GUIDING PRINCIPLES
FOR EXEMPLARY
PLACE-BASED
STEWARDSHIP
EDUCATION



INTRODUCTION

Since 2007, the Great Lakes Stewardship Initiative (GLSI) has worked through regional service organizations (called "hubs") to support teachers, students, and community partners in a practice we call "place-based stewardship education" (PBSE). PBSE, builds on the pedagogy of place-based education to teach about the environment and develop capacity for environmental stewardship. Based on accumulated experience over the past ten years, the GLSI's central and hub staff has developed guiding principles to describe the GLSI's vision of exemplary PBSE in a K-12 context.

By using the term "guiding principles," the GLSI network intends for educators to use these principles and associated rubrics to help them imagine what their PBSE could be. Few real-world PBSE efforts will fulfill every principle to the highest extent; indeed, it may not be possible for a single effort to excel in every way outlined in this document. We provide these principles to help those affiliated with the GLSI further develop their practice in a manner that recognizes our shared values and aspirations. Teachers will find the principles and rubric useful for self-reflection and for strengthening their PBSE efforts to respond to the particular conditions in their communities. Hub leaders can use the principles and rubric to reflect on the work in

Imagination is the beginning of creation. You imagine what you desire, you will what you imagine, and at last you create what you will.

—George Bernard Shaw

their participating schools and communities and to help determine where and how they should increase their support and assistance.

The principles are defined within the context of, and for, the GLSI. We hope that readers within and outside of the GLSI will find them useful and consider how they can adapt the principles to their unique environmental, community, organizational, and programmatic contexts.

A separate user guide is provided that: 1) addresses in more detail how these principles and the associated rubric can be used within the school setting and 2) defines key words or concepts in relation to GLSI PBSE. All words included in the glossary are underlined in this document.

ABOUT THE PRINCIPLES

The principles are organized into four sections.

- Part I (Set the Focus) examines the connection of PBSE to the local context and to some core environmental concepts (Principles 1 and 2).
- Part II (Develop the Foundation for Place-based Teaching and Learning) is focused on experiential teaching and learning strategies (Principles 3a–3e).
- Part III (Deepen Impact) is focused on strategies to intensify and deepen the impacts of PBSE efforts, including school-community partnerships, multiple learning experiences of meaningful duration, and generating real benefits for the community and environment (Principles 4–6).
- Part IV (Develop Skills for Participation in Democratic Practices) is focused on the strategies that help students develop as active participants in community life, including fostering student voice, modeling democratic practices, exploring various perspectives, clarifying personal values, and engaging in public discourse (Principles 7–10).

GUIDING PRINCIPLES FOR EXEMPLARY PLACE-BASED STEWARDSHIP EDUCATION

PART I: SET THE FOCUS

Principle 1: Situate environmental learning and stewardship in the places students live, grow, and play.

GLSI <u>PBSE</u> is grounded in <u>place</u>. It begins with the <u>local environment</u>, exploring its features as well as its role in the history, traditions, aspirations, culture, economy, literature, and art of students' <u>neighborhoods</u> and <u>communities</u>. PBSE builds on students' personal experiences and associations with place to explore the environment and engage in acts of <u>stewardship</u>—focusing on neighborhood sites, the local community, and the Great Lakes region, as appropriate to the <u>environmental issue(s)</u> being explored.

Principle 2: Equip students to understand how all humans, in various ways, affect and are affected by the <u>natural</u> <u>environment</u>, and that the community's environmental resources, laws, beliefs, and perspectives influence and are influenced by broader physical and social systems.

GLSI PBSE helps students examine the multifaceted relationships all humans have with the environment, including the ways in which we depend on, benefit from, and enjoy environmental resources, and impact natural systems by our actions and choices. In <u>developmentally appropriate</u> ways, PBSE helps students develop capacity for <u>systems thinking</u>, such as how local sites and <u>natural resources</u> are situated in broader ecosystems, watersheds, and biomes, as well as how environmental uses and impacts influence and are influenced by human economic, political, and social activity.

PART II: DEVELOP THE FOUNDATION FOR PLACE-BASED TEACHING AND LEARNING

Principle 3: Build your place-based stewardship <u>education</u> effort out of rigorous <u>experiential learning</u>, support it with appropriate teaching practices, and integrate it into your local educational system.

Principle 3a: Rely extensively on hands-on, inquiry-based experiential teaching and learning.

