

The Core Competencies for Certification Programs

These Core Competencies were adopted by the NAAEE Board in March 2006 after several years of work by the Certification Advisory Council.

Preamble: These minimal competencies must be demonstrated by candidates of certification programs that are recognized by NAAEE. Each program is encouraged to add, as appropriate, supplementary competencies that certification candidates must satisfy.

This document is based on the National Project for Excellence in Environmental Education **Guidelines for the Preparation and Professional Development of Environmental Educators** (2004), and was developed and approved by the certification committees of the states of KY, TX, and UT.

Theme 1: Environmental Literacy

1.1 Questioning and Analysis Skills

A certified environmental educator will compare and contrast three different investigative approaches/methods/modes and apply at least one of them to an environmental topic.

A certified environmental educator will describe two scenarios in which environmental knowledge is incomplete, and will explain how environmental knowledge continues to change as discoveries are made.

A certified environmental educator will critically analyze two or more sources of information for accuracy and reliability.

1.2 Knowledge of Environmental Processes and Systems

A certified environmental educator will demonstrate an understanding of the processes and systems that comprise each of these concepts:

- biological change;
- cycles, physical processes that shape the earth, and energy flow;
- biodiversity
- cultural, political and economic systems;
- human interactions with the environment; and
- ecological consequences.

A certified environmental educator will demonstrate knowledge of the certifying state and bioregion's natural and cultural histories.

1.3 Skills for Understanding and Addressing Environmental Issues

A certified environmental educator will differentiate between an environmental event, problem and issue.

A certified environmental educator will identify an environmental issue and, for that issue, design a plan to:

- investigate, analyze, and evaluate its scope, causes, and consequences; and
- investigate and evaluate alternative solutions.

1.4 Personal and Civic Responsibility

A certified environmental educator will

- describe an environmental issue and various societal values that play a role in it;
- articulate citizen rights and responsibilities, as well as his/her position, with respect to that issue;
- propose and justify a course of action;
- design a plan to carry out that action; and
- critique that plan, to include probable outcomes and consequences.

Theme 2. Foundations of Environmental Education

2.1 Fundamental characteristics & goals of environmental education

A certified environmental educator will be able to describe the goals, objectives and characteristics of environmental education that contribute to making it a distinct field.

2.2 How environmental education is implemented

A certified environmental educator will be able to identify two major national and two state EE providers and the resources they offer.

2.3 The evolution of the field

A certified environmental educator will be able to explain the evolution of the field of environmental education, by citing and describing the significance or impact of two historical documents, three movements (historical and emerging), two policies, and three individuals in making the field what it is today.

A certified environmental educator will be able to discuss how at least one current policy impacts his or her day-to-day work.

Theme 3: Professional Responsibilities of the Environmental Educator

3.1 Exemplary environmental education practice

A certified environmental educator will model responsible, respectful and reasoned behavior during two presentations and an interaction (e.g. committee meetings, activities, communications, etc.) with a local community.

A certified environmental educator will correlate two inquiry-based lessons to national and/or state academic standards.

3.2 Emphasis on education, not advocacy

A certified environmental educator will illustrate with two examples what the differences are between advocacy and education.

A certified environmental educator will identify two instructional strategies and two curriculum materials/resources (e.g. CD-ROMs, videos, posters, books, websites, etc.) and explain how they can be used to encourage learners to gain/explore different perspectives, form their own opinions, and support their beliefs.

A certified environmental educator will implement one of the instructional strategies s/he identified and explained.

3.3 Ongoing learning and professional development

A certified environmental educator will identify his or her own past and present professional development activities, conduct a self-assessment of the degree to which he or she currently meets the core competencies, and create a plan for his or her future professional development, identifying

- specific gap(s) in his or her knowledge and skills and
- three different methods to achieve improvement (e.g. membership in professional associations, professional journals, mentoring, conferences, field experiences, etc.).

