Outdoor Environmental Education Helps Students with Emotional, Cognitive, and Behavioral Disabilities

Educating outside can be daunting for teachers, especially those with students that have emotional, cognitive, or behavioral disabilities. Do these students succeed when learning outside? Should we encourage schools and principals to have more outdoor environmental education?

In a study released in 2018, researchers from North Carolina State University examined the attention, behaviors, and learning outcomes for students who took part in an outdoor environmental education program (Learn more about the specifics of the program in the sidebar). Some educators may be worried about taking students outside:

Will students be distracted? Does it take away from learning?

The researchers surveyed students who were enrolled in the outdoor, environmental education program; a group of control students who were not in the program; and all of their teachers. They asked questions about the students' attention span, behavior and science learning outcomes (like their academic grades).

They found that teachers reported outdoor environmental education:

and behavior of students with emotional, cognitive, and behavioral disabilities

Keeps students with emotional, cognitive, and behavioral disabilities on track in science

Why is outdoor environmental education important for students with emotional, cognitive, and behavioral disabilities?

1st Research has shown that being outside is good for the mental and physical health of everyone - especially kids!

2nd Environmental education uses teaching techniques and strategies that particularly help students with disabilities. Using hands-on techniques, keeping students physically active, and drawing on inquiry-based methods engages students in education.

All About Outdoor, Environmental Education

How often? Four to 12 days over the school year

How long? The entire school day

Location? School yard or nearby natural area

What's covered? Terrestrial ecology, forces & motion, weather, and more!



Aligned with state sciencestandards



Hike and explore nature



Use hands-on, inquiry-based techniques



Small-group setting



Mandatory orientation day

The Bottom Line

Outdoor environmental education can improve the attention span and behavior of students with disabilities, while keeping them on track academically. Students get more engaged and excited about learning - and teachers have a less chaotic, more focused classroom.

Check out the full manuscript! Szczytko, R., Carrier, S. J., & Stevenson, K. T. (2018). Impacts of Outdoor Environmental Education on Teaching Reports of Attention, Behavior, and Learning Outcomes for Students with Emotional, Cognitive, and Behavioral Disabilities. Frontiers in Education, 3 (June). http://doi.org/10.3389/feduc.2018.00046