



ENVIRONMENTAL EDUCATION

A report from the
Bosch Community Fund



BOSCH



Making Impactful Investments in Environmental Education

In 2023, the Bosch Community Fund sought to gain a deeper understanding of the environmental education landscape. Using Michigan as a pilot, the purpose was to update ourselves as grantmakers in the environmental education space. In addition, we wanted to share our discoveries with our grant applicants, as many of our partners connect with the Bosch Community Fund to share their own best practices and gather inspiration from others. The study also yielded the development of a new, open-sourced repository for stakeholders, including educators, nonprofits, and government agencies, to leverage and build upon.

Throughout the report, you will also find examples of some of the top programs in environmental education that meet the needs of educators and their students. **You can find the full report [here](#).**

Environmental Education **Impact Data**

Our approach to grant investments is centered on strong community **engagement** and partnerships. By **listening** to local stakeholders about the most pressing issues in their community, the Fund selects the most **impactful** investments.



More than
\$6+ million
dollars invested in
environmental
education
initiatives



Nearly **10,000**
teachers impacted
by environmental
education
initiatives



Over 700,000
K-12 and post-
secondary
students impacted
by environmental
education
initiatives



Bosch Community
Fund has **provided**
over 350 grants
in support of
environmental
education
initiatives



Innovative eco+STEM Programs

Through research and stakeholder interviews, the following **program components** have been identified as integral for **program success**.



STUDENT VOICE

Encourage students to **voice their opinions** and **actively engage with the lessons** by sharing their thoughts, asking questions, and communicating with one another.

Best Practices: Chicago Region Trees Initiative, Earth Rangers, Trees Watertown



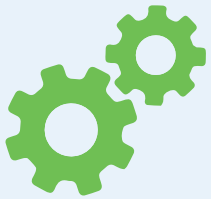
MULTIDISCIPLINARY & SYSTEMS THINKING

Students are encouraged to utilize ideas, practices, and methods from multiple disciplines in order to engage with lesson content, think through **new knowledge**, and **engage in problem-solving**. *Best Practices: Lewisville ISD, Katy ISD, Bloomfield School District*



STEWARDSHIP & CITIZENSHIP

Cultivate **stewardship** behavior to encourage students to put their skills and knowledge to use in real world applications which, in turn, activates a stronger interest in **environmental protection activities**. *Best Practices: North Carolina Coastal Federation, Charleston Waterkeeper, Stewards of Plaster Creek, Coastal Prairie Conservancy, Boone Conservancy*



CULTURALLY-RESPONSIVE TEACHING

Educators can draw on **experiences**, **cultural references**, or places familiar to their students and **highlight values** and **skills** that are significant to learners' home and social life to help promote student engagement. *Best Practices: Earth Heart Growers, Minnesota Valley Refuge Friends, Charles River Watershed, University of Arizona*



DIVERSITY, EQUITY & INCLUSION

Educate students and community members about the environment in a way that incorporates the **perspectives of a diverse group**, including the content that is taught, how it is taught, and who is teaching it. *Best Practices: Charles Drew Transition Center: Detroit Public Schools Community District, Merry Lea Environmental Learning Center*

Environmental Education + 3-P Learning

The Bosch Community Fund, nonprofits, and educators are leveraging **3-P learning** to help demystify environmental education across the U.S.



PLACE-BASED: Emphasizes the connection between educational content and the real world for teaching & learning

FRIENDS OF THE ROUGE: This program enhances environmental education and stewardship efforts in the Rouge River watershed including the annual river clean-up in metropolitan Detroit.



PROBLEM-BASED: Students investigate real-world problems, develop solutions, and adjust their approach based on feedback and experimentation

SOUND RIVERS: This program supports the reduction of stormwater pollution entering the Neuse River watershed and focuses on topics such as non-point source pollution, stormwater control measures, and current water quality issues in North Carolina.



