

Session strand: Fundraising & Leadership Development

The Benefits of Outdoor Education Experiences on Today's Youth

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ABSTRACT

The benefits of outdoor education programs on youth and teens were studied by the American Institutes for Research (AIR), State Education & Environmental Roundtable (SEER), YMCA Camp Greenville, and the American Camping Association. Results show an impact on four main areas: personal development, interpersonal skills, academic achievement, and environmental awareness. Specific results of students who were involved with outdoor education programs include an increase in science scores on pre- and post- tests by 27%, a drastic decrease in disciplinary referrals, as well as a change in summer campers of increased self-esteem, independence, leadership, social skills, environmental awareness, and decision making skills. There is a great need for outdoor education programs in a society that continuously disconnects from the natural world. Louv (2006) draws our attention to the concepts of Nature Deficit Disorder and the 8th Intelligence, being "Nature Smart". Outdoor education programs have the ability and potential to reconnect children to the wilderness and enhance their understanding of and ability to be Nature Smart.

FOUR RESEARCH PROJECTS

Consider these different perspectives. One fourth grade student in San Diego declared, "I like to play indoors better 'cause that's where all the electrical outlets are" (Louv 2006, vii). After completing an outdoor education experience in North Carolina, one high school student said what they liked best about the experience was that it was "a chance to do things I'd never

even dreamt of doing before” (personal communication, October 2004). Another student that attended the same outdoor education program was asked if they would recommend the experience to others. The student replied, “Yes, because you have fun, discover things about yourself and the natural world, and you can get dirty” (personal communication, August 2004). We live in a world that seems to disconnect from the natural world more and more each day. Outdoor education (OE) experiences offer students the opportunity to reconnect to the wilderness while they gain an appreciation of their classmates, and an understanding of themselves. The four following studies give an overview of some of the benefits of OE experiences on today’s youth.

The first study comes from the American Institutes for Research (AIR). This research project compared 225 students in California who attended environmental education (EE) programs with those who did not. Initial and follow up surveys were given to students, parents, and teachers. One result of the study was that the parents of these students observed positive environmental behaviors being practiced at home (e.g., recycling). Teachers reported significant gains in the following: self-esteem, conflict resolution, relationships with peers, problem-solving skills, motivation to learn, and positive classroom behavior. Students that participated in the EE experiences also improved their science score by 27%, as measured by a pre- and post-survey (McQuillan and Kennelly 2005).

Another research study, conducted by the State Education & Environmental Roundtable (SEER) observed 40 schools involved with EE. The study consisted of four teacher surveys and interviews with over 400 students and 250 teachers / administrators. An overview of the results includes the following: better performance on standardized tests, reduced discipline problems in the classroom, development of problem-solving skills, increased engagement in the classroom

and greater pride and ownership in their education (Lieberman and Hoody 1998). SEER also reported several specific results. One result was with regards to the Grade Point Average of students at Little Falls High. The GPA of 9th grade students in the traditional track was 2.42 whereas students involved with the EE program was 2.95 (Lieberman and Hoody 1998). Over a two year period, math comprehension on California achievement tests rose 16 percentile points for low achievers, 13 percentile points for middle-level achievers, and 7 percentile points for high-level achievers (Lieberman and Hoody 1998). The SEER study also shows reduced disciplinary actions in the classroom among those students involved with EE programs. In a case study at Hotchkiss Elementary (Dallas, TX) disciplinary referrals dropped from 560 the first year of being involved with an EE program to 160 the second year and only 50 the third year (Lieberman and Hoody 1998). This study also notes that students that are involved in EE programs become more active problem solvers; act as independent decision makers; think critically and creatively; ask thought-provoking questions; understand connections and interrelationships; and transfer learning to other aspects of their lives (Lieberman and Hoody 1998).