Theme 4: Planning and Implementing EE

4.1 Knowledge of learners

A certified environmental educator will demonstrate and/or document appropriate instructional approaches that meet the needs of diverse learners, taking into account differences in:

- Cultural and socioeconomic backgrounds,
- Age and grade level,
- Levels of knowledge and experience,
- Special needs, and
- Developmental abilities.

4.2 Knowledge of instructional methodologies

A certified environmental educator will demonstrate three distinct instructional methods that are particularly suited to environmental education (See the list on page 14 of *Guidelines for Initial Preparation of Environmental Educators*.)

4.3 Planning for instruction

A certified environmental educator will articulate the scope of what constitutes environmental knowledge and skills as well as the sequence in which they should be learned, by aligning one program's content to the *Guidelines for Learning* (K-12). (Note: For adult programs refer to "Theme 1: Environmental Literacy" of the *Guidelines for Initial Preparation of Environmental Educators*, as a framework.)

4.4 Knowledge of environmental education materials and resources

A certified environmental educator will be able to list and critically evaluate two types of EE materials obtainable from community and corporate organizations, agencies, professional development training programs, and/or the Internet. (Note: Evaluations should be based on *Environmental Education Materials: Guidelines for Excellence*.)

A certified environmental educator will be able to critically evaluate one state or local EE program. (Note: Evaluations should be based on *Nonformal Environmental Education Programs: Guidelines for Excellence*.)

4.5 Technologies that assess learning

A certified environmental educator will describe three types of instructional tools or technologies and give examples of their safe, effective, appropriate use in instructional settings.

4.6 Settings for instruction

A certified environmental educator will analyze one of his or her teaching environments citing three ways to address potential safety issues and three ways in which the teaching environment is appropriate for the subject matter he or she is teaching.

A certified environmental educator will describe three field experiences in which he or she has been able to link content to the learners' immediate environment.

4.7 Curriculum planning

A certified environmental educator will give two examples of how he or she has successfully integrated environmental education into curricula, programs or an organization's mission.

A certified environmental educator from the nonformal community will be able to demonstrate strategies for supporting and enhancing teachers' efforts in environmental education at the P-12 level.

Theme 5. Fostering Learning

5.1 A climate for learning about and exploring the environment

A certified environmental educator will demonstrate that he or she successfully stimulated learners' interest in the environment.

5.2 An inclusive and collaborative learning environment

A certified environmental educator will demonstrate that he or she successfully engaged children/adults in their own learning and provided first-hand, inquiry-based, developmentally appropriate experiences, indicating ways in which they collaborated.

A certified environmental educator will demonstrate that his or her lesson/presentation was relevant and interdisciplinary.

A certified environmental educator will cite two instances where he or she used the diverse backgrounds and perspectives of learners not just as context but also as an instructional resource.

5.3 Flexible and responsive instruction

A certified environmental educator will demonstrate that he or she is able to take advantage of “teachable moments” by being flexible and open to student questions and ideas.

Theme 6: Assessment and Evaluation

6.1 Learner outcomes

A certified environmental educator will demonstrate the use of two assessment tools designed to measure cognitive, affective and/or psychomotor outcomes that align with instructional objectives (NOTE: Instructional objectives should be drawn from state standards and/or EE goals and objectives.)

6.2 Assessment that is part of instruction

A certified environmental educator will demonstrate the implementation of one strategy to engage learners in setting their own expectations for learning and evaluating their performances.

A certified environmental educator will demonstrate how one assessment strategy was used to shape instructional planning and/or delivery.

6.3 Improving instruction

A certified environmental educator will demonstrate one example of how assessment and/or evaluation data were used to improve instruction.

6.4 Evaluating Programs

A certified environmental educator will describe:

- One way he or she used evaluation to design or develop an environmental education program.
- One way he or she used evaluation during program implementation to improve an environmental education program.
- One way he or she used evaluation to determine the impact of an environmental education program.

A certified environmental educator will display three data collection tools and the analysis he or she used to evaluate an EE program.