PROJECT-BASED: Emphasizes student understanding of a tangible product through critical thinking, problem-solving, collaboration, & communication

PITTSBURGH PARKS CONSERVANCY: This program engages students through hands-on outdoor science learning and inquiry, focusing on forest and aquatic ecosystems.



Strategic Investments

By Topic Areas

- Air
- Climate
- Energy
- Forest
- Land
- Pollution
- Tree Canopy
- Water

GRANT RECIPIENTS:

Trees Atlanta (GA)
Detroit Dirt (MI)
Charleston Waterkeepers (SC)
Keep Lincoln Beautiful (NC)

By Setting

- Community Programs
- In School
- After School Program

GRANT RECIPIENTS:

The Morton Arboretum (IL)
Houston Audubon Society (TX)
Pittsburgh Parks Conservancy (PA)
Southern New Hampshire University (NH)

Educator Support & Resourcing

- Professional Development
- Equipment
- Curriculum

GRANT RECIPIENTS:

Lewisville ISD (TX)
SE Michigan Stewardship Coalition (Great Lakes Stewardship Initiative) (MI)
New Jersey Audubon (NJ)

Workforce & The Green Economy

- Career Pathways
- Internships
- Application Of Green Skills

GRANT RECIPIENTS:

Canopy (CA)
Stewards of Plasters Creek (MI)
Palisades High School (NC)

Environmental Education Testimonials



MICHIGAN: Megan Schrauben, Director, MI STEM, State of Michigan Department of Labor & Economic Opportunity *“While there is more attention on the importance of STEM, many don’t think about how environmental education can be a key entry point for STEM careers. Foundations, such as the Bosch Community Fund, corporations, and other institutions, are focused on solving critical engineering problems and promoting sustainability. For many students, interest in these fields will start with environmental education in K-12 schools.”*



CALIFORNIA: Beth May, Senior Director, Philanthropy, Canopy *“The Bosch Community Fund support allows our environmental educator to deliver Canopy’s hands-on and outdoor-based science lessons to 8 different school communities in East Palo Alto, Belle Haven, and Mountain View. Through lesson topics such as tree adaptations, tree defense mechanisms, and tree life cycles, the experiential programming increases students’ appreciation, understanding, and wonder about trees and how systems connect.”*



NORTH CAROLINA: Rachel Bisesi, Coastal Education Coordinator, North Carolina Coastal Federation *“Bosch Community Fund’s support provides for the needs of our oyster shell recycling program and broadens community awareness on coastal rehabilitation. With the Coastal Discovery Program and the Coastal STEM Career Fair, the Fund is helping the Coastal Federation’s efforts to nurture future coastal stewards while introducing potential STEM career paths. The investment fortifies our immediate coastal ecosystem and lays the groundwork for informed, passionate leaders of tomorrow.”*



SOUTH CAROLINA: Andrew Wunderley, Executive Director & Waterkeeper, Charleston Waterkeeper *“The Bosch Community Fund generously supported our efforts to strengthen the experiential, place-based learning components of our Water Watch and volunteer corps programs. The goal is to create a community of clean water stewards who are engaged in protecting and restoring Charleston’s local waterways. The project provides hands-on experiences, including water quality monitoring to empower our community to put its stewardship into action.”*

5 Ways to Make a Difference in Your Community

1

Get Involved in Local Stewardship Programs

Join organizations in your community for **volunteer** opportunities and **workshops** to **protect** local **ecosystems**.

2

Engage in Place-Based Learning

Take learning outdoors to deepen **appreciation** for **nature** and understand local **environmental issues**.

3

Promote Sustainable Practices

Encourage **sustainable habits** to collectively make a **positive impact** on the environment.

4

Support Environmental Advocacy

Back local initiatives for **protecting natural resources**.

5

Educate and Inspire

Share your environmental **knowledge** to build a more conscious and resilient community.



Bosch Community Fund

For more information on the **Bosch Community Fund** and our environmental education **initiatives**, visit our [website](#).

