High Quality Environmental Education Programming: A Self-Assessment Rubric for District Success

Overview of the Self-Assessment Rubric:

The primary purpose of this self-assessment rubric is to help non-formal educational organizations and educators demonstrate the alignment of their environmental education programs with K-12 school district priorities. The criteria used in the rubric are based on data collected and analyzed during a research study conducted during the 2023-24 academic year. The study aimed to explore how well environmental literacy programming, particularly Meaningful Watershed Educational Experiences (MWEEs), aligns with school district priorities, focusing on student learning goals in the Mid-Atlantic states.

Intended Use of the Rubric:

The resulting rubric is designed as a self-assessment tool for environmental education providers. It is not intended as a scoring system but rather as a means for program improvement. The rubric helps providers ensure that environmental literacy programs align with district curriculum and state standards. Additionally, it aims to foster collaboration between environmental education providers and school districts, while enhancing professional development and support for non-formal educators, teachers, and administrators.

For more context and information regarding the rubric and the research involved in its development, see the last page.

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How to use the rubric:

1. **Identify a specific environmental education program that your organization offers.**
2. **Review the numbered criteria (i.e. 1A) and the associated assessments statements.**
3. **Review the scale. The greater the total score at the end of this rubric, the closer you are to what is outlined as a "high quality" environmental education program.**
    a. **High Emphasis (5): This rating indicates that your program dedicates significant focus, effort, and resources to the specified area, and it is well-developed, functioning effectively, and aligned with best practices.**
    b. **Low Emphasis (1): This rating indicates that the area receives minimal attention or resources and may require additional development or focus to improve its effectiveness.**
4. **Use the dropdown menu for each criterion to choose a rating (1-5) in the "Current self assessment score" column. List evidence and/or examples of why the score is applicable in the adjacent column.**
5. **Brainstorm and identify modifications that could improve the quality and relevance of your program in the final column.**
6. **Add each of the self-assessment scores in the final row of the rubric. This number can be used to reflect on your program holistically.**

It is recommended to repeat this assessment periodically, such as annually, to guide discussions and planning for program improvements. This rubric can be a great tool for collaborative planning and communication with school district partners. In conjunction with this rubric, the MWEE Audit Tool can be used as a supplemental resource to assess specific MWEE components.

Organization Name: _____

Program Name: _____

Grade Level: _____

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1. Aligns programming with the district's existing instructional guides, curriculum framework, and other supportive materials, while also ensuring alignment with environmental literacy practices (NAAEE Guidelines for Excellence).				
1A Align programming with the district's existing instructional guides, curriculum framework, and other supportive materials, with a focus on academic rigor, integrated STEM skills and practices, inquiry, and real-world experiences.				
High Emphasis (5)  **Low Emphasis (1)**		**Current Self-assessment score**	**Evidence of rating on the continuum (Cite specific examples of how each category is being met)**	**Planned modifications to better align with High Emphasis criteria**
Programming aligns with state standards and is written into the district's existing instructional guides, curriculum framework, or other supportive materials.	Programming does not align with state standards and is not written in or clearly connected to the district's instructional guides, curriculum framework, or other supportive materials.	5		
Programming is at grade level, providing rigorous learning opportunities for students to practice STEM skills and engage in inquiry (asking questions, conducting investigations, and synthesizing information).	Programming is below grade level and does not provide rigorous learning opportunities for students to practice STEM skills and engage in inquiry.	5		
Learning experiences are student-driven, with ample opportunities for exploration, discovery, and action.	Learning experiences are primarily teacher-driven, with few chances for student-led investigation or action.	5		

1B Include opportunities for cross-curricular integration particularly related to reading and math (in elementary instruction).				
High Emphasis (5)  **Low Emphasis (1)**		**Current Self-assessment score**	**Evidence of rating on the continuum (Cite specific examples of how each category is being met)**	**Planned modifications to better align with High Emphasis criteria**
Provides clear opportunities for students to practice grade-level appropriate reading and math skills and practices during the program.	Does not provide clear opportunities for students to practice reading and math skills and practices.	5		
Programming requires students to apply STEM concepts in cohesive, interdisciplinary ways. Including, but not limited to creating meaningful connections across disciplines to create learning opportunities for greater depth and complexity to address relevant engineering, scientific, and societal challenges (e.g. STEM, mathematics, social science, language arts, health, career-connected learning).	Programming rarely requires the application of interdisciplinary STEM concepts.	5		

