

KEY CHARACTERISTIC #5: PROGRAM QUALITY AND APPROPRIATENESS

Nonformal environmental education programs are built on a foundation of quality instructional materials and thorough planning.

5.1) Quality Instructional Materials and Techniques.

The environmental education program employs instructional materials and techniques of the highest quality.

What to look for:

- Any educational materials developed or used as part of the program include the characteristics of quality environmental education materials as outlined in NAAEE's *Environmental Education Materials: Guidelines for Excellence*. (See sidebar on next page.)
- Program elements and materials
 - are broadly inclusive and recognize the integral connections between environmental concerns and the wider questions of social needs, welfare, and economic opportunity.
 - are integrated with relevant curricula or with program goals from the organization.
 - comply with all applicable regulations, standards, and safety guidelines.
- Program elements, instructional strategies, and materials
 - reflect learning theory appropriate for the target audience. (See also Appendix C: Working with Adult Learners and Appendix D: What You Need to Know About Children Under Six.)
 - consider innovative and novel ways to achieve objectives rather than assuming that traditional or historical methods are most appropriate.
- aid in developing critical and creative thinking skills.
- are culturally and gender sensitive and inclusive, and are age, audience, and content appropriate.
- are integrated into an appropriate scope and sequence.
- The program uses instructional methodologies based on respected, research-based practices. Methods address the varied learning styles of audience members, including attention to theories of multiple intelligences.
- Life-long learning strategies are incorporated into program design.
- The overall program and specific activities are broadly accessible and are responsive to concepts and standards expressed in the Americans with Disabilities Act (ADA).
- The program
 - uses appropriate and effective technology.
 - is safe and comfortable for the audience.
 - is integrated into a continuum of environmental education, with readiness and follow-up activities conducted as appropriate.
- Materials have been reviewed by experts in education and subject matter and by their intended audience to assure that they are pedagogically sound, value-fair, and scientifically accurate.

Summary of *Environmental Education Materials: Guidelines for Excellence*

Environmental Education Materials: Guidelines for Excellence is designed to help the educator, administrator, curriculum designer, or materials developer evaluate the quality of environmental education materials. These *Guidelines* offer a way of judging the relative merit of different materials, a standard to aim for in developing new materials, and a set of ideas about what a well-rounded environmental education curriculum might be like.

The *Guidelines* point out six key characteristics of high quality environmental education materials:

Key Characteristic #1 –

Fairness and Accuracy

EE materials should be fair and accurate in describing environmental problems, issues, and conditions, and in reflecting the diversity of perspectives on them.

- 1.1 Factual accuracy;
- 1.2 Balanced presentation of differing viewpoints and theories;
- 1.3 Openness to inquiry; and
- 1.4 Reflection of diversity.

Key Characteristic #2 – Depth

EE materials should foster awareness of the natural and built environments; an understanding of environmental concepts, conditions, and issues; and an awareness of the feelings, values, attitudes, and perceptions at the heart of environmental issues, as appropriate for different developmental levels.

- 2.1 Awareness;
- 2.2 Focus on concepts;
- 2.3 Concepts in context; and
- 2.4 Attention to different scales.

Key Characteristic #3 –

Emphasis on Skills Building

EE materials should build lifelong skills that enable learners to address environmental issues.

- 3.1 Critical and creative thinking;
- 3.2 Applying skills to issues; and
- 3.3 Action skills.

Key Characteristic #4 –

Action Orientation

EE materials should promote civic responsibility by encouraging learners to use

their knowledge, personal skills, and assessments of environmental issues as a basis for environmental problem solving and action.

- 4.1 Sense of personal stake and responsibility; and
- 4.2 Self-efficacy.

Key Characteristic #5 –

Instructional Soundness

EE materials should rely on instructional techniques that create an effective learning environment.

- 5.1 Learner-centered instruction
- 5.2 Different ways of learning;
- 5.3 Connection to learners' everyday lives;
- 5.4 Expanded learning environment;
- 5.5 Interdisciplinary;
- 5.6 Goals and objectives;
- 5.7 Appropriateness for specific learning settings; and
- 5.8 Assessment.

