Name:



# Self-Assessment for Environmental Educators

Based on the *Guidelines for the Preparation and Professional Development of Environmental Educators* from the North American Association for Environmental Education (NAAEE)

### Scoring

Score yourself for each guideline as follows:

- 4 = exemplary
- 3 = proficient
- 2 = needs improvement
- 1 = no knowledge of this guideline

Enter your score for each guideline on the "Score" line. The form will calculate your score totals automatically.

Self-Assessment Averages
Theme 1: Environmental Literacy
Theme 2: Foundations of Environmental Education
Theme 3: Professional Responsibilities of the Environmental Educator
Theme 4: Planning and Implementing Environmental Education
Theme 5: Fostering Learning
Theme 6: Assessment and Evaluation

# Theme 1: Environmental Literacy

### Guideline 1.1: Questioning, analysis and interpretation skills

Developing environmental literacy depends on a willingness and ability to ask questions about the surrounding world, speculate and hypothesize, seek and evaluate information, and develop answers to questions. Environmental literacy requires a familiarity with some basic modes of inquiry, a mastery of fundamental skills for gathering and organizing information, and an ability to interpret and synthesize information and communicate explanations.

### Guideline 1.2: Knowledge of environmental processes and systems

Environmental literacy hinges on understanding the processes and systems that comprise the environment, including human systems and their influences. That understanding is based on knowledge synthesized from across the traditional disciplines (especially the natural and social sciences) and includes knowledge about the Earth as a physical system and living environment.

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#### Guideline 1.3: Skills for understanding and addressing environmental issues

Environmental literacy includes the abilities to learn about, evaluate, and act on environmental issues. The skills and knowledge outlined in the first two guidelines (1.1, questioning, analysis, and interpretation skills; and 1.2, knowledge of environmental processes and systems) are applied and refined in the context of these issues—the real-life dramas where differing viewpoints and interpretations of data about environmental problems and their potential solutions are played out.

#### Guideline 1.4: Personal and civic responsibility

Environmental literacy is activated by individual commitment. Environmentally literate citizens are motivated and empowered to act on their own informed conclusions about what should be done to ensure environmental quality. In developing and applying concept-based learnings and skills for inquiry, analysis, and action, people cultivate an understanding that what they do as individuals and in groups makes a difference.

# Theme 2: Foundations of Environmental Education

#### Guideline 2.1: Fundamental characteristics and goals of environmental education Score

Educators understand environmental education as a distinct field and know its defining characteristics and goals.

- Identify the goals and objectives of environmental education as laid out in founding documents of the field such as the Belgrade Charter (UNESCO-UNEP, 1976) and Tbilisi Declaration (UNESCO, 1978), as well as in more recent definitions such as Agenda 21 (UNCED, 1992).
- Describe the broad view that environmental education takes of "environment," incorporating concepts such as systems, interdependence, and interactions among humans, other living organisms, the physical environment, and the built or designed environment.
- Discuss environmental education as an interdisciplinary field and provide examples of ways in which it draws on and integrates knowledge from across academic disciplines.
- Identify major components of environmental literacy. Discuss influences that have contributed to the evolution of these concepts, such as work done by Charles Roth, Harold Hungerford, R. Ben Peyton, and Rick Wilke.
- Relate environmental education's focus on environmental literacy and citizenship with the need to provide opportunities for learners to enhance their capacity for independent thinking and effective, responsible action.

#### Guideline 2.2: How environmental education is implemented

Educators understand that environmental education takes place in a variety of settings and that sources of support, program requirements, and other factors vary from context to context.

- Identify a range of individuals, organizations, and agencies delivering environmental education programs, including formal and nonformal programs. Identify efforts to link formal and nonformal programs through partnerships and other collaborations.
- Discuss how school policies, state or local mandates for environmental education, and federal legislation influence environmental education efforts.
- Describe a variety of national, regional, state, and local environmental education programs and support services, including funding sources and resources.

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Theme 1 Average

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Theme 2 Average

#### Guideline 2.3: The evolution of the field

Educators are familiar with how the field of environmental education has changed over time and continues to change.

