

Developing a Conservation Education Program

The purpose of this article is to assist new conservation educators in the process of program development. It offers an overview and a helpful tool to use when designing a new program.

Often, new educators are faced with the daunting task of developing a new conservation education program. Depending on the level of expertise, this may be an easy or problematic task. Without experience, it is hard to know where to begin. This article offers a brief overview and an outline to help you get started.

It is important to understand what it is we want to achieve, so let's begin with a definition for conservation education. There are many differing definitions but here are two examples:

1) the process of positively influencing people's knowledge, attitudes, emotions and behaviors about wildlife and wild places through the engagement and involvement of the audience, and/or

2) improve natural resource management by helping people become aware of the value of the natural resource, examining the threats to the well-being of the environment and motivating them to improve environmental management. A conservation educator's role is to facilitate learning through inquiry, discussion, critical-thinking and active problem-solving with the audience.



Conservation educators have the ability to inspire people to learn more about the environment and take action to change the world around them based on the decisions they make. In addition to this, leading by example can show an audience how to share this information with friends and family and how to take actions that care for wildlife and the environment.

Your educational approach should encourage environmentally responsible behavior by fostering:

- **Awareness** – a sensitivity to the environment associated problems
- **Knowledge** – an understanding of how the environment functions, how people interact with and depend on the environment, and how environmental problems can be solved
- **Attitudes** – a concern for the environment and the personal motivation and commitment to participate in environmental improvement and protection
- **Skills** – the ability to identify and investigate environmental problems and to contribute to their resolution
- **Participation** – active involvement in working towards the resolution of environmental problems

(United Nations Educational, Scientific, and Cultural Organization – United Nations Environment Programme 1978, 1-7.)

Steps in Designing a Conservation Education Program

The term program in this article refers to a collection of information, lessons and activities that are put together to make a conservation education program. Lessons and activities are the tools used to deliver messages to the audience. There are six basic steps for designing a conservation education program, which are:

1. Conduct an evaluation called a Needs Assessment to find out what people know about the environmental issue you'd like to address.
2. Define and research your environmental issue;
3. Identify your target audience;
4. Set goals and objectives;
5. Define your budget;
6. Make a plan for evaluating the program.

These steps are flexible and may need to be revisited or completed in different orders depending on what is most effective for the project. The most successful programs are designed with the audience, facility, and available resources in mind.

1. Conduct a Needs Assessment of Your Target Audience

Learn about the background of the people and the region where you'll be working. Even if you feel you are already familiar with these elements, it is always a good idea to systematically collect data from your target audience in order to get an unbiased look at their beliefs about the conservation issue you'll be addressing. This is called a Needs Assessment and can be accomplished through questionnaires, interviews or focus group methods. You can collect this data with visitors to your site or at a meeting of stakeholders. Find out about your community's history: does the community have experience with similar programs? What did or did not work with these programs? Past experience can teach you much about what will work for your program.

This beginning or *baseline* information you collect can help you see the gaps and opportunities when developing a program that meets the needs of the people and the region. Later, the Needs Assessment can be compared to your audiences' responses throughout the program to evaluate the success of your program. See the section on evaluation for more details.

The community can also act as a valuable resource. Explore the skills and resources that different members of your community may have. Is there anyone that might have the right ideas, skills, or resources for your program? There may be those in your community that could act as advisors to represent attitudes and concerns of your audience as well as make recommendations about the content or management of your program, promote your project, or provide resources. These people may be individuals or groups.



2. Define and Research the Conservation Issues that You Will Address

In order to implement a successful education program, research the conservation issues of the region. You might leverage the expertise of a variety of organizations that work in the local area, your local university, informal meetings with local community members, talks with

government officials, teachers and **creditable** books, journals and websites. Gather as much content information as possible to ensure you have a true and accurate picture of the issues.

It is critical to work with experts in the region to identify the primary conservation issue that you would like to reduce or alleviate. For example, if the protection of the endangered chimpanzee is your primary issue, you might ultimately want to measure the reduction in numbers of snares removed in a specific area as a result of education programming. Or, if protection of sea turtles is your focus, then you might want to measure the decrease in numbers of artificial lights that shine on the beach as a result of your education programming. When educators look at the big issues in conservation, as well as, their individual programming objectives, then they are truly impacting the conservation field.

