



connected **kids**
 student **leaders**
 environmental **stewards**



GREAT LAKES
 Stewardship Initiative

5 years ★ 50,000 stewards

5 years
50,000



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The Great Lakes Stewardship Initiative (GLSI) was launched in 2007 to develop knowledgeable and active stewards of the environment and protect the Great Lakes. The initiative's approach to teaching and learning results in vibrant, hands-on experiences that increase student achievement and help young Michigan residents become lifelong stewards of the Great Lakes.

The GLSI works toward its goal by awarding grants to regional hubs. Currently there are nine GLSI hubs in Michigan, each of which is led by experienced, qualified staff. The hubs offer professional development that helps teachers facilitate inquiry-based learning and problem-solving. Hubs also help organize and sustain school-community partnerships and provide leadership within their regions.

The GLSI, through grants and technical assistance, supports each hub's efforts to integrate three strategies into its work with teachers, students, and community organizations in its service area:

- Place-based education
- Sustained professional development
- School-community partnerships

In its first five years, the GLSI has worked with nearly 800 teachers in more than 200 schools across Michigan, and supported rigorous stewardship experiences for more than 50,000 students.

Four national consultants work with GLSI staff and participants:

- David Sobel, Center for Place-based Education at Antioch New England Institute
- Greg Smith, Lewis & Clark College
- Doris Terry Williams, Rural School and Community Trust
- Jon Yoder, Salem-Keizer School District

“The Great Lakes Stewardship Initiative is one of the most comprehensive statewide place-based education programs in the country. I'm completely impressed with how the program directors have devised strategies that simultaneously increase student engagement, improve academic achievement, and contribute to the improvement of environmental quality in the Great Lakes' ecosystems. It's like feeding a whole flock of birds with one hand. This is an approach which deserves to be replicated in other Michigan communities and in other Great Lakes states.”

—David Sobel,
Center for Place-based Education
at Antioch New England Institute



We know the GLSI is working when students and their teachers collaborate with local organizations to study and address important environmental issues in their communities, while they learn academic content and practice the skills of problem-solving and citizenship.

The GLSI is funded by the Great Lakes Fishery Trust (GLFT), with additional support from the Wege Foundation. Other funders include the Charles Stewart Mott Foundation, the Community Foundation for Muskegon County, the Fremont Area Community Foundation, and the Frey Foundation.

The GLFT is a private foundation established in 1996 to mitigate fishery damages caused by the Ludington Pumped Storage Plant, a hydroelectric facility located on Lake Michigan. Since 1998, the GLFT has awarded over \$55 million in grants to enhance the Great Lakes fishery. As part of its commitment to education, the GLFT has pledged in principle to invest \$10.9 million in the GLSI over a 10-year period (2007–17). To date, the GLFT has provided nearly \$7 million in support of this important work. For more information about the GLFT, please visit the GLFT website at www.glft.org.

Find out more about the Great Lakes Stewardship Initiative online at www.glstewardship.org.

GLSI hubs (and their fiscal agents) are:

- Discovering PLACE (University of Michigan–Flint)
- GRAND Learning Network (Michigan State University)
- Grand Traverse Stewardship Initiative (Grand Traverse Conservation District)
- Groundswell (Grand Valley State University)
- Lake Superior Stewardship Initiative (Western Upper Peninsula Center for Science, Mathematics and Environmental Education)
- Northeast Michigan Great Lakes Stewardship Initiative (Community Foundation for Northeast Michigan)
- Southeast Michigan Stewardship Coalition (Eastern Michigan University)
- Upper Great Lakes Stewardship Initiative (Superior Watershed Partnership)
- West Michigan Great Lakes Stewardship Initiative (Muskegon Area Intermediate School District)

5^{years} ★ 50,000 kids = SUCCESS

When education and hands-on experience are combined, young people **EXCEL**. They need these experiences to help them learn about and connect with the natural resources that are all around them. The **Great Lakes Stewardship Initiative** provides these place-based experiences to classes of students, in all economic brackets, who collaborate with local organizations to study an environmental issue or topic in their community.

Through place-based education, kids become connected with the environment, engaged in their education, leaders in their schools, and excited about making a difference in their community. These kids become...

active **learners**,

student **leaders**,

environmental **stewards**, and

engaged **community members!**



GREAT LAKES
Stewardship Initiative

www.glstewardship.org



With the help of participating educators, civic leaders, and community partners, the GLSI's work:

- ★ Helps young people become effective **environmental stewards**
- ★ Encourages schools and community organizations to work together for mutual benefit
- ★ Creates a sustained effort across Michigan that **expands classrooms**, **strengthens communities**, and serves as a beacon for positive change

Our Successes

Selected GLSI survey findings, 2012–13 school year



GREAT LAKES
Stewardship Initiative

I valued being able to **give back to the environment** instead of just learning. It's pretty amazing to think that while I learned about the world I live in, I can help it. I know many schools/classes might not get an opportunity like this, so I'm very grateful.

