

GUIDING PRINCIPLES FOR EXEMPLARY PLACE-BASED STEWARDSHIP EDUCATION:

RUBRIC



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

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

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 rubric.

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

Element	1 <u>Baseline/Beginning</u>	2 <u>Developing</u>	3 <u>Advancing</u>	4 <u>Exemplary</u>
1.1: GLSI PBSE experiences are about the environment in the context of the <u>community</u>.	Teaching and learning about the environment and its stewardship does not draw on local <u>natural resources</u> and places that are familiar to students.	In a limited way, teaching and learning about the environment and its stewardship draws on local natural resources and examines the role of these resources in the community's history and the present-day way of life of community members.	Teaching and learning about the environment and its stewardship often draws on local natural resources and examines the role of these resources in the community's history and the present-day way of life of community members.	Teaching and learning about the environment and its stewardship intentionally and almost always draws on local natural resources and examines the role of these resources in the community's history and the present-day way of life of community members. Students' personal experiences and associations with place are fully embraced to generate interest and engagement.
1.2: GLSI PBSE environmental learning and stewardship activities occur in the community.	Learning takes place exclusively in the classroom.	Students may participate in a field trip or limited-purpose outdoor activity, but nearly all of the learning and stewardship activities are conducted in the classroom or on the <u>school grounds</u> .	A few learning and stewardship activities occur in the community's <u>built or natural environment</u> . Most activities are conducted in the classroom or on the school grounds.	Many learning and stewardship activities occur in the community's built or natural environment. These activities are supported by others occurring in the classroom or on the school grounds.

Principle 2: Equip students to understand how all humans, in various ways, affect and are affected by the natural environment, 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 developmentally appropriate ways, PBSE helps students develop capacity for systems thinking, such as how local sites and natural resources 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.

Element	1 Baseline/Beginning	2 Developing	3 Advancing	4 Exemplary
2.1: GLSI PBSE builds knowledge of how humans affect and are affected by the environment.	The PBSE effort does not address how humans depend on, benefit from, and impact the environment.	The PBSE effort addresses how humans depend on, benefit from, and impact the environment only superficially or tangentially. These topics are not explicit in learning goals and assessments.	The PBSE effort explores how humans depend on, benefit from, and impact the environment to some degree, within the specific context of the PBSE effort. These topics are the focus on one or more explicit learning goals and assessments.	The PBSE effort treats the topic of how humans depend on, benefit from, and impact the environment, in the specific context of the PBSE effort, as an integral part of the work. Several significant explicit learning goals and assessments focus on how humans depend on, benefit from, enjoy, and impact the environment.
2.2: GLSI PBSE cultivates systems thinking and awareness.	The PBSE effort does not explore or acknowledge the ways in which the local environmental <u>issue or asset</u> of focus is embedded in broader ecosystems, physical systems (e.g., watersheds, geological systems) or social/human systems of behavior or thinking (e.g., laws and regulations, cultural beliefs about the environment).	Students are taught that the local environmental issue or asset of focus is embedded in, and influenced by, broader systems, but students do not engage in inquiry-based learning and exploration of how broader systems influence the environmental issue or asset of focus in PBSE.	The PBSE effort includes some inquiry-based activities designed to increase student understanding of how the local environmental issue or asset of focus is embedded in, and influenced by, broader systems.	The PBSE effort includes several inquiry-based activities designed to increase student understanding of how the local environmental issue or asset of focus is embedded in, and influenced by, broader natural systems as well as social/economic/legal systems governing human impacts on the environment.

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

Principle 3: Build your place-based stewardship education effort out of rigorous experiential learning, 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 inquiry processes 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.

Element	1 Baseline/Beginning	2 Developing	3 Advancing	4 Exemplary
3a.1: GLSI PBSE relies extensively on <u>hands-on, inquiry-based experiential learning</u> and teaching.	Assignments provide for limited or no hands-on, inquiry-based discovery as part of the learning process. The questions within the PBSE effort have preexisting answers, and outcomes of the effort are defined upfront.	A few assignments offer opportunities to approach questions from an inquiry-based, hands-on perspective. There may be an understood "right" answer to the problem. Enacting solutions or responses is not part of the learning experience.	Many assignments allow for students to explore "messy," real-world community or environmental problems in an inquiry-based, hands-on manner. Students take some action as a consequence of their learning, and significant questions and outcomes of the work are not predetermined.	Extensive opportunities are provided for students to explore "messy," real-world environmental issues, to develop and enact responses, to reflect and redesign based on feedback and outcomes, and to reflect on and celebrate their achievements. The dynamic nature of the issues being explored means the outcomes of inquiry cannot be predetermined. Teachers and partners adapt their support as needed to best facilitate each student's learning and subsequent decisions.