It's important to offer workable solutions that do no harm to the environment or the community. Focusing the program on the interests of the community will draw a larger crowd in order to make a larger impact. Some examples of wildlife conservation issues that may be important to a region are:

- Sustainable harvesting of forest products;
- Maintenance of adequate fuel wood and construction supplies;
- Raiding of agricultural crops by wildlife;
- Over hunting of wild animals or trade in live animals or their products;
- Connecting children to wildlife by immersing them in nature;
- Reducing our environmental footprint to positively impact global warming;
- Loss of habitat due to development;
- Introduction of non-native wildlife;
- Reduction of biodiversity in a region.

3. Develop a Key Message and Conservation Action Related to the Issue



Every program should address 1-2 Key Messages that you want to get across to the audience that are based on the issues that you identified above. This will help keep the program focused, making it interesting and understandable.

The messages and actions should be adapted for your audience in order for them to be relevant and meaningful. Each program should focus on

just a few, maybe 1-2 messages and actions, to ensure that the participants remember these most important elements of your program. As you are thinking of what messages and actions you would like to use, ask yourself these questions:

- How can your activity promote specific audience actions to help the conservation issue?
- What does your audience need to learn, or how does their attitude need to change in order to help solve the conservation issue?
- What messages and actions do you want your audience to leave with?
- How can you get your audience to examine their own behaviors and how they impact the environment?

Use the list of examples in the Program Development Tool to help you start thinking about key messages and conservation actions.

4. Identify Your Target Audiences

The people your interpretive programs reach can include many different groups such as children, adults, families, organizations, and tourists just to name a few. Each of these groups will be interested in and able to understand different things. Knowing your audience, their interests, and level of understanding will help you develop a more effective program. In education, the concept of one-size-fits-all is definitely not true. You will need to adjust the level of information, the delivery techniques and the program length based on the audience you choose.



There are many ways to better understand your audience. A few are as follows:

- If you have a site or education center, you can record current visitors, asking them their age, where they are from, and what interests them or is most important to them. You can do this by paper questionnaire, a guest log, or personal interview.
- Decide on a target audience. For example, if you are focusing on the negative impacts of gill net fishing, you may want to focus on commercial fishermen.
- Go to other centers to learn more about their programs and the audiences they attract. This can also give you an understanding of how to best meet your audiences' needs.
- Research your audience. Learn about their customs, beliefs, education level, and what they consider important. See how these aspects effect the way they view and care for the environment.

5. Set Goals and Objectives

A **goal** is a broad statement defining the purpose of your program.

Example:

The purpose of this program is to reduce snare poaching by building awareness of the local biodiversity, discussing its beneficial role to people and the ecosystem, and inspiring the audience to take positive action for wildlife.

An **objective** is a desired outcome. Usually several objectives are set in order to attain a goal. Clear lesson objectives are “SMART” objectives; they are:

Specific
Measurable
Appropriate
Realistic
Timebound

Example: *After this program, participants will be able to:*

- *Name three animals in the local region;*
- *Identify 2 environmental threats to wildlife;*
- *Describe two actions that help wildlife.*

Objectives can measure whether you were successful in your teaching and are used in writing evaluation questions. Be sure they are the most important ideas in your program and the ones you want participants to take away with them.

6. Define your Budget

A **budget** is a plan for distributing resources (most often money) during a fixed period. It may be advisable to start developing your budget early on since the program you develop will be constrained to your available resources. You will have to pay for personnel, construction and maintenance, and supplies as well as costs that are specific to particular programs, such as transportation and materials costs. Just as with goals and objectives, your budget can be a tool to evaluate the effectiveness of your program.

As you develop your budget make sure to define your available resources. List what you have, what can be donated, and what is available. Then make a list of what you will need for your program and decide how you will spend your money.

7. Make a Plan for Evaluating the Program



Evaluation is the systematic collection of data to help you measure the effectiveness of your program. In the context of a conservation education program, evaluation is based on whether or not objectives have been met. Throughout the development and implementation of your program you should be evaluating your program as a whole as well as each activity in the program. Gather information and keep it so that you can look back on the results of your program

and alter it in order to get better results. These records can also be useful for showing others, including current and potential funders, how successful you have been.

In order to get a more complete picture of your program's effectiveness, a detailed evaluation is necessary. Use the program's objectives to help you write specific evaluation questions that will demonstrate whether your program participants learned the information. It is not necessary to write many questions. Often, 5 or 6 well-worded questions can help you measure whether your objectives have been met. The more questions you ask, the more data you have, so keep it simple to make your data analysis easier. Also, as a tip, multiple choice and true/false questions are easiest to evaluate.

Example: **Objective:**
Give an example of a food chain.

