

Children Today, Outdoor Experiences and Impacts

Nature-deficit disorder is not an official diagnosis but a way of viewing the problem, and describes the human costs of alienation from nature, among them: diminished use of the senses, attention difficulties, and higher rates of physical and emotional illnesses. The disorder can be detected in individuals, families, and communities (Louv, 2005).

In Richard Louv's book, *Last Child in the Woods* (2005), he coins the phrase "nature deficit disorder." What Louv is referring to is the **increased lack of contact our children have with nature and the resulting consequences on the social, cognitive and physical development and health of our children**. According to the Kaiser Family Foundation (2005), our children are spending less than half the time out of doors that their parents did growing up. Another longitudinal study found that children under 13 living in the United States spend on average only about half an hour of unstructured time outdoors each week (Hofferth & Sadberg, 2001). It is clear that our children today spend much more time indoors than they do outdoors and some believe this is leading to some significant impacts. Louv (2005) cites research to suggest that this emerging "nature deficit disorder" among our children is linked to epidemic rises in childhood obesity, increasing social and cognitive delays as our children enter the school systems and rises in diagnoses of Attention Deficit/Hyper-Active Disorder (ADHD).

Benefits of Providing Children with Outdoor Experiential Activities and Environmental Education

It's intuitive—many of us know the benefits of spending time out of doors because that was our experience growing up. We learned many valuable skills—observation/inference, team work, interdependence, independence and self-confidence, natural consequences and more. We learned science while digging in the dirt, playing in the pond or climbing in trees. The following are just some of the key benefits of providing children with outdoor experiences and learning that are supported by research:

- **Studying EE Creates Enthusiastic Students, Innovative Teacher-Leaders** - EE offers opportunities for rich, hands-on, real world and relevant learning across the curriculum (Archie, 2003).
- **EE Helps Build Critical Thinking, and Relationship Skills** - Environment-based education emphasizes specific critical thinking skills central to "good science"—questioning, investigating, forming hypotheses, interpreting data, analyzing, developing conclusions, and solving problems (Archie, 2003).
- **EE Instructional Strategies Help Foster Leadership Qualities** - Environmental education emphasizes cooperative learning (i.e., working in teams or with partners), critical thinking and discussion, hands-on activities, and a focus on action strategies with real-world applications (NAAEE & NEETF, 2001). EE provides opportunities for students to develop and practice leadership skills such as:

- Working in teams
- Listening to and accepting diverse opinions
- Solving real-world problems
- Taking the long-term view
- Promoting actions that serve the larger good
- Connecting with the community
- **EE Schools Demonstrate Better Academic Performance across the Curriculum**
Schools that adopt environmental education as the central focus of their academic programs frequently demonstrate the following results (Lieberman & Hoody, 1998; NEETF, 2000; Archie, 2003):
 - Reading, science, social studies, and mathematics scores improve.
 - Students develop the ability to transfer their knowledge from familiar to unfamiliar contexts.
 - Students “learn to do science” rather than “just learn about science.”
 - Classroom discipline problems decline.
 - All students have the opportunity to learn at a higher level.
- **Self Control/Self Discipline Benefits for Children with ADD/Inner City Youth** - Taylor and her colleagues found that children with attention-deficit disorder (ADD) benefited from more exposure to nature -the greener a child’s everyday environment, the more manageable are the symptoms of ADD (Taylor, 2001). Taylor also observed that access to green spaces for play, and even having views of green settings, enhances peace, self-control, and self-discipline among inner-city youth, especially among girls.
- **Increased Focus/Improved Cognition** - Wells observed that proximity to nature, access to views of nature, and daily exposure to natural settings increases the ability of children to focus and improves cognitive abilities. (Wells, 2000).
- **Health Benefits** - At the school environment level Bell and Dymont observed that children who experience school grounds or play areas with diverse natural settings are more physically active, more aware of good nutrition, more creative, and more civil to one another. (Bell, 2006)
- **Development of Positive Social Skills** - Play in diverse natural environments reduces or eliminates anti-social behavior such as violence, bullying, vandalism, and littering and reduces school absenteeism. (Coffey, 2001; Malone, 2003; Moore, 2000).
- **Conservation Benefits** - Higher levels of environmental knowledge correlate significantly with a higher degree of pro-environment/conservation behavior. The more people know, the more likely they are to recycle, be energy efficient, conserve water, etc. (NEETF, 2005).

EE Related State Legislation and Executive Activities:

Because of the many benefits of outdoor experiential activities and environmental education, many states have proactively supported these opportunities for their youth, families and communities. The following provide a summary of these efforts at the state level:

[California SB 207 - Outdoor Environmental Education and Recreation Program, 2007.](#)

[This bill would establish the Outdoor Environmental Education and Recreation](#)

Comment [AC1]: If we could combine and edit these to fit within the first three pages, I think that would be good.

Comment [AC2]: Should these be formatted with bullets?

Comment [AC3]: Is this proposed legislation or is it law? I think here I would only include existing programs and law.

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Program, to be administered by the Director of Parks and Recreation (director), for the purpose of increasing the ability of underserved and at-risk populations to participate in outdoor recreation and educational experiences by awarding grants to education programs that are available to the public and are operated by public entities or nonprofit organizations.

[New Jersey EE Fund](#), 1994. Creates an EE fund for the state that supports EE efforts as well as a mandate for the integration of EE into core curricular standards for schools that are tested on a regular basis.

Comment [AC4]: If we are concerned about length, we could lump together the NJ, NC, OH, WI EE grant programs under one item.

[New Mexico HB 369 - Outdoor Classrooms](#), 2007. A \$500,000 fund established for the creation and support of outdoor classrooms in on New Mexico public lands.

[North Carolina Office of EE Legislation](#), 1993. Established an Office of EE in North Carolina to serve as a clearinghouse for information and resources for EE implementation and to administer grant funding in support of these efforts in schools.

[Ohio EE Fund](#), 1990. Created an advisory group that oversees the \$1M competitive grant program (awarded annually) supporting EE efforts in Ohio.

[Washington House Bill 2910 - EE Study PL](#) \, 2006. Created and funded a directive for the Superintendent of Schools in the state of Washington to conduct a year long study of the benefits of EE and recommendations for EE initiatives in the state.

Comment [AC5]: I'm not sure that this is worth mentioning since it just called for a study.

[Wisconsin EE Board 1989 Act 299](#), 1989. Established a board for EE in Wisconsin charged with overseeing the creation of an EE grants program and the establishment of an office for EE at the University of Wisconsin, Stevens Point.

The governor of Kansas issued a proclamation establishing Environmental Education Week in Kansas in 2007 and 2008.

The governor of California issued a proclamation establishing a Children's Bill of Rights <http://www.calroundtable.org/cobor.htm>

Comment [AC6]: Could be joined with the item below

The governor of Michigan issued a No Child Left Inside Day proclamation http://www.michigan.gov/gov/0,1607,7-168-23442_25488-162823--,00.html

The governor of Pennsylvania hosted a conference followed by community hearings on the issue, which resulted in this report with policy recommendations: <http://www.connectoutdoors.state.pa.us/>

Comment [AC7]: Could be joined with item below

The governor of Maine hosted a conference on the issue.

The governor of Washington signed legislation establishing a \$1.5 million grant programs for school children to visit parks and other natural areas. <http://www.parks.wa.gov/NoChildLeftInside/>

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The governor of Maryland issued an executive order in 2008 creating a Partnership on Children and Nature to develop policy responses to the issue.

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