In GLSI PBSE, the outcomes of investigations are not predetermined. A community of learners develops as students use <u>inquiry processes</u> to generate questions, pursue answers, reflect on their work, and take action in response to their learning. Teachers and partners provide appropriate support, adjusting the level and nature of their support to facilitate students' learning.

Principle 3b: Teach students to draw on multiple disciplines and <u>ways of knowing</u> as they consider and take action on local stewardship needs.

The environmental challenges of the Great Lakes region cannot be effectively addressed with solutions generated within any single <u>discipline</u>. Students, teachers, and partners in PBSE draw across disciplines for the information, process skills, and habits of mind that are needed to identify issues and develop questions, identify appropriate sources of evidence, gather data and information, analyze findings, take action, assess results, and communicate with the broader community. PBSE encourages creative thinking and expression as a part of this process.

Principle 3c: Include assessments for learning as well as assessments that generate evidence of learning.

GLSI PBSE includes assessments that create opportunities for students to reflect on their experience; clarify, organize, express, and extend their thinking; demonstrate skills gained or enhanced through the work; generate products of real-world value and relevance; and receive feedback on the strengths and opportunities for improvement in their products or performances. Assessments generate multiple and diverse forms of evidence of learning and skills gained, allowing teachers, administrators, and partners to understand what students are gaining and how the PBSE effort could be modified to enhance learning and impact.

Principle 3d: Establish clear but flexible learning goals that relate to robust standards for student achievement.

GLSI PBSE is not an addition to the <u>content standards</u> every teacher must address; rather, it offers an adaptable and flexible opportunity to meet numerous standards in a unified, robust learning endeavor. Teachers involved in exemplary PBSE are familiar with robust standards in use in their buildings and districts and able to identify which standards are addressed in their PBSE

efforts. They articulate higher-level learning goals served by the PBSE effort, and adapt these goals to accommodate important learning opportunities that may emerge as PBSE develops.

Principle 3e: Use PBSE to inform, enhance, and support school building and district priorities.

GLSI PBSE is flexible and adaptable, and accommodates the curricular emphases and other priorities of diverse schools and districts. It can be a supportive educational approach to address a variety of school improvement goals, including those that may emphasize increased connections with community or family. At the same time, exemplary PBSE seeks to inform and enhance building and district improvement efforts—to become embedded in the culture and practices of educational systems and a source of distinctive teaching and learning benefits.

PART III: DEEPEN IMPACT

Principle 4: Cultivate collaborative, mutually beneficial school-community partnerships.

In GLSI PBSE, partnerships offer reciprocal value—student learning is enhanced by the knowledge and access that community partners provide, and communities are significantly improved. In deep partnerships, we see mutual involvement of school and community in the planning, design, implementation, and assessment of PBSE, as well as shared accountability and responsibility for its outcomes. Through partnerships, PBSE builds school-community connections and relationships, promotes school-community communication, and challenges students, teachers, and community members to take on new roles.

Principle 5: Explore local environmental issues over a period of weeks or months, with sufficient time for all parts of the inquiry cycle and relationship development, and offer opportunities to repeat the process over the years of schooling.

GLSI PBSE is of sufficient duration for students to identify issues and develop questions, identify appropriate sources of evidence, develop respectful relationships with community partners, gather data and information, analyze findings, take action, assess results, communicate results, reflect, and celebrate. PBSE involves a substantial time commitment, including some concentrated blocks of time. Ideally, students will have many PBSE opportunities over their years in school.

Principle 6: Deliver meaningful benefits to the local environment and the community through PBSE.

GLSI PBSE actively engages students, teachers, and partners in purposeful work to address local stewardship needs or opportunities. Possible areas of focus for PBSE are weighed, in part, by the degree to which they will yield a meaningful and valued benefit to the environment and the broader community. Students, teachers, and partners share in the responsibility to manage their time and resources to achieve intended outcomes.

PART IV: DEVELOP SKILLS FOR PARTICIPATION IN DEMOCRATIC PRACTICES

Principle 7: Cultivate <u>student voice</u> and involve students in <u>democratic practices</u> throughout the course of a PBSE effort.

Students, teachers, and community partners co-create PBSE efforts. Students have opportunities to be heard and to collaborate with teachers and community partners, as well as gain leadership and decision-making skills. Teachers and partners facilitate student decision making in age-appropriate ways, establish parameters for student choice, support informed choice, help students voice their opinions and perspectives, and learn alongside students.

