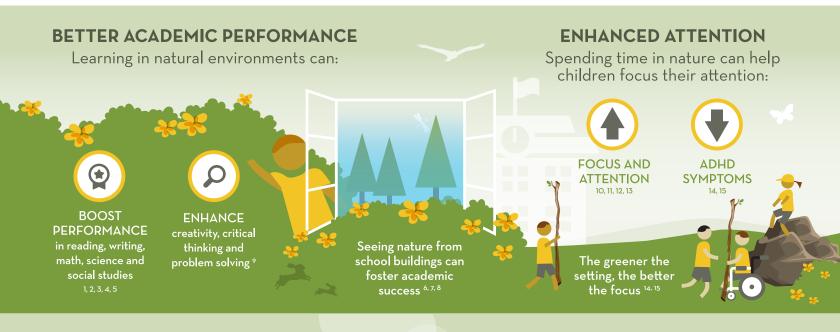
## NATURE CAN IMPROVE ACADEMIC OUTCOMES

Spending time in nature enhances educational outcomes by improving children's academic performance, focus, behavior and love of learning.



## INCREASED ENGAGEMENT & ENTHUSIASM

Exploration and discovery through outdoor experiences can promote motivation to learn:



## **IMPROVED BEHAVIOR**

Nature-based learning is associated with reduced aggression and fewer discipline problems: 18, 19





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ADDITIONAL RESEARCH ON THE BENEFITS OF NATURE AVAILABLE AT childrenandnature.org/research

## SUPPORTING RESEARCH

"Lieberman & Hoody (1998). Closing the achievement gap: Using the environment as an integrating context for learning. Results of a Nationwide Study. San Diego: SEER. Chawla (2015). Benefits of nature contact for children. J Plan Lit, 30(A), 433-452. Berezowitz et al. (2015). School gardens enhance academic performance and dietary outcomes in children. J School Health, 85(8), 508-518. Williams & Dixon (2012). Impact of garden-based learning on academic outcomes in schools: Synthesis of research between 1990 and 2010. Rev Educ Res, 83(2), 211-235. Wells et al. (2015). The effects of school gardens on children's science knowledge: A randomized controlled trial of low-income elementary schools. Int J Sci Edu., 37(17), 2858-2878. \*Li & Sullivan (2016). Impact of views to school landscapes on recovery from stress and mental fatigue. Landscape Urban Plan, 148, 149-158. "Wu et al. (2014). Linking student performance in Massachusetts elementary schools with the "greenness" of school surroundings using remote sensing. PLoS ONE 9(10): e108548. \*Matsuoka, R. H. 2010. Student performance and high school landscapes. Landscape and Urban Planning 97 (4), 273-282. \*Moore & Wong (1997). Natural Learning: Rediscovering Nature's Way of Teaching. Berkeley. CA: MIG Communications. \*Paber Taylor et al. (2002). Views of nature and self-discipline: Evidence from inner-city children. Psy. 22, 49-63. \*Märtensson et al. (2009). Outdoor environmental assessment of attention promoting settings for preschool children. Health Place, 15(4), 1149-1157. \*Wells (2000). At home with nature effects of "greenness" on children's cognitive functioning. Environ Behav, 33(6), 775-795. \*Berto et al. (2015). How does psychological restoration work in children's An exploratory study. J Child Adolesc Behav 3(3). \*Faber Taylor et al. (2016). Coping with ADD: The surprising connection to green play settings. Environ Behav, 33(1), 54-777. \*A moly et al. (2014). Green and blue spaces and behavioral development in Barcelona schoolchildren: The BREATHE Project.