2. Use best practices of environmental literacy, including the MWEE Framework and NAAEE's Guidelines for Excellence. Focus on (1) local environmental phenomena that highlight community connections and (2) authentic learning applications.				
High Emphasis (5  **Low Emphasis (1)**		**Current Self-assessment score**	**Evidence of rating on the continuum (Cite specific examples of how each category is being met)**	**Planned modifications to better align with High Emphasis criteria**
Includes each of the four MWEE essential elements – issue definition, outdoor field experiences, synthesis and conclusions, and environmental action.	Includes 0-1 of the MWEE essential elements.	5		
Programming is centered on a local environmental phenomenon that is directly relevant to students' communities and prompts students to develop their civic engagement skills.	Programming is not centered on local environmental phenomena and does not provide opportunities for students to develop their civic engagement skills.	5		
Students engage in hands-on investigations and field studies of local environmental issues/ phenomena. Programs require students to apply their knowledge and skills to understand and take action on local environmental issues resulting in a clear, positive impact on their community.	Students have few or no opportunities to investigate or study local environmental issues/ phenomena. Programs focus on theoretical knowledge with little practical application.	5		
Community knowledge and assets are integrated into the programming to enhance learning.	Community knowledge and assets are seldom used in programming.	5		

3. Focus on authentic and grade-level appropriate applications of learning that highlight related environmental careers.				
High Emphasis (5)  **Low Emphasis (1)**		**Current Self-assessment score**	**Evidence of rating on the continuum (Cite specific examples of how each category is being met)**	**Planned modifications to better align with High Emphasis criteria**
Programming includes structured activities with a clear and direct focus on environmental careers and provides students with college and career pathway information on the indicated careers.	The program provides limited opportunities for students to learn about and experience environmental careers. The focus is primarily on academic content rather than practical career exploration, so students gain only a basic awareness of potential careers in the environmental field without much depth or experiential learning.	5		

4. Accessible Experiences				
High Emphasis (5)  **Low Emphasis (1)**		**Current Self-assessment score**	**Evidence of rating on the continuum (Cite specific examples of how each category is being met)**	**Planned modifications to better align with High Emphasis criteria**
Programming is designed in a way that provides ample opportunities for adaptation and differentiation based on student needs, including accessible field sites on and off school grounds.	Programming is designed with minimal opportunities for adaptation and differentiation, where field sites may not be accessible to all students.	5		
There is a documented procedure for clear communication with classroom teachers related to the needs of students before an experience.	There are no documented procedures for clear communication with classroom teachers related to the needs of students before an experience.	5		

5. Safety of Learners (Physical, Emotional, and Cultural)				
High Emphasis (5) 	**Low Emphasis (1)**	**Current Self-assessment score**	**Evidence of rating on the continuum (Cite specific examples of how each category is being met)**	**Planned modifications to better align with High Emphasis criteria**
A comprehensive safety protocol is in place, including well-documented procedures for emergencies, with all environmental education provider staff trained in first aid, CPR, and other relevant safety measures.	Safety protocols are lacking or poorly defined, with inadequate environmental education provider staff training and insufficient attention to emergency procedures.	5		
Protocols are specifically designed to ensure both the physical and emotional safety of students, with a deep commitment to understanding and addressing their diverse backgrounds and individual needs including supporting students who read, write, and/or speak in a language other than English. The programming is highly culturally responsive, integrating students' life experiences into instruction and creating a learning environment where every student's background is respected and valued.	Protocols aim to keep students safe, and programming includes some elements of cultural responsiveness, valuing students' life experiences in instruction.	5		
An adult-to-student ratio (including chaperones) of 10:1 is maintained during all programs, ensuring personalized attention and supervision for each student.	The adult-to-student ratio is frequently inadequate, compromising supervision and individualized support for students.	5		