Possible Evaluation question:

An example of a food chain is:

- Spider, bird, elephant
- Grass, kob, leopard
- Warthog, grass, vulture

Getting Started

Now use the Program Development Tool in the next section to help integrate all the steps in the development process. This will help you see how the steps fit together to create a well-balanced and comprehensive program design.

*Adapted from **Interpreting Biodiversity, A Manual for Environmental Educators in the Tropics** by Margret C. Domroese and Eleanor J. Sterling; American Museum of Natural History 1999*

CONSERVATION EDUCATION PROGRAM DEVELOPMENT TOOL

This tool has two components. The Program Examples to help you start thinking about new program components and the Outline to help you organize your thoughts.

Examples of Important Program Components:

KEY MESSAGES

Select 1-2 messages that fit the focus of your program. Below are just a few examples.

- Animals are beautiful; they enhance and improve the quality of life;
- Our country's wildlife is a world treasure;
- Animals are in danger and need our help to survive;
- Habitat conservation and protection are necessary to protect wildlife;
- Habitat loss is a major threat to many species;
- All life is interconnected;
- Nature's balance ensures our survival;
- The bushmeat trade is unsustainable;
- Wild animals make bad pets – don't buy or sell them;
- People's lifestyle choices have an impact on habitat and wildlife;
- Environmental destruction leads to human instability;
- Conservation is our individual obligation;
- The future of wildlife lies in our actions today;
- Field research is a critical component to help conserve wildlife and their habitats;

CONSERVATION ACTIONS

The conservation actions you select should be appropriate for your target audience and support your Key Messages. Below are just a few examples.

- Teach others to respect and care for wildlife;
- Report problems affecting wildlife to elders or relevant authorities;
- Learn more about wildlife by observing it in your area, reading books or joining a club;
- Pick-up litter and do not drop it on the ground;
- Instead of using natural forests, plant trees in your community for domestic use;
- Reduce the number of plastic bags you use;

- Reduce the use of pesticides;
- Support wildlife conservation organizations through contributions or volunteerism;
- Choose your pets wisely and be sure they were not taken from the wild;
- Create backyard or schoolyard habitats for wildlife by hanging feeders, planting trees and building a pond;
- Purchase products that are wildlife-friendly;
- Reduce, reuse, recycle, replenish.

TARGET AUDIENCES

- Visitors to your site
- Local communities (urban and rural, those living around protected areas, those living near your site)
- Students (nursery, primary, secondary, university)
- Nature clubs and other special-interest groups
- Elders or senior citizens groups
- Farmers/ forest exploiters
- Hunters (local and foreign)
- Tourists (local and foreign)
- Politicians and decision makers
- Law enforcement officials
- Corporations operating in the area
- Conservationists
- Media outlets (local and international)
- Traditional authority
- Religious groups
- Aid organizations operating in the area

INSTRUCTIONAL METHODS

- Adult education lectures (often uses power point or flip charts)
- Interpretative talks and tours
- Interpretative or graphic panels
- Games
- Interactive lessons using visual aides
- Small group, peer-learning
- Movies
- Festival days
- Demonstrations
- Songs
- Role playing / theatre / puppet shows
- Community meetings
- Community discussion groups
- Teacher Workshops (workshops usually include activities, small group discussions and demonstrations)
- Printed materials (creating posters, stickers, books, T-shirts, photos.) These items do not stand-alone but can be associated with a program.

EVALUATION TOOLS

- Pre-Post Questionnaires
- Observation of participants behaviors
- Visitor/participant feedback (either written or verbal)
- Interviews



OUTLINE

Identify a program that you would like to develop and then use this form to help you create an outline.

Name of Program: _____

Environmental Issue: _____

1. **Key Messages:** Choose 1-2 messages for your program

A. _____

B. _____

2. **Conservation Actions:** Choose 1-2 actions that your program will encourage.

A. _____

B. _____

3. **Target Audience:** Select a specific target audience for your program.

Audience: _____

4. **One-Page Program Description** – Develop 2-3 objectives that you would like the program to achieve, provide a summary of the background information needed to conduct the program, identify the materials you will need and describe the activities that you will use.

Objectives: After this program, participants will be able to:

Background Information (this is the content information you researched):

Materials Needed:

Instructional Methods: (A variety of methods most often holds the audience's attention, so add a small discussion group on a pertinent topic and/or a short film or a game to encourage participation.)

5. **Evaluation Tool** – Decide on an evaluation tool and describe how you will conduct the evaluation to be sure that you have met your objectives.