

WHY OUTDOOR LAB



Why is Outdoor Lab So Important?

We have all experienced the pleasure of taking a walk in nature or simply sitting beneath a tree on a beautiful day. A crisp winter chill, rustling leaves falling around you, the smell of wildflowers coming to life in spring. These experiences stir the senses and leave us all feeling refreshed and energized. But what has come into focus in recent years are the **many tangible benefits - academic, physical, and emotional** - that spending time in nature can yield.

Hundreds of studies across the globe have examined exactly what happens to hormone levels, heart rate, mood, education outcomes, civic-mindedness, focus, and other physiological and psychological measures when we are immersed, even briefly, in the natural world. The extensive evidence converges on the same conclusion: being outdoors, especially outside in green spaces, is good for us.

Nonprofit organizations such as the **Children and Nature Network**, the **North American Association for Environmental Education**, the **Search Institute**, **Hello Insight**, and **Fresh Tracks**, are coalescing the best academic research on the physical, academic, mental, and communal benefits of a close connection to nature.

Outdoor Lab has been producing these benefits for students since its inception. Beyond the curricular lessons of environmental science, natural history, sustainability, or geology, Outdoor Lab offers a unique opportunity for developing social-emotional learning in an awe-inspiring wilderness setting. Environmental education and outdoor science programs, especially those providing longer and overnight experiences like **Outdoor Lab**, can play an **important role in supporting students' social and emotional development**.



Why is Social Emotional Learning an Important Factor in Youth Development?

Heightened social-emotional learning (SEL) capacities are directly linked to positive youth outcomes and meeting important youth development milestones. According to research, social-emotional learning offers the following benefits:

Academic Success - Developing stronger social-emotional skills improves the academic performance of students. In a 2014 study, SEL was shown to raise students' achievement scores by an average of 11 percentage points. The 'soft skills' that students develop through SEL are shown to improve their attitudes towards school and, as a result, increase their performance in the classroom.

Fewer behavioral problems - Students with strong SEL are less aggressive and disruptive in school. Studies have shown these benefits are long-term, as SEL students still have 10% fewer psychological, behavioral, or substance abuse problems when they reach the age of 25.

Less emotional distress – SEL students have fewer occurrences of depression, anxiety, stress, and social withdrawal, as evidenced by measures like the Children's Manifest Anxiety Scale. Essentially, as students practice the new behaviors they learn in SEL programs, they develop stronger self-regulation skills.

Positive social behavior - Students get along better with others, as reported by fellow students, teachers, parents, and independent observers. Students and teachers report closer bonds after Outdoor Lab, and close student-teacher relationships make students want to perform better in school and have positive long-reaching benefits when teachers inspire their students to embrace challenges beyond the classroom.



What Makes Outdoor Lab Uniquely Effective in Growing SEL in Students?

First, Outdoor Lab puts students in a different setting from their everyday classroom. This can shift a student's identity, sense of self, and offer a new layer of self-awareness. To say nothing of the beauty of both our Windy Peak and Mount Blue Sky campuses, a new setting can sometimes shake up the social dynamics of a classroom or other pre-existing social groups. Moreover, interactions with a range of role models (High School Leaders and Interns) and caring teachers and counselors offer students opportunities to try out new ways of being and to see themselves (and be seen by others) in a new light.

This, in turn, allows for a wider range of social roles for the student to be seen and valued back home and in the classroom. These attributes can build students' positive identities and lead them to **build and recognize new strengths** in themselves and in others. A new setting can also present opportunities to **grow students' self-management and communication skills** as they navigate a new physical and social space and manage their needs in a setting different from their day-to-day lives.



Second, outdoor learning can be dynamic and engaging. Students' understanding of classroom concepts can emerge directly from their observations and experiences outdoors. Time for reflection after the lesson then further supports the development of **students' positive identities and self-perception as learners**.

Third, Outdoor Lab offers a range of different physical challenges, including weather or navigating difficult terrain. Through thoughtful support and scaffolding, students rise up to meet developmentally and emotionally appropriate challenges. These experiences support students in developing **resilience, perseverance, and confidence**.

