

KEY CHARACTERISTIC #3: PROGRAM SCOPE AND STRUCTURE

Nonformal environmental education programs should be designed with well-articulated goals and objectives that state how the program will contribute to the development of environmental literacy.

3.1) Goals and Objectives for the Program.

The environmental education program is based on well-considered goals and objectives. (See also Appendix A: Writing SMART Objectives and Appendix B: Using Rubrics.)

What to look for:

- The environmental education program is based on clearly delineated, relevant goals and objectives related to the ultimate goal of an environmentally literate citizenry and environmental quality.

Canon Envirothon League City, Texas

The Canon Envirothon's mission is to develop knowledgeable, skilled, and dedicated citizens who are willing and prepared to work towards achieving and maintaining a natural balance between the quality of life and the quality of the environment. This mission is accomplished by developing in young people an understanding of the principles and practices of natural resource management and ecology, and through practice dealing with complex resource management decisions. The Canon Envirothon fosters a working partnership with resource professionals and the general public to promote goals of environmental education in grades 9-12 and to recognize students who achieve excellence in environmental and natural resource knowledge and skills. Below is an edited example of a program goal and its associated objectives.

Goal 2

To promote stewardship of natural resources and to encourage the development of the critical thinking, cooperative problem-solving, and decision-making skills required to achieve and maintain a natural balance between the quality of life and the quality of the environment.

Objectives:

b. Students should be able to investigate issues using both primary and secondary sources of information and synthesize the data gathered. Students should demonstrate the ability to:

- Listen with comprehension;
- Collect, organize, and analyze information;
- Frame appropriate questions to guide their investigation;
- Use a range of resources and technologies in addressing questions; and
- Critically examine information from a variety of sources.

d. Students should be able to identify alternative solutions for various issues and their associated value perspectives. They should be able to evaluate alternative solutions with respect to their ecological and cultural implications.

For more information about the Canon Envirothon, go to: www.envirothon.org

- Program goals and objectives
 - describe accurately and specifically what the program is designed to accomplish. Objectives are attainable and measurable.
 - reflect the value of long-term commitments by the organization and partners.
 - relate specifically to the needs and interests of the identified audience(s).
 - address any applicable standards or mandates of the organization.
 - consider relevant aspects of state or federal planning documents and, for school-focused youth programs, are consistent with applicable national, state, and local educational goals and objectives.
 - are consistent with the purposes for which the program was funded and responsive to intended uses specified by the funder.
- Partners develop program goals and objectives collaboratively.
- Program materials clearly explain the program's importance.
- Topics to be included, major concepts to cover, and key questions to be considered by the program clearly follow from the goals and objectives.
- The tangible and intangible costs and benefits of reaching goals and objectives are considered as the goals and objectives are developed.
- Evaluation criteria and indicators of success are specified for the program and tied to program goals and objectives.

3.2) Fit with Goals and Objectives of Environmental Education.

The environmental education program builds towards the larger goals and objectives of the environmental education field.

What to look for:

- The program clearly establishes how it contributes to the larger goals of environmental literacy and responsible action such as those detailed in *Excellence in Environmental Education: Guidelines for Learning (K-12)*, published by the North American Association for Environmental Education. (See sidebar on next page.)
- The program considers how it contributes to a comprehensive environmental education program in the local area, state, and region, and includes applicable state plans as resources. (For more on these topics, see www.uwsp.edu/cnr/neeap/StatusofEE/componentdef98.htm.)

3.3) Program Format and Delivery.

The environmental education program is built on careful consideration of the program format and delivery system(s) that will most effectively reach the target audience.

What to look for:

- The “medium” or format (e.g., workshop, demonstration area, community forum, festival, course, guest speaker) is appropriate to meet the set goals and objectives, and thought has been given to the appropriate context needed to accomplish objectives. For instance, is it a stand-alone event or activity? Is it infused throughout other programs or curricula? Is it a module, activity, or event inserted into an existing program or part of a regular community group activity?
- The program's scope and duration are appropriate to meet the goals and objectives.
- Program format and delivery mechanisms meet the needs of the intended audience.
- Program format and delivery are designed to provide a “safe” and comfortable atmosphere for audience members of all races, genders, ages, or cultures.

Summary of Excellence in Environmental Education: Guidelines for Learning (K-12)

These guidelines set a standard for high-quality environmental education across the country, based on what an environmentally literate person should know and be able to do. By setting expectations for performance and achievement in fourth, eighth, and twelfth grades, *Guidelines for Learning* suggests a framework for effective and comprehensive environmental education programs and curricula.