Principle 3b: Teach students to draw on multiple disciplines and ways of knowing 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 discipline. 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.

Element	1 Baseline/Beginning	2 Developing	3 Advancing	4 Exemplary
3b.1: GLSI PBSE draws on multiple disciplines and ways of knowing.	PBSE work is concentrated in and organized around one academic content area.	A second content area is explored in the PBSE work, but the work is not integrated across content areas, or the second content area is only touched on.	PBSE work reflects multiple content areas, but students face few expectations to <u>integrate</u> the learning across disciplines. There is separation in the ways the different disciplines are drawn upon to create the full learning experience (e.g., a distinct math product, a science product).	PBSE work crosses disciplinary boundaries to inform and address issues in the community. Students are asked to answer questions or solve problems by drawing on and integrating the ideas and practices of more than one discipline.

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.

Element	1 Baseline/Beginning	2 Developing	3 Advancing	4 Exemplary
3c.1: GLSI PBSE includes <u>assessments for learning</u>.	Learning pursued through PBSE is not being assessed, or is assessed only via written tests of content knowledge.	Assessments are predominantly traditional written tests, but cover at least one of these additional goals: reflecting; organizing, clarifying, expressing, and extending thinking; demonstrating skills; generating products of real-world significance. Students receive little formative feedback along the way.	Assessments cover some but not all of these goals: reflecting; organizing, clarifying, expressing, and extending thinking; demonstrating skills; generating products of real-world significance. Students may receive some formative feedback along the way.	Assessments create opportunities for students to reflect on their experience; clarify, organize, express, and extend their thinking; demonstrate skills gained or enhanced through the work; and generate products of real-world value and relevance. Students receive feedback on the strengths and opportunities for improvement in their products or performances.
3c.2: GLSI PBSE includes <u>assessments that produce evidence of learning and skill development</u>.	Learning pursued through PBSE is not being assessed, or does not generate any <u>credible evidence of learning</u> and skill development.	Assessments offer some limited evidence of student learning and skill development. The evidence may have large gaps or may not meet the quality standards of the teacher(s), school, or district.	Assessments offer generally credible evidence of student learning and skill development. There may be some gaps or a lack of a quality match between the PBSE activities and the measures/evidence.	Assessments generate credible evidence of student learning and skill development in the areas of focus in PBSE.
3c.3 In GLSI PBSE, students, teachers, administrators, and partners use <u>assessment evidence to improve learning outcomes over time</u>.	Students, teachers, administrators, and partners are not using credible student assessment evidence to improve learning outcomes from PBSE.	Students, teachers, administrators, and partners make limited use of credible student assessment evidence to improve learning outcomes from PBSE.	Students, teachers, administrators, and partners are regularly using credible student assessment evidence to improve learning outcomes from PBSE.	Students, teachers, administrators, and partners make extensive and systematic use of credible student assessment evidence to improve learning outcomes from PBSE.

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

GLSI PBSE is not an addition to the content standards 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.

Element	1 Baseline/Beginning	2 Developing	3 Advancing	4 Exemplary
3d.1: GLSI PBSE is informed by and responsive to content and process standards.	The relationship between a PBSE effort and applicable content and process standards has not been explored.	The PBSE effort is informed by a general understanding of applicable content and process standards.	A few applicable content and process standards have been identified as the key standards served by the PBSE effort. Other standards may apply, but a complete mapping has not been done.	A full mapping of applicable content and process standards served by the PBSE effort has been done, based on a review of standards in use in the building and district and/or national standards for student achievement.
3d.2: GLSI PBSE has clear but flexible learning goals.	Specific learning goals for the PBSE effort have not been identified.	Specific learning goals have been identified but there is no preparedness to adapt the goals as the PBSE effort develops.	Specific learning goals have been identified. There is some readiness to adapt the goals in response to important, emergent needs and opportunities in the PBSE effort.	Specific learning goals for the PBSE effort have been identified. All parties are ready to adapt learning goals as necessary to accommodate important, emergent opportunities in the PBSE effort.

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.