6. Collaboratively plan outdoor experiences

High Emphasis (5)	Low Emphasis (1)	Current Self-assessment score	Evidence of rating on the continuum (Cite specific examples of how each category is being met)	Planned modifications to better align with High Emphasis criteria
Environmental education providers consult with school district leaders and/or teachers to identify opportunities for outdoor experiences, including spaces on school grounds, that help to meet identified learning objectives.	Environmental education providers provide limited time and support for collaborative planning of outdoor experiences with district leaders and/or teachers.	5		
Environmental education providers improve prospects for program sustainability by incorporating outdoor experiences that can take place on school grounds or within walking distance.	Minimal emphasis is placed on utilizing school grounds and fails to actively address transportation barriers, leaving schools to navigate challenges independently.	5		
Environmental education providers consult with school district leaders and teachers to identify clear roles and expectations during outdoor experiences.	Roles and expectations between environmental education providers and teachers during outdoor field experiences are either assumed or not clear.	5		
Environmental education providers build the capacity in formal educators to lead outdoor experiences by providing opportunities to co-teach alongside environmental education providers.	Minimal emphasis is placed on building teacher capacity in leading outdoor experiences, requiring an unsustainable reliance on environmental education providers.	5		
The environmental education provider is willing to collaborate to modify the program to meet the school district's needs.	Programming is very prescriptive and environmental education providers are not willing or able to modify or adapt it.	5		

7. Professional Development for Environmental Education Providers				
High Emphasis (5)  **Low Emphasis (1)**		**Current Self-assessment score**	**Evidence of rating on the continuum (Cite specific examples of how each category is being met)**	**Planned modifications to better align with High Emphasis criteria**
Staff members who lead educational programs have received professional development in essential areas such as applicable state standards, restorative practices and behavioral interventions; culturally responsive pedagogies; Universal Design for Learning (UDL), 5E lesson planning, supporting language development for all learners, and student-driven inquiry.	Staff members who lead educational programs have received minimal professional development in essential areas such as applicable state standards, classroom management, and culturally responsive pedagogies.	5		
Diversity, Equity, Inclusion, and Justice professional development is required for all staff members.	Diversity, Equity, Inclusion, and Justice professional development is not provided and/or is not required for all staff members.	5		

8. Flexible and Inclusive Support for School-Based Professionals				
High Emphasis (5)  **Low Emphasis (1)**		**Current Self-assessment score**	**Evidence of rating on the continuum (Cite specific examples of how each category is being met)**	**Planned modifications to better align with High Emphasis criteria**
Offers professional development for teachers and administrators of participating students in a variety of formats and timeframes, to accommodate school and district schedules.	Provides for teachers and administrators of participating students' professional development in few formats and timeframes, limiting participation opportunities.	5		
Engages teachers in all aspects of MWEE implementation, using practical models.	Fails to engage teachers comprehensively in MWEE implementation and uses impractical or idealized models.	5		
Provides ample time for teachers to plan and envision implementation in their classrooms.	No options for the inclusion of teacher planning/participation.	5		
Ensures no or nominal fees or provides other incentives such as PD credits for participation, and may include stipends.	Imposes monetary requirements or offers limited or no other PD credit opportunities or incentives, hindering widespread participation.	5		

Assessment Practices/Strategies: **Provide an overview of how your program goals/student learning is assessed.**

What assessment tools are you using to measure student learning outcomes?

How do these assessments inform your programming?

RUBRIC ADDENDUM:

Development Process:

The development of the rubric involved several steps. First, an extensive literature review was conducted, focusing on MWEE and other place-based instructional strategies, which provided a theoretical framework for the rubric. Initial data collection included pre-interview surveys and focus group interviews with school district personnel, including administrators and K-12 teachers. Additionally, a supplemental non-formal focus group, comprising leaders from state departments of education, was convened. This group provided insights into their state's educational priorities and how they relate to environmental education and the MWEE. The study included participants from five Mid-Atlantic states with diverse content backgrounds, contributing to a multidisciplinary approach.

Key Findings:

The study revealed that administrators and teachers highly value their partnerships with local non-formal education organizations and are eager to build on these relationships. Non-formal education providers should be aware of local educational contexts and priorities, adjusting their programming accordingly to meet the needs of local districts. Recommendations for these providers include ensuring that their programming directly supports district curriculum and state standards, offering opportunities for collaborative planning of outdoor experiences, and enhancing professional development for both formal and non-formal educators and administrators. The findings were consistent with those from NOAA's District Environmental Literacy Planning Toolkit.