- Discuss how educational movements, including progressive education, nature study, outdoor education, conservation education, and ecology education, contributed to the development of environmental education and how they differ from environmental education.
- Discuss how the work of bodies such as the Brundtland Commission (Brundtland, 1987), the United Nations Conference on Environment and Development (UNCED, 1992), the International Conference on Environment and Society (UNESCO 1997), and the World Summit on Sustainable Development (2002) has influenced—or might influence—environmental education.
- Describe specific findings from environmental education research and discuss their effect on how environmental education might be perceived, defined, or practiced.
- Identify current and emerging issues in the field of environmental education. For example, evaluate
  assertions that environmental education focuses more on advocacy rather than education and discuss
  how these assertions are affecting environmental educators and education programs.
- Describe how specific environmental education research findings have informed the educator's own perspective.

# Theme 3: Professional Responsibilities of the Environmental Educator

#### **Guideline 3.1: Exemplary environmental education practice**

Educators understand their responsibility to provide environmental education that is appropriate, constructive, and aligned with the standards of the field.

- Identify ways in which environmental education can be used as a tool for meeting curriculum standards and addressing education reform goals. Identify and practice ways in which educators can enhance these links in their work.
- Assess the role of partnerships with community members and organizations, government agencies, businesses, the formal and nonformal education systems, and others in providing environmental education that is appropriate and helpful to the community.
- Model responsible, respectful, and reasoned behavior during instruction.
- Model the process of inquiry and application of environmental investigations in instruction.

#### Guideline 3.2: Emphasis on education, not advocacy

Educators understand that their commitment as environmental educators is to provide accurate, balanced, and effective instruction—not to promote a particular view about environmental conditions, issues, or actions.

- Identify and implement instructional techniques for presenting differing viewpoints and theories in a balanced manner and identifying potential sources of bias in information.
- Differentiate among instructional materials on the basis of their factual accuracy. Select and use materials that together present a range of differing viewpoints, ethical positions, and interpretations where there are differences of opinion or competing scientific explanations. Weigh evidence regarding environmental problems based on validity of data (e.g., from scientific societies or reputable journals).
- Identify and implement instructional strategies and techniques that encourage learners to explore different perspectives, form their own opinions, and explain their beliefs.

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#### Guideline 3.3: Ongoing learning and professional development

Educators are aware of the need to be active learners in their professional lives.

- Identify and practice ways of continually updating information about the environment and issues, current research, environmental education materials, and instructional methods. For example, critically read scientific journals or join and actively participate in local, state, national, or international organizations associated with environmental education, or participate in a professional certification program.
- Identify and develop relationships with mentors, advisors, and others who challenge educators to
  expand and upgrade their knowledge and skills and expand their firsthand understanding of different
  points of view about environmental issues.
- Reflect on and learn from personal practice as an environmental educator, both individually and with other professionals and colleagues. Use tools such as peer coaching, portfolios, and journals.
- Seek out opportunities to learn essential content and skills in real-world environmental settings or contexts, especially within the communities and ecosystems in which one lives and teaches.
- Learn and use research and analytical skills to expand existing knowledge about the environment, related issues, and environmental education.

# Theme 4: Planning and Implementing Environmental Education

#### **Guideline 4.1: Knowledge of learners**

Educators know how to tailor instructional approaches to meet the needs of, yet challenge, different learners.

- Identify and model methods for presenting the environment or environmental issues in appropriate and engaging ways for learners of different ages, backgrounds, levels of knowledge, and developmental abilities. (This range may include adults, especially for educators in nonformal settings.)
- Select environmental education materials and strategies that are developmentally appropriate for a designated age or level of knowledge. Adjust these to respond to individual differences among learners.
- Demonstrate an understanding of learning theories such as multiple intelligences and learning styles. Organize environmental education instruction to accommodate different approaches to learning.
- Apply theories of cognitive and moral or social development in creating an environmental education instructional plan for a particular grade level, class, or group.
- Recognize and acknowledge the validity of varying cultural perspectives present in groups of learners. Tailor instructional approaches to respond to these perspectives and use them as an educational resource.

#### Guideline 4.2: Knowledge of instructional methodologies

Educators are familiar with and can employ a range of instructional methods that are particularly suited to environmental education.