Element	1 Baseline/Beginning	2 Developing	3 Advancing	4 Exemplary
3e.1: GLSI PBSE informs school building and district priorities.	PBSE has not been discussed as a teaching and learning strategy at a building or district level. School administrators may or may not be familiar with it.	Conversations take place within the school building regarding PBSE and the level of priority it should have.	PBSE is incorporated in the building's school improvement plan as a strategy to meet one or more school improvement goals. Discussion or implementation of this strategy is beginning to occur across the district.	PBSE is a school- or districtwide teaching strategy and has become embedded in the culture and in practices. Teachers, administrators, and school boards are continually examining its contribution and value in relation to long-term school improvement.
3e.2: GLSI PBSE supports school and district priorities.	The PBSE effort does not incorporate any of the school or district priorities, or in any way reflect the input of school and district personnel beyond the involved teachers.	In limited ways, the design of the PBSE effort reinforces and supports school and district priorities and reflects the input of school and district personnel beyond the involved teachers.	PBSE is designed to reinforce and support school and district priorities, and reflects the input of school and/or district leadership, but there is little or no evidence of change or progress related to the school or district priorities or goals.	PBSE is designed to actively support school and district priorities and curricular emphases, and reflects the input of school and/or district leadership. Products are generated that demonstrate advancement of the school/district goals through PBSE.

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.

Element	1 Baseline/Beginning	2 Developing	3 Advancing	4 Exemplary
4.1: GLSI PBSE involves diverse partnerships, including robust partnerships.	There are no community partners involved in the work, or those identified as community partners are contributing in ways that might better identify them as volunteers or chaperones.	Community partners play very limited roles in PBSE, such as in-class presentations about their subject matter, or authorizing action on land they own (without being engaged in the work).	One or more community partners play an important role in planning, implementing, or assessing the PBSE effort, but do not have significant input on its design nor share in accountability for its outcomes. Other partners play various limited but valuable roles.	There is a diverse set of community partners with varied levels of involvement in the PBSE effort. One or more partners participate fully in planning, designing, implementing, and assessing the PBSE effort, and share fully in accountability for outcomes.
4.2: GLSI PBSE partnerships are reciprocal.	The partnerships supporting PBSE are one-sided, with one party (school or community organization) putting in significant effort to deliver a benefit to the other without realizing a benefit in return.	The partnerships supporting PBSE are lopsided, with one party putting in significant effort to benefit the other, with only modest benefit in return.	The partnerships supporting PBSE are approaching balance. Each party is putting in effort to provide a benefit to the other. However, either the school or the community partner is disproportionately benefiting.	The partnerships supporting PBSE are balanced. Each party is putting in effort to meet the interests of the other. Each party is better off for having the partnership in place.

Element	1 Baseline/Beginning	2 Developing	3 Advancing	4 Exemplary
4.3: In GLSI PBSE, partnerships work to advance school-community connections and to further discussion of how schools and communities can evolve and benefit through partnership.	The members of the PBSE team are not deliberately discussing the potential of partnerships as long-term assets for the school and the partner(s). Partnerships are time-limited and no one is aware of them other than those who are working on the PBSE effort.	In limited ways, teachers and partners are establishing longer-term or broader relationships than are needed for a specific PBSE effort, and recognize the long-term potential of the relationship. A few teachers and/or members of the partner organization who are not directly involved in the PBSE effort are aware of one or more of the partnerships.	PBSE partnerships are blossoming into broader ongoing relationships. There is awareness of these partnerships within both the broader school community and the partner organization, and these people are discussing how the partnership affects the work of the school and partner organization.	PBSE partnerships are thought of and managed as valuable, long-term relationships. There is awareness and discussion of these partnerships in the broader school community and in the partner organization. People on both sides of the relationship are taking on new roles and thinking critically about the impact of school-community partnerships.

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.

