to deal with pollution.

The school garden supports student inquiry and connection to the natural world. Science concepts are reinforced, and teachers can address a variety of subjects within a garden lesson. Further, school gardens promote a range of benefits among students. One study of the program found that students overwhelmingly reported that they felt calm, safe, happy and relaxed in the school garden.^{xiii} Another study found that third, fourth, and fifth grade students who participated in school gardening activities scored significantly higher on science achievement tests than students who did not participate in garden-based learning activities.^{xiv}

- Earth Force is a national, non-profit educational organization dedicated to helping young people get hands-on, real-world opportunities to practice civic skills, acquire environmental knowledge, and develop the skills and motivation to become lifelong leaders in addressing environmental issues. In January 2007, afterschool students at the Lighthouse Elementary School in Jupiter, Florida, created an Earth Force Club to tackle projects beneficial to the school, the community and the earth. The students' first project was to restore the school's dilapidated nature trail. A Florida ecosystems expert and staff member at Florida Atlantic University's Environmental Program spoke with the students about the importance of planting native species to attract wildlife. After studying the habitat for several weeks, the students went to work. They planted native plants and

hung feeders to attract a variety of different birds. The trail was cleared of weeds and trash, and a map was created so students and other members of the community could come and navigate their way through the trail. Throughout the program, students in the Earth Force Club learned about environmental issues and realized the positive effect they could have on the earth.^{xv}

Fostering greater environmental awareness has the potential to prepare future generations of environmental stewards and leaders—such as scientist and entrepreneurs—who will help meet the economic and environmental challenges that lie ahead.

--Glenn Zaccara, Sr. Manager, Corporate Responsibility, T-Mobile USA

In 2008, T-Mobile piloted a successful cell phone recycling program with afterschool programs. While collecting phones for recycling by T-Mobile, local afterschool programs taught kids about recycling and the environment and showed them how to engage the broader community in

their efforts. Participating programs included:

- Broader Urban Involvement and Leadership Development (BUILD, Inc.) in Chicago, Illinois, which serves more than 3,000 students annually at 26 schools, eight community-based locations, and at the Cook County Temporary Juvenile Detention Center. BUILD collected 77 used cell phones between August 2008 and January 2009.
- Boys & Girls Club of East Los Angeles serves 400 children at three different sites. They collected more than 50 used cell phones between September 2008 and December 2008.
- A.C.E. Afterschool Program in Elwood, New Jersey serves 160 students. The students collected more than 75 used cell phones between September 2008 and December 2008.

Throughout the course of the recycling program, the students:

- Learned about recycling and its benefits to the environment;
- Worked with families and youth to promote the drive in the schools;
- Created systems for future recycling drives;
- Received communications training and developed outreach materials for teachers and other adults in the community;
- Developed materials to promote the drive and other recycling efforts, including posters and flyers; and
- Produced outreach materials used during school announcements to promote the recycling drive among fellow students.

While the T-Mobile program was designed specifically to encourage recycling of cell phones, the students learned much more than the importance of recycling. Similarly, many environmentally based projects can be vehicles to help kids gain skills that will benefit them both inside and outside the classroom.

Conclusion

Afterschool programs have long been lauded for keeping kids safe, inspiring them to learn and helping working families. But they do even more than that. They provide an ideal platform to teach children about the environment and to give them access to natural ecosystems, either through modest programs like schoolyard gardens or in much more ambitious ways. Afterschool programs are positioned to use the outdoors to give richness and relevance to school subjects and activities, and to give students opportunities for physical activity and dynamic hands-on learning.

More than just nature studies, environmental education is a critical component to learning and healthy development. Afterschool programs that include environmental education open doors to the outside, and bolster the learning that happens inside.

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^x <http://www.njsacc.org/advocate/afterschoolOutdoors.php>. Retrieved November 3, 2008.

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^{xv} <http://www.earthforce.org/content/article/detail/1850>. Retrieved September 29, 2008.