

Research quoted in “What if the key to academic success was right outside your door?” presented by Elandriel Lewis

- Being outside helps children’s academic performance
 - Studies in the U.S. show that schools that use outdoor classrooms and other forms of nature-based experiential education support significant student gains across the curriculum. Students in outdoor science programs improved their science testing scores by 27% (American Institutes for Research, 2005)
- Teaching outside boosts outcomes
 - Simply conducting traditional instruction in a more natural setting boosts educational outcomes. (Kuo, M. et al, 2019)
 - The greener a school’s surroundings, the better its standardized test performance. (Sivarajah, S. et al, 2018)
- Natural Settings Enhance Cognitive Abilities
 - Proximity to, views of, and daily exposure to natural settings increases children’s ability to focus and enhances cognitive abilities (Wells, 2000)
- Being outside reduces ADHD symptoms.
 - Contact with the natural world can significantly reduce the symptoms of attention deficit disorder in young children. (Kuo and Taylor, 2004)
- Being outside helps children develop critical skills.
 - Play in nature is especially important for developing capacities for creativity, problem-solving, and intellectual development. (Kellert, 2005)
- Nature improves immune function.
 - Time spent in and around nature is consistently linked to objective, long-term health outcomes.
 - The less green a person’s surroundings, the higher their risk of morbidity and mortality – even when controlling for socioeconomic status and other possible variables.
 - The range of specific health outcomes tied to nature is startling:
 - Depression and Anxiety Disorder
 - Diabetes Mellitus

- ADHD
 - Various Infectious Diseases
 - Cancer
 - Healing from surgery
 - Obesity
 - Birth outcomes
 - Cardiovascular disease
 - Musculoskeletal Complaints
 - Migraines
 - Respiratory Disease
 - Etc.
- Neighborhood greenness has been consistently tied to life expectancy and all-cause mortality.
- (Kuo. M, 2015)
- Being outside reduces children's stress.
 - Green plants and vistas reduce stress among highly stressed children. Locations with greater number of plants, greener views, and access to natural play areas show more significant results. (Wells and Evans, 2003)
- Being outside improves children's self-discipline.
 - Access to green spaces, and even a view of green settings, enhances peace, self-control, and self-discipline within children. This is especially true for inner city youth, particularly girls. (Taylor, Kuo, and Sullivan, 2001)
- Being outside improves social development.
 - Outdoor learning leads to positive outcomes in students' social development.
 - Nature stimulates social interaction between children much more than indoor learning environments.
 - When learning outdoors, students work more collaboratively as they explore the natural world together.
 - (Dunlap, 2015)
- Being outside supports creativity and cooperation.

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- Being outside improves children's social relations.
 - Children are better able to get along with others when they have regular opportunities for free and unstructured play in the out-of-doors. (Burdette and Whitaker, 2005)
- Being outside increases children's health.
 - Children who experience school grounds with diverse natural settings are more physically active, more aware of nutrition, more civil to one another and more creative. (Bell and Dymont, 2006)
- Being outside improves children's eyesight.
 - More time spent outdoors is related to reduced rates of nearsightedness in children and adolescents. (American Academy of Ophthalmology, 2011 and the American Medical Association, 2017)
- Nature may improve your GPA.
 - There is some correlation between time spent in physical activity and small increases in students' grade point averages and more efficient learning in the classroom. (Trudeau, F., & Shephard, R. J. 2008)