Element	1 Baseline/Beginning	2 Developing	3 Advancing	4 Exemplary
5.1: GLSI PBSE is of adequate duration.	The PBSE effort is a very small part of the students' experience over the course of the school year (e.g., students' PBSE experiences are short-term, lasting less than one week).	PBSE is pursued in the context of a short unit of study (e.g., students' PBSE experiences extend over one to two weeks).	PBSE is used for several units of study (e.g., students' PBSE experiences extend over a period of several weeks with at least one block of concentrated time).	Students are engaged in their PBSE effort for significant and concentrated amounts of time over the course of the school year (e.g., students' PBSE experiences extend over a period of several months with occasional blocks of concentrated time).
5.2: GLSI PBSE includes all parts of the inquiry cycle as well as relationship building.	Students engage in a mini-inquiry process. They may gather data and analyze findings, but other parts of the inquiry cycle are not included.	Students gather information and analyze it. They also have modest involvement in another part of the cycle, such as identifying issues, taking action on findings, or communicating.	Students engage in many of the aspects of the inquiry cycle but insufficient time is allotted to complete the cycle.	Students engage in all parts of the inquiry cycle, including identifying issues and developing questions, identifying appropriate sources of evidence, gathering data and information, analyzing findings, taking action, assessing results, communicating results, reflecting, and celebrating. Along the way, they develop respectful relationships with community partners.
5.3: GLSI PBSE is available throughout a student's K–12 experience.	PBSE occurs in only one grade or class. There are not any opportunities for students to have ongoing involvement with issues or resources over multiple years.	A few teachers within the school use PBSE. Their efforts are separate and distinct, and there is limited or no alignment of the work by teachers across grades or subjects.	Several teachers use PBSE. They are beginning to explore and experiment with coordinated work across grade levels that provides for a longer-term, more integrated student experience with PBSE.	PBSE is an established teaching practice in multiple grade levels in the school and district. Most teachers are using PBSE, which creates opportunities for collaboration across grades, subjects, and years. There is a shared understanding across grade levels of the purposes and goals of PBSE.

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.

Element	1 Baseline/Beginning	2 Developing	3 Advancing	4 Exemplary
6.1: GLSI PBSE benefits the local environment and the community.	The PBSE work is not focused on improving or benefiting the local environment and the community; benefits are strictly educational and for students.	The PBSE work has limited benefit to the local environment and community. It is primarily for the educational benefit of students.	The PBSE work has important benefits for the local environment and community, while still delivering powerful educational benefits.	The PBSE work meaningfully benefits the local environment and the community, while still delivering powerful educational benefits. The selection, design, and execution of the plan reflect this priority on meaningful benefits for the environment and community.
6.2: GLSI PBSE is managed to ensure timely delivery of intended benefits.	A <u>management plan</u> is not in place, leaving the PBSE effort vulnerable to breakdowns related to time/scheduling, permits/permissions, budget, and other contingencies.	A management plan exists that takes into account some contingencies, but there is not a well-developed system for monitoring progress and identifying potential breakdowns and challenges. The managers of the PBSE effort are teachers or community partners; no students are involved in this aspect.	The management plan for the PBSE effort is a flexible plan that allows for unexpected events and conditions. Teachers and/or community partners manage the PBSE effort with little student involvement.	Students, teachers and community partners anticipate and plan for factors of time, weather, budget, permits, and other potential disruptions of the PBSE effort. All share in responsibility to deliver intended benefits on time and on budget.

PART IV: DEVELOP SKILLS FOR PARTICIPATION IN DEMOCRATIC PRACTICES

Principle 7: Cultivate student voice and involve students in democratic practices 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.

Element	1 Baseline/Beginning	2 Developing	3 Advancing	4 Exemplary
7.1: GLSI PBSE cultivates student voice and involves students in democratic practices.	Students are not involved in the selection of a focal issue for PBSE or other important choices about PBSE. Teachers and partners do not draw out student opinions and perspectives in the course of the PBSE effort.	Students make some choices, typically from within teacher-generated parameters (e.g., selecting an issue or independent study from a list of alternatives). Teachers and partners provide limited opportunity and encouragement for students to express their perspectives on the issues of focus.	Students have significant input into the design and focus of <u>place-based learning</u> , balanced with input from teachers and members of the community. Teachers and partners make some effort to support student self-expression.	Students work with teachers and partners to design and execute their PBSE effort, with all parties functioning as co-creators of the work. Teachers and partners model relevant democratic practices, support students' informed choices, and deliberately cultivate and acknowledge student voice.

Principle 8: Use deliberate processes 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.