Lastly, just being outside has health benefits and **reduces feelings of stress and anxiety**. Access to time outside increases students' focus on academics once they return to the classroom.

Outdoor Lab Students Show SEL Growth – By the Numbers.

The Outdoor Lab Foundation partnered with **Hello Insight** to participate in a study in which we coordinated the completion of approximately 500 pre-post Social-Emotional Learning surveys from our students at participating middle schools. Together we were able to measure how participation at Outdoor Lab boosts both “**Outdoor SEL**” and “**Core SEL**” in our students.



Outdoor SEL captures three independent capacities – Connection to the Outdoors, Well-being in the Outdoors, and Support for the Environment – that indicate young people’s development in outdoors settings. Young people who show Outdoor SEL create a bond with the outdoors and nature, increase their well-being when they are outdoors, and become champions of the environment.

Core SEL encapsulates several capacities that are all interdependent and positively affect the development of emotional, cognitive, and behavioral factors in young people’s lives. Capacities under this banner include Academic Self Efficacy, Contribution, Positive Identity, Self-Management, and Social Skills.

Additionally, we measured students’ **Learning Preferences, Program Satisfaction, and Social Capital.**



Findings

When comparing Outdoor Lab students to approximately 125,000 young people participating in 1,500 programs nationwide, **Outdoor Lab has proven to be a solid research-based intervention that promotes SEL development.** Outdoor Lab was particularly strong at growing Academic Self Efficacy, Social Skills, Positive Identity, and Well-Being in the Outdoors.

95%

Students who grew in at least one Core SEL capacity

Students who showed significant growth in one of the three Outdoor SEL capacities

70%

50%

Students who reported an increase in the number of adults who care for them and want to see them succeed

Students who would recommend Outdoor Lab to a friend

74%

70%

Students who told us that Outdoor Lab engaged them in learning styles that they prefer

Students who reported “Engage Authentically” experiences, which measure a young person’s experience with an adult who takes the time to get to know them by listening and understanding who they are

68%

70%

Students who reported “Challenge Growth” experiences, which measure a young person’s experience with an adult who encourages them to take risks and perform beyond their own expectations

Title 1 School Findings

Title 1 students exceeded the overall population in having Engage Authentically, Promote Peer Bonds, and Challenge Growth experiences while at Outdoor Lab. Growth in Academic Self-Efficacy was the same in Title 1 students as in the overall population.

96%

Students grew in at least one Core SEL capacity

Students showed significant growth in at least one Outdoor SEL capacity

73%

53%

Students reported an increase in the number of adults that care for them and want to see them succeed.

Measures where Title 1 students' growth outpaced overall Core SEL measures

3/5

100%

Of Title 1 students' growth outpaced the overall population in Outdoor SEL measures

Title 1 students reported a higher Program satisfaction score

79%

74%

More Title 1 students told us that Outdoor Lab engaged them in learning styles that they prefer

Title 1 students reported a higher Program satisfaction score

79%

Conclusion

It is clear the Outdoor Lab curriculum and format work in tandem to help students uncover personal, academic, interpersonal, and social skills. Though each group experience is unique, we ensure consistency and alignment with our objectives of teaching environmental science, physics, math, history, sustainability, and astronomy while imparting civic-mindedness, self-esteem, self-efficacy, empathy, and personal responsibility.

We increase students' understanding of how natural spaces are connected to their lives back home and can serve as a resource for greater personal well-being, learning, and happiness. The Program provides a safe and supportive environment for youth to develop teamwork, an increased sense of self, an understanding of their place in the world, a passion for lifelong learning, and a commitment to environmental stewardship.

While hard to imagine, in a state like Colorado, many young people do not have the same opportunity to enjoy the outdoors and take in the benefits of being connected to nature the same way. By providing a unifying experience for all students growing up in Jeffco, **Outdoor Lab and the Outdoor Lab Foundation are providing a way to grow and strengthen all our students**, nurture a range of new skills and interests, help realize every student's unique potential, and prepare them for wherever their future leads.