—7th grader

77%

Agree/agree very much
I feel other students should have the opportunity to participate in a stewardship project like I did.



63%

Agree/agree very much
I have learned new skills from the stewardship project that I could use in a job.

Middle and high school students in two hubs

91%

Agree/Agree very much
By working on our water quality project, I learned about things I can do to protect water quality in lakes, rivers, and streams.

Elementary students in four classrooms and three hubs

The GLSI helps students be:

active learners
critical thinkers
environmental stewards
engaged community members
leaders — both now and in the future

61%

Agree/agree very much
I saw how my work through my stewardship project helped protect or improve the environment.



83%

Agree/Agree very much
I saw how our water quality project this year helped make our environment better.

81%

Agree/Agree very much
Working on water quality helped me learn how to do science—experimenting, measuring, observing, and finding out new facts.

I really liked going and doing the stewardship project and learning about the environment.

—6th grader

Our Successes

Middle School Students Help Improve Detroit, MI



...[GLSI] work encourages the HODA mission of working with the community and being a “**neighborhood school.**”

—Ali Abdel, principal

77%

Agree/agree very much
I feel other students should have the opportunity to participate in a stewardship project like I did.

63%

Agree/agree very much
I have learned new skills from the stewardship project that I could use in a job.

61%

Agree/agree very much
I saw how my work through my stewardship project helped protect or improve the environment.



Tire Sweep

Southeast Michigan Stewardship Coalition (SEMIS)
Hope of Detroit Academy (HODA)

HODA is pursuing several distinctive place-based efforts anchored around the essential question, “**What is Community?**” A team of six teachers has worked together, narrowing and implementing different pieces of their vision for place-based education. Teachers working with younger students have focused work on schoolyard beautification and habitat projects, while teachers working with older students have focused on brownfields, composting, recycling, and a community Tire Sweep program that has emerged as the centerpiece for Hope of Detroit’s place-based work.

Teachers and partners involved in the Tire Sweep consistently express the hope that this work will cultivate optimism and foster a sense of empowerment among the students, and that students will carry this message to their parents and other community members. Students are developing ideas and raising questions about the community and environment with greater frequency, and teachers attribute these changes to the place-based work the students have experienced. Principal Ali Abdel encourages the SEMIS work because it supports the HODA mission of working with the community and being a “neighborhood school.” He has observed that students are “really excited” to see the changes they are able to make, and more engaged in school as a consequence.

Other teaching and learning aspects include:

- ★ **Cooperative learning**—students worked in groups to find out who owned local tire stores and how to properly dispose of tires in the community.
- ★ **Inquiry**—students proposed and explored a powerful ecojustice question throughout the year: “Why are there so many brownfields in our community and not the surrounding suburbs?”
- ★ **Engagement with community partners**—students connected with community partners during the Tire Sweep, and on several occasions worked during and after school with partners from Great Lakes Bioneers Detroit and Southwest Detroit Environmental Vision to research aspects of the tire project.



Our Successes

Elementary Students Make a Difference in Bath, MI

Welcome to our Wetlands

GRAND Learning Network
Bath Elementary School

The centerpiece of place-based education at Bath Elementary is the vernal pond behind the school. Vernal ponds are small wetland areas that are filled with water usually only in the spring. They are very important nurseries for amphibians and insects, and are also used during the wet season by many birds, mammals, and reptiles. Through various activities, including the planting of native species at the pond, students are learning to care for one of the most important and fragile components of their local environment.

Teachers at Bath Elementary have been energized by the student learning they have seen as a result of their place-based education efforts. They report that students are more comfortable with reading, writing, and cooperative learning activities; highly engaged and motivated to learn; and learning at a deeper level. The students are excited to visit the pond and to engage in caretaking and observation activities. Because teachers at multiple grade levels are involved, students develop a long-term connection to the pond, and care for it as their own. Students also feel that they are part of a larger community of learners locally.

Student-generated products used for assessment of place-based learning have included:

- ★ Written field observations, reflections, and journal writing
- ★ Pond brochures created by 3rd and 6th grade reading buddy teams
- ★ Memory books with pictures and captions created by 2nd and 3rd graders participating in Annie's BIG Nature Lesson at Bengel Wildlife Center
- ★ Group posters of animal tracks
- ★ Poster presentations

“I think they understand that whatever we do affects the environment. And also that we are responsible, **they are responsible**, as humans, for taking care of it.”

—Jan Derksen,
3rd grade teacher

91%

Agree/Agree very much

By working on our water quality project, I learned about things I can do to protect water quality in lakes, rivers, and streams.



83%

Agree/Agree very much

I saw how our water quality project this year helped make our environment better.

81%

Agree/Agree very much

Working on water quality helped me learn how to do science—experimenting, measuring, observing, and finding out new facts.