Element	1 Baseline/Beginning	2 Developing	3 Advancing	4 Exemplary
8.1: GLSI PBSE considers multiple perspectives on environmental issues.	The PBSE effort makes no space for exploration of other points of view regarding the environmental issue or stewardship project.	Students only minimally explore varied viewpoints regarding the environmental issue or stewardship project.	Students explore in some depth at least one viewpoint related to the stewardship issue or project, which may involve consultation with those affected by the environmental issue or stewardship project.	Students participate in a <u>deliberate process</u> to learn about viewpoints on environmental issues. If possible, students engage in age-appropriate dialogue and consultation with people or groups affected by an environmental issue or stewardship project.
8.2: GLSI PBSE explores the potential consequences of project-related decisions from environmental, economic, and <u>equity perspectives</u>.	An analysis of the consequences of project choices from environmental, economic, and equity perspectives is not included in the PBSE effort.	Students only minimally explore the potential consequences of various project choices from environmental, economic, and equity perspectives.	In some depth, students consider the potential consequences of their project choices from an environmental, economic, or equity perspective.	Students engage in a systematic process to consider the potential consequences of project choices from environmental, economic, and equity perspectives.

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.

Element	1 Baseline/Beginning	2 Developing	3 Advancing	4 Exemplary
9.1: GLSI PBSE helps students clarify their personal values related to nature and community.	Students are not provided with a focused opportunity to consider their own values about nature and community in the context of the PBSE effort.	Students have very limited opportunities to explore their own values about nature and community in the context of the PBSE effort.	Students have many opportunities to explore the underlying values behind various positions on the focal issues explored through PBSE, and through this process to reflect on, clarify, and express their own values about nature and community in the context of the PBSE effort.	Opportunities and processes for students to investigate underlying values are robust and woven throughout the PBSE effort. Students reflect on, develop, and express their own thoughts and values about nature and community in the context of the PBSE effort.
9.2: GLSI PBSE develops social-emotional and professional competencies.	The PBSE effort does not include any deliberate opportunities for students to experience teamwork, overcome setbacks, demonstrate responsibility, resolve conflicts, or otherwise develop their social-emotional and professional competencies.	A few opportunities are provided for students to develop social-emotional and professional competencies. These opportunities are limited or sporadic, and of low priority.	Multiple opportunities are intentionally provided for the development of social-emotional and professional competencies in the context of the PBSE effort. Teachers recognize the potential of PBSE to develop these competencies, but the competencies are not discussed explicitly with students.	Opportunities to develop social-emotional and professional competencies are robust and woven throughout the PBSE effort. Developing these competencies is an important priority of the work and discussed explicitly with students.

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

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.

Element	1 Baseline/Beginning	2 Developing	3 Advancing	4 Exemplary
10.1: GLSI PBSE involves students in meaningful public outreach.	Students do not share information about their actions, findings, conclusions, recommendations, and/or perspectives beyond their classrooms.	Students share information about their actions, findings, conclusions, recommendations, and/or perspectives beyond the classroom, within the school setting.	Students focus on the broader community issues embedded in their PBSE effort and share that information in school events that attract parents, other teachers, and other interested members of the community.	Students focus on the broader community issues embedded in their PBSE effort and share that information with members of the community including, but reaching beyond, the school-based audience of students, parents, and educators.
10.2: GLSI PBSE creates opportunities for students to understand and engage in public processes for discussing environmental issues in the community.	Students do not identify the broader environmental and community <u>themes</u> embedded in their PBSE effort or the public processes through which these issues are discussed.	Students identify the broader environmental and community themes embedded in their PBSE effort, and discuss the public process for debating these issues in the community, but do not have an opportunity to engage in discussion in a public forum.	Students identify the broader environmental and community themes embedded in their PBSE effort, and discuss the public process for debating these issues in the community. They have modest, age-appropriate opportunities to discuss the issues with community members.	Students identify the broader environmental and community themes embedded in their PBSE effort; discuss the public process for debating these issues in the community; and, in an age-appropriate way, engage in public discussion of the issues with community members, which may include discussion of current and future community policies and practices.
10.3: GLSI PBSE involves all students in public outreach and discourse.	Students do not share information about their PBSE effort or engage in <u>public discourse</u> .	A handful of students share information about their PBSE effort and engage in public discourse.	Many, but not all, students share information about their PBSE effort and engage in public discourse.	All students share information about their PBSE effort and engage in public discourse.

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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

West Michigan Great Lakes Stewardship Initiative

Sarah Coleman, Muskegon Area Intermediate School District

Erica Johnson, Muskegon Area Intermediate School District

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

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
Meaghan Gass, Thunder Bay National Marine Sanctuary

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 Initiative

Kristen Grote, GTSI Coordinator (former)

Upper Great Lakes Stewardship Initiative

Jennifer Hill, Superior Watershed Partnership



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