- Select among relevant environmental topics and issues for study based on learners' interests and their ability to construct knowledge to gain conceptual understanding.
- Use a variety of teaching methods and strategies appropriate for the environmental education content and context.
- Select instructional methodologies based on learning objectives, learner characteristics, time requirements, involvement of community members, community dynamics and policies, available resources, and the instructional setting.

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Theme 3 Average

#### **Guideline 4.3: Planning for instruction**

Educators are able to plan age-appropriate environmental education instruction and programs that meet specific instructional goals.

- Produce a plan for environmental education instruction and demonstrate how the overall plan and specific elements (such as plans for units of instructional or daily activities) enhance coordination or integration across disciplines or help meet specific goals of environmental education.
- Develop a plan for a coherent, focused environmental education program that is consistent with the content outlined in *Excellence in Environmental Education—Guidelines for Learning (K–12)* or comparable expectations for adults.
- Demonstrate how plans for environmental education instruction will help learners meet relevant national, state, and local educational standards for learning performance in specific disciplines.

Guideline 4.4: Knowledge of environmental education materials and resources Score

Educators are aware of a range of materials and resources for their environmental education efforts and understand how to access, evaluate, and use these resources.

- Identify and evaluate materials and education resources using criteria such as those suggested in *Environmental Education Materials: Guidelines for Excellence.*
- Demonstrate ways in which the community can be a resource for environmental education, identifying local businesses, service organizations, government agencies, nonprofit organizations, and others that may participate in and support instructional programs.
- Identify and use sources of information about instructional materials and other resources including training offered by national, state, and local environmental education programs and professional organizations.
- Use the Internet to identify and access sources of information about the environment, particular issues, and educational resources. Critically evaluate the usefulness of resources found on the Internet.

#### **Guideline 4.5: Technologies that assess learning**

Educators are familiar with a range of technologies available to assist student learning.

- Use a variety of tools for environmental observation, measurement, and monitoring (e.g., magnifying glasses, chemical tests, hygrometers, survey and interview techniques, traffic counts) and instruct learners in their safe and proper use.
- Demonstrate proficiency with technologies used to display, analyze, and communicate environmental information.
- Identify sources of expertise about unfamiliar learning technologies and learn from them or incorporate this outside expertise into instruction.

#### **Guideline 4.6: Settings for instruction**

Educators understand the importance of a safe and conducive learning environment both indoors and outside.

- Demonstrate a concern for learner safety in designing, planning, and implementing instruction, especially experiences that are hands-on or that take place outside the classroom. Attend to the physical layout and maintenance of the learning facility or center so learners can use it safely and effectively.
- Identify, create, and use diverse settings for environmental education, appropriate to different subject matter and available resources. These may include the school yard, laboratory, field settings, community settings, museums, zoos, demonstration sites, and other places.
- Identify or develop and implement responses to real or perceived barriers to using expanded settings (such as outdoor settings) in educational and safe ways.
- Plan and implement instruction that first links content to learners' immediate surroundings and

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experience, then expands learners' horizons as appropriate to larger environmental issues and contexts.
 Guideline 4.7: Curriculum planning Score \_\_\_\_\_
 Educators are familiar with ways of including environmental education in the curriculum.
 Describe basic approaches to creating a developmentally appropriate scope and sequence for environmental education curricula.
 Develop an environmental education program designed to meet the educational goals of an agency or other institution using criteria such as those outlined in Nonformal Environmental Education: Guidelines for Excellence.

- Develop a plan for integrating environmental education into the formal school curriculum, either across the curriculum or as a separate course or emphasis within one or more areas of study.
- Demonstrate links between environmental education curricula (or plans for integrating environmental education into an existing curriculum) and national, state, or local standards in disciplines such as science, mathematics, social studies, geography, and language arts.
- Correlate environmental education with state education standards in a particular discipline or grade level.

Theme 4 Average

# **Theme 5: Fostering Learning**

#### Guideline 5.1: A climate for learning about and exploring the environment

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Educators understand how to create a climate in which learners are intellectually stimulated and motivated to learn about the environment.