CHANGING

environment
educators
students
futures

Lea Sevigny educator



For 24 years Lea Sevigny has pushed the envelope on what it means to teach. Constantly scanning the world outside of the classroom for inspiration, Sevigny has landed on a concept so compelling it changed the culture of an entire school district. Place-based education as a method for effective teaching and community engagement is reaching full saturation at Forest Hills Public School District in western Michigan. Five years ago Sevigny connected with Groundswell,

the local GLSI hub, to take part in professional development and training around place-based education. That training was the start of a relentless commitment to expand the classroom and develop the critical thinking skills her students needed. Before she knew it, Sevigny and her colleagues were part of a grassroots effort to make community members and the school board aware of the positive effects that place-based education had on their students, educators, and the local environment. Assistant superintendents for instruction and finance saw the spark from their efforts and quickly **connected the dots between education, the school's budget, and the community.** Now students are helping the township control invasive garlic mustard in removal projects and creating

recipes that include this plant weed as giveaways at the local River Festival. They're lowering maintenance and facilities costs by surveying the school's property for good storm water management techniques and repurposing traditional grass areas as native plant gardens. The district's administration understands the benefits of place-based education because the results are right in front of them – they see the difference every time they park their car and walk into the building or hear from a thankful business owner in the community. **Lea is now an instructional coach and environmental education coordinator helping to integrate place-based education into the curriculum for the district's 10,000 students.**

Grant Kammer student

Unsure. Uninspired. Unmotivated. These are the words Grant Kammer would have used to describe his outlook on the future just one year ago. That is, until he was able to connect with Groundswell, a GLSI hub, in Grand Rapids, MI, during his senior project. City High School has all seniors do a capstone project with an environmental focus as a requirement for graduation. Even though Kammer had been exposed to environmental themes throughout his education, it wasn't until his senior year that he was able to make the connection between his two passions: writing and the environment. *"I didn't know there was a way to bring the two together*

for a real world product," said Kammer. *"There were three of us that came up with the idea...we're even submitting the assignment for funding because we're so excited about it actually taking off."* Their idea is a website that helps connect sustainably created art to buyers, with proceeds going to fund the maintenance of the site and future environmental projects. It's completely designed, programmed, and written by Kammer and his teammates.

"Mike and everyone at Groundswell opened my eyes to possibilities I didn't even know existed...I thought I'd be stuck in a cubicle somewhere," explained Kammer. Kammer won't

mind a cubicle as long as he gets to *"...work for a company that is environmentally focused and sustainably minded."* Kammer is enrolled at Aquinas College studying Sustainable Business. *"I can be an environmental entrepreneur...this has shown me that I can do what I love and actually make a living."*



MAKING CONNECTIONS

hubs
schools
community partners
teachers
students

Making change for the sake of the environment can be very difficult. Challenges of perception, resource competition, misinformation, and apathy abound when it comes to engaging people. This is especially true for traditionally marginalized segments of the population. Place-based education is all about **helping students learn and develop critical thinking skills** using their surrounding community and environment as a resource. Empowering a diverse audience around the environment is hard enough, but when compounded by issues of poverty and place, whether rural or urban, many of our efforts fail to connect. That's why the hub network is such an important part of the Great Lakes Stewardship Initiative. **Hubs help bridge the gap between the environment and the community, regardless of the community's demographic makeup or economic status.**

Discovering P.L.A.C.E

Discovering PLACE and its work show how a community struggling for even bare necessities can find the value in environmental stewardship. This hub works in a region doing its best to recover from a weakened economy, social issues, and deteriorated community assets. Understandably, the environment is not a priority for many people who live in this area. However, Discovering PLACE, based at the University of Michigan—Flint, recognizes the needs of this community and has made significant inroads in eight traditional urban schools. This hub has been able to integrate place-based education at every age level, from kindergartener to high school seniors. The Flint region is a dense, built-out landscape and water resources are not nearby. The Great Lakes and their ecosystems can feel distant, unlike many Michigan communities where the display of natural resources is obvious and impressive. In a place like Flint, you have to be creative to make the natural environment relevant.

Stewardship projects often take shape through the lens of whatever the community is tackling. Whether it's food deserts, brownfield redevelopment, or concerns with pollution from storm water runoff, Discovering PLACE, educators, and community members craft solutions that engage the youth in learning and developing a sense of place. After a brownfield site was redeveloped, students at Tucker Elementary planted an apple orchard to bring new life into an area that had been a deserted eyesore and drag on the neighborhood for years. Now parents are getting involved to help young people maintain and harvest the community gardens that have sprouted up where abandoned houses used to be. All of these solutions reverse damage to the environment. They also inject energy and inspire a sense of ownership in these new community assets.

What's special about the hub network is that the hubs understand these communities. Without their work, place-based education loses relevancy; the environment loses relevancy. From urban centers to rural villages, hubs find a way to provide the necessary, grassroots leadership to help the local education, environment, and business community find common ground. Every hub creates opportunities for educators to find new ways to open their students' minds—to **connect to the environment in a way that's personal and enduring.**



*making a
difference
together*

“The joy of place-based education is that it provides a vehicle to make these connections, strengthen lessons, engage the community, and expand what people see as their place.”

—Leyla Sanker,
Community Outreach Coordinator,
Discovering PLACE