Key Characteristic #6 – Usability

EE materials should be well-designed and easy to use.

- 6.1 Clarity and logic;
- 6.2 Easy to use;
- 6.3 Long-lived;
- 6.4 Adaptable;
- 6.5 Accompanied by instruction and support;
- 6.6 Make substantiated claims; and
- 6.7 Fit with national, state, or local requirements.

For more information on the *Materials Guidelines*, go to www.naaee.org/npeee/materials.php

An Autumn Walk by a Stream A Natural Resource Leadership Retreat for Women

In 2001, the Kentucky Cooperative Extension Service sponsored An Autumn Walk in the Woods, A Natural Resource Leadership retreat for women. The retreat targeted women who, as volunteers or staff members, teach in extension programs in their own home areas. Retreat organizers recognized that although women often make natural resources decisions, they had historically been underserved by education programs. The retreat was such a success, it was repeated in 2002 and 2003.

The retreat was designed specifically to meet the needs of its target audience. The strategy of the Autumn Walk Series is to use local traditions and hobbies as interesting and effective teaching tools. The women participated in hands-on workshops led by natural resource specialists and artists. With their help, the women not only gained a better understanding of natural resource concepts, but also learned that natural resource education could be passed on through storytelling, painting, photography, and music.

The Autumn Walk Series has produced several notable products that the women now use as tools in their own education programs. A video on making paper used the participants as actors. A calendar included quotes and teaching tips by the participants. They composed a song that was sung by the music instructor and distributed on a CD. Poems and watercolor sketches created by the participants were included in a desktop flipchart that chronicles one of the retreats.

— Submitted by Gwenda Adkins, Elliott County (Kentucky) Extension Agent for Family and Consumer Sciences. From an article by Aimee D. Heald, University of Kentucky Agriculture Communications.

5.2) Field Testing.

Educational activities and strategies used in the environmental education program are tested to ensure their effectiveness.

What to look for:

- Educational activities, materials, and strategies are tested in the field with samples of the target audience, and revisions are made based on this testing whenever possible.
- The evaluation plan is implemented and updated as needed, based on field testing.
- Equipment, consumables, money, and other resources needed to conduct the program are assembled or readily available, and items are tested or reviewed before they are needed for the program.

5.3) Promotion, Marketing, and Dissemination.

The environmental education program has an effective promotion, marketing, and dissemination plan to ensure that it reaches its target audience and has the opportunity to achieve its goals and objectives.

What to look for:

- The availability and content of the program are widely known to target audiences in the local community, and elsewhere if appropriate. Members of the target audience(s) know how they can participate in the program and where they can obtain additional information about the program.
- Media contacts and publicity strategies are detailed in print for use on an ongoing basis.
- Event schedules are coordinated with partners and collaborators to avoid conflicts.

- To the extent possible, events are scheduled so as not to compete with other programs for the target audience(s) and in order to maximize opportunities for the target audience(s) to participate.
- Partners and collaborators help in marketing and promotion efforts.
- Programs are coordinated with other environmental education programs to maximize effect and opportunity for integration.
- Photographs (with signed releases from participants depicted in photos, granting their permission to publish or otherwise use the photographs), case studies, or other forms of documentation are collected to facilitate marketing and sharing of information gained.

5.4) Sustainability.

The environmental education program can be sustained if a long-term initiative is necessary for effectiveness.

What to look for:

- The program’s goals and objectives are valid and appropriate for the entire length of the program cycle.
- A long-term funding strategy for the program has been developed that details how the program will be continued after initial funding is exhausted. Alternatives such as fees for services and charging for materials are incorporated as appropriate.
- Partnerships and other “ownership” possibilities are included in strategies for sustaining the program.
- Accurate records of programs, goals, objectives, content, participants, training, resources, and evaluation results are compiled and kept in order to contribute to the organization’s institutional memory.