Strand #1 – Questioning and Analysis Skills

Environmental literacy depends on learners' ability to ask questions, speculate, and hypothesize about the world around them, seek information, and develop answers to their questions. Learners must be familiar with inquiry, master fundamental skills for gathering and organizing information, and interpret and synthesize information to develop and communicate explanations.

Strand #2 – Knowledge of Environmental Processes and Systems

An important component of environmental literacy is understanding the processes and systems that comprise the environment, including human systems and influences. That understanding is based on knowledge synthesized from across traditional disciplines. The guidelines in this section are grouped in four sub-categories:

- 2.1 The Earth as a physical system;
- 2.2 The living environment;
- 2.3 Humans and their societies; and
- 2.4 Environment and society.

Strand #3 – Skills for Understanding and Addressing Environmental Issues

Skills and knowledge are refined and applied in the context of environmental issues. These environmental issues are real-life dramas where differing viewpoints about environmental problems and their potential solutions are played out. Environmental literacy includes the abilities to define, learn about, evaluate, and act on environmental issues. In this section, the guidelines are grouped in two sub-categories:

- 3.1 Skills for analyzing and investigating environmental issues; and
- 3.2 Decision-making and citizenship skills.

Strand #4 – Personal and Civic Responsibility

Environmentally literate citizens are willing and able to act on their own conclusions about what should be done to ensure environmental quality. As learners develop and apply concepts and skills for inquiry, analysis, and action, they also understand that what they do individually and in groups can make a difference.

For more information on the Learner Guidelines, go to: www.naaee.org/npeee/learner_guidelines.php

- The design of program format and delivery mechanisms includes a detailed consideration of how the program fits with a larger scope and sequence for environmental education and learner readiness for the concepts and skills presented.
- Evaluation strategies are designed and implemented to provide feedback to program partners and the audiences involved so that learning is not just unidirectional.

3.4) Partnerships and Collaboration.

The environmental education program maximizes effectiveness and efficiency by working in partnership with groups of similar interest or with shared goals.

What to look for:

- Potential partners and collaborators have been identified.
- The relationship of the program to desired long-term cooperative activities between and among partners is clearly articulated and understood.
- Partners have been involved in the process of developing the program.
- Roles of partners and collaborators are clearly

- established and are linked to the expertise, resources, and skills each partner brings.
- Duration of commitment to the program is clearly articulated among partners.
- The relationships among program goals and the goals of partners' programs and collaborators' interests are clear.
- A program development team represents partner and collaborator interests.

Environmental Education and Conservation Global Rochester, NY

When Environmental Education and Conservation Global (EECG), an international non-profit organization based in Rochester, NY, was considering active participation in International Migratory Bird Day (IMBD) in 2003, one of the first things it did was to survey Rochester-area organizations and agencies involved in wildlife or habitat conservation. EECG asked these groups if they felt that participation in IMBD activities would be beneficial to their organizations and to international migratory birds. They also asked if the groups would be willing to join a coalition of Rochester organizations and agencies, under the coordination of EECG, to develop plans for a local celebration of International Migratory Bird Day.

Eventually, 14 groups responded and became part of the coalition. Approximately half of these organizations were active in coalition planning meetings for IMBD over an eight-month period. The others were kept informed and their opinions solicited by frequent emails and summaries of planning decisions. To ensure that the programs and activities developed were supportive of the overall goals of coalition members, the following two objectives were stated:

Objective: Strengthen coordination among organizations in the Rochester area engaged in migratory bird conservation and research.

Objective: Strengthen individual organizations in the coalition and enable them to better reach organizational objectives.

Steps—

- Create a coordinating council to plan the migratory bird day activities and develop cooperative efforts in the local area to benefit migratory birds.
- Establish a successful record of cooperation through exemplary production of the migratory bird activities.

Steps—

- Increased membership in organizations occurring immediately after IMBD in 2003.
- Increased inquiries and hits on organizations' web sites immediately after IMBD in 2003.
- Increased participation in organizations' field trips and meetings after IMBD in 2003.

The coalition decided to sponsor a festival on International Migratory Bird Day and planned educational programs and service projects focused on migratory birds leading up to the festival itself. On the day of the festival, coalition members presented educational programs and exhibits. Some 1500 people from the Rochester area visited the festival to learn more about migratory birds and their needs.

After the festival was completed, EECG surveyed coalition members, asking a variety of questions, including how well the festival supported the goals of the organizations involved. EECG also asked whether the process and content of the festival were seen as worthwhile, both from the standpoint of benefits to migratory birds and from the standpoint of benefits to the organizations. The responses to both questions were decidedly positive.

For more information about EECG, go to: www.eecg.org