Principle 8: Use <u>deliberate processes</u> to identify and consider multiple perspectives regarding a stewardship issue or project.

In GLSI PBSE, students learn that there are varied viewpoints and interests regarding the environment, and that there may be multiple points of view about the merits of the stewardship projects they are considering. Where appropriate, students, teachers, and partners engage with people affected by the stewardship issue or effort in processes of dialogue, communication, and collaboration. Within a PBSE effort, the impact that various options and choices might have on plants, animals, people, habitats, and ecosystems is thoughtfully considered, including potential for environmental, economic, and equity impacts.

Principle 9: Incorporate opportunities for students to develop and clarify their personal values related to nature and community, and to develop the social competencies essential to stewardship.

GLSI PBSE facilitates deep thinking and analysis about oneself and one's relationship with nature and community. Students, teachers, and partners explore their personal values and commitments as an intentional component of PBSE. Youth and adults engage in collaborative stewardship endeavors, allowing all participants to gain skills and assets such as perseverance, civic efficacy, empathy, the ability to work with others, and conflict resolution.

Principle 10: Support and enable the visible, meaningful participation of students in the community's <u>public</u> <u>discourse</u>.

GLSI PBSE creates opportunities for students to understand and engage in public processes for discussing issues related to the community's natural resources and environmental impacts. Participants in PBSE share information about their actions, findings, conclusions, and recommendations, and, in age-appropriate ways, participate in public dialogue about the future of the places and communities to which they belong.

The GLSI is grateful for the assistance and input provided by our external reviewers, each of whom thoughtfully considered our draft principles and offered helpful insights and recommendations to clarify and strengthen the document. Our gratitude goes to:

Dr. Nicole Ardoin, Stanford University

Dr. Bora Simmons, National Project for Excellence in Environmental Education

Dr. Doris Williams, Rural School and Community Trust

Dr. Constance Flanagan, University of Wisconsin-Madison

Dr. Shelley Billig, RMC Research Corporation

Dr. Martha Monroe, University of Florida

The guiding principles were developed by representatives of each of the nine GLSI hubs and the GLSI's central staff. Contributors include:

GLSI Central Staff

Mary Whitmore, GLSI Coordinator Lisa Marckini-Polk, Civic Research Services, Inc. Patricia Jessup, Jessup & Associates LLC

Lake Superior Stewardship Initiative

Shawn Oppliger, Western Upper Peninsula Center for Science, Mathematics, and Environmental Education Joan Chadde-Schumaker, Michigan Technological University Lloyd Wescoat, Michigan Technological University

West Michigan Great Lakes Stewardship Initiative

Sarah Coleman, Muskegon Area Intermediate School District

Erica Johnson, Muskegon Area Intermediate School District

Southeast Michigan Stewardship Coalition

Dr. Ethan Lowenstein, Eastern Michigan University Rebecca Nielsen, Nielsen Education Consulting Lisa Voelker, Eastern Michigan University

GRAND Learning Network

Dr. Shari Dann, Michigan State University Margaret Holtschlag. BIG Lesson Programs Mark Stephens, Michigan State University

Groundswell

Clayton Pelon, Grand Valley State University Michael Posthumus, Grand Rapids Public Museum Kevin Holohan, Grand Valley State University

Northeast Michigan Great Lakes Stewardship Initiative
Brandon Schroeder, Michigan Sea Grant/Michigan State
University Extension
Tracy D'Augustino, Michigan State University Extension
Sarah Waters, NOAA Thunder Bay National Marine Sanctuary
Meaghan Gass, Northeast Michigan Great Lakes
Stewardship Initiative

Discovering PLACE

Leyla Sanker, University of Michigan-Flint Dr. Jacob Blumner, University of Michigan-Flint M'Lis Bartlett, University of Michigan-Flint

Grand Traverse Stewardship InitiativeKristen Grote, GTSI Coordinator (former)

Upper Great Lakes Stewardship InitiativeJennifer Hill, Superior Watershed Partnership



This document was developed under Assistant Agreement No. 00E01327-0 awarded by the U.S. Environmental Protection Agency. It has not been formally reviewed by EPA. The views expressed are solely those of the Great Lakes Fishery Trust and EPA does not endorse any products or commercial services mentioned.