

# Environmental Education

## PART OF A WELL-ROUNDED EDUCATION FOR ESSA FUNDING

### WHY ENVIRONMENTAL EDUCATION?

More than ever, children and adults need to know how ecological systems work and why they matter. The health of the environment is inseparable from humans' well-being and economic prosperity. People require knowledge, tools and sensitivity to successfully address and solve environmental problems in their daily lives.

Environmental education offers a powerful approach to teaching. It includes, but is not limited to, place-based learning, field experiences, service learning, and other hands-on and authentic educational experiences that support STEM and other grade level subjects. Many environmental education programs and lesson plans are already correlated to our state's standard course of study and are easy to integrate into your existing lessons and activities.



### BACKED BY RESEARCH:

Mounting research demonstrates that environmental education:

- Improves academic performance across content areas<sup>1</sup>
- Enhances critical thinking skills<sup>2</sup>
- Develops personal growth and life-building skills including confidence, autonomy, and leadership<sup>3</sup>
- Increases civic engagement and positive environmental behaviors<sup>4</sup>
- Reduces discipline and classroom management problems<sup>5</sup>
- Increases engagement and enthusiasm for learning<sup>6</sup>

Learn more about Stanford University's analysis of 119 studies that concluded "environmental knowledge is just the tip of the iceberg" <https://naaee.org/eepro/research/eeworks/student-outcomes>

### ELIGIBILITY FOR ESSA FUNDING

From the federal level, funding from the Every Student Succeeds Act (ESSA) can be used to introduce or expand environmental education in your school district as part of your efforts to provide a well-rounded education. As an eligible activity under ESSA, environmental education can be integrated across the curriculum in ways that align with standards and help to achieve academic goals in science, math, social studies, and English language arts.

Ways your district can leverage ESSA funding to support environmental education include:

#### Title II, Part A: Supporting Effective Instruction

- Supporting professional development for teachers and paraprofessionals in environmental education-specific teaching strategies and resources. Funding can be used to cover: substitute teacher fees to enable teachers to attend professional development opportunities, the use of school grounds for teaching and conducting environmental research and/or making use of citizen science investigations.

#### Title IV, Part A: Student Support & Academic Enrichment, Part B: 21st Century Community Learning Centers

- Integrating curriculum-aligned, hands-on, field-based learning experiences into classroom teaching, field trips, afterschool and summer activities to promote a healthy, active lifestyle.
- Increasing partnerships with schools and community-based environmental education providers.
- Strengthening inquiry and student engagement in STEM through participation in local, real-world environmental issue investigations.
- Participating in citizen science research as a component of innovative blended learning projects.

1. Bartosh, O., Tudor, M., Ferguson, L., & Taylor, C. (2006). Improving test scores through environmental education: Is it possible? *Applied Environmental Education and Communication* 5(3), 161-169. 2. Ernst, J. A. & Monroe, M. (2006). The effects of environment-based education on students' critical thinking skills and disposition toward critical thinking. *Environmental Education Research*, 12(3-4), 429-443. 3. Boyer, S.J. & Bishop, P.A. (2004). Young adolescent voices: Students' perceptions of interdisciplinary teaming. *Research in Middle Level Education* 28(1), 1-19. 4. Bodzin, A.M. Integrating instructional technologies in a local watershed investigation with urban elementary learners. *Journal of Environmental Education*. 2008;39(2):47 - 58. 5. Volk, T.L., & Cheak, M.J. (2003). The effects of an environmental education program on students, parents, and community. *Journal of Environmental Education* 34 (4), 12-25. 6. Stone, M.K. (2001). STRAW: Students and teachers restoring a watershed. Center for Ecoliteracy. <https://www.ecoliteracy.org/article/straw-studentsand-teachers-restoring-watershed>

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### DID YOU KNOW...

- ⇒ There are more than **200 facilities**, including Environmental Education Centers, in North Carolina that provide programs and field trips for students correlated with state's standards. <https://www.eenorthcarolina.org/educator-resources/classroom-visits-and-school-field-trips>
- ⇒ The **North Carolina Office of Environmental Education and Public Affairs** maintains a statewide calendar of workshops, training institutes, webinars, field experiences, and other professional development opportunities for teachers. Most of these workshops provide CEU credit. View the calendar here: <http://web.eenorthcarolina.org/core/event/calendar.aspx>
- ⇒ **North Carolina's K-12 Environmental Literacy Plan** outlines strategies to enable students to examine environmental issues while balancing cultural perspectives, the economy, and public health. It also provides teachers with high quality professional development aligned with State Board of Education priorities. <https://www.eenorthcarolina.org/educator-resources/supplemental-resources/k-12-environmental-literacy-plan>
- ⇒ As the state affiliate of the North American Association for Environmental Education, the **Environmental Educators of North Carolina (EENC)** can connect you to like-minded teachers, informal educators, students, park rangers, and leaders in your area. EENC also provides professional development and other support to promote excellence in environmental education. [www.eenc.org](http://www.eenc.org)



### ADDITIONAL RESOURCES

Best Practices for Environmental Education:

- *North Carolina's K-12 Environmental Literacy Plan* (<https://files.nc.gov/deqee/documents/files/environmental-education-plan.pdf>)
- *North American Association for Environmental Education's Guidelines for Excellence in K-12 Education* (<https://naaee.org/our-work/programs/guidelines-excellence>)

Research on the Impact of Environmental Education:

- *North American Association for Environmental Education's EEWorks* (<https://naaee.org/eepro/research/eeworks/student-outcomes>)
- *Children and Nature Network's Research Library* (<https://www.childrenandnature.org/learn/research/>)

### WHO CAN I CONTACT FOR MORE?

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### THIS DOCUMENT IS SUPPORTED BY THESE STATEWIDE PROGRAMS:

- Environmental Educators of North Carolina, [eenc.org](http://eenc.org)
- N.C. Office of Environmental Education and Public Affairs, [eenorthcarolina.org](http://eenorthcarolina.org)
- N.C. Association of Environmental Education Centers, [ncaeec.org](http://ncaeec.org)
- N.C. Project WET - Lauren Daniel, NC D.E.Q.
- N.C. Project WILD - Tanya Poole, NC Wildlife Resources Commission, [www.ncwildlife.org/educators](http://www.ncwildlife.org/educators)
- N.C. Project Learning Tree - Renee Strnad, NC State University Extension Forestry, [plt.ces.ncsu.edu](http://plt.ces.ncsu.edu)
- Project OWL - Michelle Pearce, The NC Arboretum, [www.ncprojectowl.org](http://www.ncprojectowl.org)