The third study was conducted by YMCA Camp Greenville in Cedar Mountain, NC where lead chaperones were asked about the effects the Project Worth outdoor education program (which focuses on team building, character development, and adventure) had on their students. In an open-ended question (where they could list more than one effect), teachers replied that their students gained self-confidence & conquered fears (88%), learned to work as a team (75%), community building was enhanced and new friendships were formed (63%), students were challenged to try new things or think in new ways (50%), technical skills were learned (e.g. hiking, rock climbing, interpretive skills) (38%), environmental awareness was

enhanced (12%), leadership skills increased (12%) (Lien 2006). One lead chaperone from the O'Neal School in Southern Pines, NC noted, "The experience allowed our students the opportunity to conquer fears and feelings of inadequacy that they may have had before attending the program. They were allowed to get to know each other better in a way that would not be possible in the classroom. They were challenged to attempt things that they may never have tried under other circumstances. They came away knowing how to work well together and how to be better leaders" (personal communication, November 2006). In this same study, over 1,000 participants over a five-season span completed written evaluations including the question, "What did you learn during your stay?" The following is the breakdown of the most common answers: teamwork (28%); survival skills (18%); to challenge myself (11%); about classmates (9%); technical/adventure skills (6%); environmental stewardship (6%); character traits—caring, honesty, respect, responsibility (5%); about nature / the environment (5%) (Lien 2006).

The final research project was conducted by the American Camping Association (ACA). It is the largest study of camper outcomes in the United States to date and included 5,000 families attending 80 different camps. While this study has an emphasis on summer camps, many OE programs are run out of camps and may have similar results. Parents, camp staff, and campers reported that the student had significant growth in: self-esteem, independence, leadership, friendship skills, social comfort, peer relationships; adventure and exploration, environmental awareness, values and decisions, and spirituality (Burkhardt, Henderson, Marsh, Thurber, Scanlin, and Whitaker 2005, 1).

These studies provide evidence that OE programs have the potential to impact the personal development, interpersonal skills, academic achievement, and environmental awareness of participants. Personal benefits may include the following: increased self-esteem, the

accomplishment of trying new things and overcoming fears, leadership skills, technical skills, communication skills, character development, and increased trust and responsibility. Other specific benefits from these four research projects show the success of community and relationship building, conflict resolution, cooperation, increased problem solving skills, motivation to learn, positive classroom behavior, increased standardized test scores, and an increased motivation and commitment to personal action (e.g. recycling, water/energy conservation). When we become aware of the range of benefits of OE programs, we must also consider the importance of these programs in today's society. OE programs may encourage students to become unplugged from the electrical outlets in their house in order to engage with the wilderness as children of generations past have done.

NATURE DEFICIT DISORDER AND THE 8th INTELLIGENCE

Over the past two years the term Nature Deficit Disorder has become widespread thanks to Louv's revolutionary Last Child in the Woods. Throughout the book, there is an emphasis placed on the need for children to reconnect with nature. Childhood is much different than it was even 20 years ago. Children spend much more time inside, watching TV, playing video games, and sitting on the couch than in years past when children were encouraged to play outside, use their imaginations, and create their own games and adventures. Louv draws our attention to the concept of being "Nature Smart". He notes that Howard Gardner from Harvard (1983) encouraged seven types of intelligence:

- Word smart
- Number/reasoning smart
- Picture smart
- Body smart

- Music smart
- People smart
- Self smart (Louv 2006).

Recently Gardner added an 8th intelligence—Nature smart. Professor Leslie Owen Wilson at the University of Wisconsin offers a list of descriptors for children that demonstrate the 8th intelligence. Such children have keen sensory skills, use heightened sensory skills to notice and categorize things from the natural world, like to be outside, easily notice patterns from their surroundings, are interested in and care about animals and plants, notice things in the environment, create, keep, or have collections, scrapbooks, logs, or journals about natural objects, are very interested, from an early age, about nature, science, and animals, show heightened awareness of and concern for the environment and/or endangered species, and finally easily learn characteristics, names, categorizations, and data about the natural world (Louv 2006).

Louv provides evidence of the importance of OE experiences through several statistics. One such statistic is that “each hour of TV watched per day by preschoolers increases by 10% the likelihood that they will develop concentration problems and other symptoms of attention-deficit disorders by age seven” (Louv 2006, 101). Another study showed, “By bolstering children’s attention resources, green spaces may enable children to think more clearly and cope more effectively with life stress” (Louv 2006, 103). Outdoor and environmental education experiences have the potential to make a real difference in the lives of students and young people across the country. Hopefully this information will prove useful for marketing purposes (offering teachers and administrators the “evidence” that OE programs are highly effective), and

financial development of OE centers. After all, these benefits are the driving force behind why we do what we do.

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