- Relate the idea of lifelong learning to instructional practices that engage learners in taking responsibility for their own learning and expectations for achievement. Demonstrate proficiency with these practices in instructional settings.
- Imbue instruction with a sense of the importance and excitement of the content.
- Provide opportunities for experiences that increase learners' awareness of—and enthusiasm for—the natural and human-designed environment.
- Incorporate opportunities for learners to have firsthand experiences exploring the world around them.
- Discuss why fostering clear and independent thinking is important in light of environmental education's goal of developing environmentally literate citizens.
- Identify and use instructional techniques that encourage learners to ask questions and explore a variety of answers.

#### Guideline 5.2: An inclusive and collaborative learning environment

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Educators know how to maximize learning by fostering openness and collaboration among learners.

- Identify and use ways to encourage flexibility, creativity, and openness, considering the assumptions and interpretations that influence the conclusions that learners and others draw about the environment and environmental issues.
- Relate learners' capacity for collaborative work to their ability to function as responsible and effective citizens. Describe and implement management techniques that foster independent and productive group work.
- Include diverse cultures, races, genders, social groups, ages, and perspectives with respect, equity, and an
  acknowledgment of the value of such diversity. Use diverse backgrounds and perspectives as instructional
  resources.

# **Guideline 5.3: Flexible and responsive instruction**

Educators know how to augment proper planning with the flexibility that allows them to take advantage of new instructional opportunities.

- Modify instructional plans and approaches, when appropriate, to take advantage of unexpected opportunities (e.g. new developments in community issues, recent events or phenomena that are in the news, or breakthroughs in scientific understanding) and learner questions and interests.
- Blend a variety of instructional methods and activities to meet instructional objectives. Make smooth transitions from one to another.
- Work collaboratively with other instructors and discipline areas, adapting instructional approaches as needed to blend or complement instructional styles and to meet shared environmental education goals.

# Theme 5 Average

# Theme 6: Assessment and Evaluation

#### **Guideline 6.1: Learner outcomes**

Educators understand the importance of tying assessment to learning.

- State expected learner outcomes that are tied to the goals and objectives of environmental education. ٠
- Identify national, state, and local standards that apply to stated learner outcomes and link assessment of environmental education learnings to these.
- Develop and use a variety of strategies for assessing learning outcomes that reflect both subject area • standards and environmental education goals and objectives.
- Describe and use means for engaging learners in setting their own expectations for achievement. Discuss the importance of these abilities in light of environmental education's emphasis on learner-centered education and lifelong learning.

### Guideline 6.2: Assessment that is part of instruction

Educators are familiar with ways of incorporating assessment into environmental education.

- Make objectives and other expectations clear to learners at the outset of an environmental education activity • or instruction.
- Provide examples of and implement specific performance-based assessments such as portfolios, open-ended questions, oral reports, group or independent research, or other projects appropriate to environmental education instruction.
- Identify and use techniques that assess learners' baseline understandings and skills at the beginning of • environmental education programs, lessons, units, and other segments of instruction such as school terms.
- Develop formative and summative assessment tools appropriate to specific environmental education instructional segments or projects.
- Discuss the importance of and identify techniques for encouraging learners to assess their own and others' work. Use these assessments to improve their learning experiences.

# **Guideline 6.3: Improving instruction**

Educators know how to use their instructional experiences and assessments to improve future instruction.

- Organize, interpret, and use the results of differing kinds of assessment to help modify and improve future instruction.
- Demonstrate a willingness and ability to collect additional information from and about learners to help modify and improve future instruction.
- Seek out opportunities to reflect, individually and with colleagues, on their own instructional practices

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# and the broader practice of environmental education within the field. Guideline 6.4: Evaluating programs Score \_\_\_\_\_ Educators understand the importance of evaluating environmental education programs and are familiar with basic evaluation approaches. Educators how program evaluation, including needs assessment, formative evaluation, and summative evaluation, contributes to program design and implementation. • Differentiate among program outputs, outcomes, and impacts and explain how they relate to program goals and objectives. • Describe reasons for evaluating environmental education programs. • List a variety of data collection methods used in environmental education program evaluation.

• Develop a plan for integrating evaluation into the overall program design process using criteria such as those suggested in *Nonformal Environmental Education Programs: Guidelines for Excellence*.

Theme 6 Average