

Educating for Stewardship: Inspiring and Engaging Youth



Planning Successful Youth Water Education Programs

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2010 WI Lakes Convention, Green Bay, WI

AGENDA

- **Why youth water education?**
- **Find youth water education resources**
- **Tips for planning new youth programs**
- **Case study demonstration: *Holding onto the Green Zone***
- **Discussion of educator opportunities and challenges**

WHY YOUTH?

- **Promote youth development**
- **Foster community partnerships**
- **Build capacity to complete management tasks**



WHY YOUTH?

➤ **Promote youth development –**

We want youth to become:

- **More interested in science and in water**
- **More knowledgeable about environment**
- **More active environmental stewards**
- **Better critical thinkers about water resources**
- **Water wise adults**

WHY YOUTH?

➤ Foster community partnerships

- Parents
- Teachers
- School administrators
- Volunteers
- Non-government organizations
- Service organizations
- Religious groups
- Businesses



WHY YOUTH?

Build



capacity



WHY YOUTH?



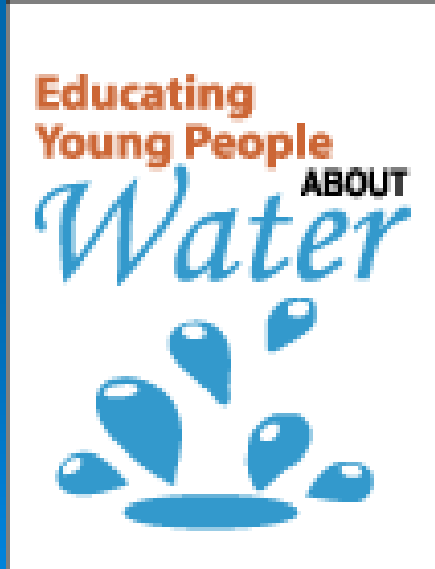
FIND YOUTH WATER EDUCATION RESOURCES

- **National Extension Youth Water Programs**
 - Educating Young People About Water
 - CESYES (Coop Ext Supports Youth Environmental Stewardship)
 - Holding onto the GREEN Zone
- **Other national sources**
 - Digital Library for Earth System Education www.dlese.org ["lakes" = 1366 resources]
 - EE Links, NAAEE www.naaee.org/ee-link "lakes" = 1634 resources]

NATIONAL EXTENSION YOUTH WATER PROGRAMS

Educating Young People About Water

www.uwex.edu/erc/eypaw/



**Project coordinator: Kate Reilly
UWExtension, kreilly@wisc.edu**

EDUCATING YOUNG PEOPLE ABOUT WATER

➤ *A Guide to Program Planning and Evaluation*



Address community needs

**Work in partnership with
local experts**

EDUCATING YOUNG PEOPLE ABOUT WATER

➤ *A Guide to Unique Program Strategies*



**Develop a program
strategy appropriate for
your situation**



EDUCATING YOUNG PEOPLE ABOUT WATER

➤ *Water-related Curricula Database*



**Find and select water
education curricula**

www.uwex.edu/erc/eypaw/choose.html

Cooperative Extension Supports Youth Environmental Stewardship



<http://cesyes.net>

Project coordinator: Kate Reilly
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CES YES: Earth Connections

- Planning Youth-Directed Natural Resources and Environmental Action Programs (handout)
- Engaging Youth in Community Environmental Activities

<http://cesyes.net/engagingfactsheet.pdf>

Engaging Youth in Community Environmental Activities

What is EE and Stewardship?

Is youth environmental stewardship important to you or your organization?

Engaging youth

Finding materials and resources

Environmental program ideas

Working with partners

Schools as partners

CES YES
http://www.cesyenes.net

Cooperative Extension Supports Youth Environmental Stewardship

EARTH CONNECTIONS

Engaging Youth in Community Environmental Activities

Youth can be valuable partners and resources in helping protect our environment and in addressing environmental concerns. They have the power to make a difference in their communities, but often need the encouragement of adults before taking on the challenges of environmental stewardship. This brochure will help you engage youth in an environmental action project, find great program ideas and educational resources, and plan how to work with partners to meet project goals.

What is Environmental Education and Stewardship?

Environmental education programs:

- ✗ Provide opportunities for youth to gather information.
- ✗ Increase knowledge and awareness of systems and issues.
- ✗ Build commitment and interest.
- ✗ Foster cooperation in resolving environmental concerns and issues.

Environmental stewardship is the concept of encouraging young people to serve their communities as protectors of the environment. Youth learn to understand and appreciate a broad range of perspectives and to take responsible action – not only on their own behalf, but on behalf of future generations. To develop creative, community-based solutions for environmental issues, it is important for leaders to help youth:

- ✗ Understand ecological concepts.
- ✗ Be aware of environmental issues.
- ✗ Develop scientific questioning and investigation abilities, and critical thinking skills.
- ✗ Build leadership skills.
- ✗ Develop the confidence needed to address environmental concerns.

Youth have a natural curiosity about science and the environment. They are eager to help protect our natural resources.

A companion brochure, *Planning Youth-Directed Natural Resources and Environmental Action Programs*, can be found on the CES YES web site: <http://www.cesyenes.net>

<http://cesyenes.net/engagingfactsheet.pdf>

➤ **Just say YES**

<http://cesyes.net/jsy.html>

- **What is youth environmental stewardship?**
- **How to evaluate useful EE programs**



➤ **What is youth environmental stewardship?**

- **Nature Appreciation**
- **Conservation Education**
- **Environmental Education**
- **Resource Education**
- **Wilderness Education**
- **Service Learning**
- **Education for Sustainability**
- **Education Reform Efforts**



➤ How to evaluate useful EE programs



- Guidelines for Designing EE Materials
- Characteristics of Youth by Age
- Experiential Learning Model
- NAAEE Guidelines for Learning about the Environment



Cooperative Extension Supports Youth Environmental Stewardship

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Guidelines for Designing EE Materials

High quality environmental education materials incorporate the following six key characteristics that have been identified by the North American Association for Environmental Education (1998), and care should be taken to select curricula that encompasses all six items;

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.

2. Depth:

EE materials should foster awareness of the natural and built environment, 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 development levels.

3. Emphasis on Skills Building:

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

4. Action Orientation:

EE materials should promote civic responsibility, encouraging learners to use their knowledge, personal skills, and assessments of environmental issues as a basis for environmental problem solving and action.

5. Instructional Soundness:

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

6. Usability:

➤ <http://cesyes.net/jsyGuidelinesee.html>

➤ Characteristics of youth by age

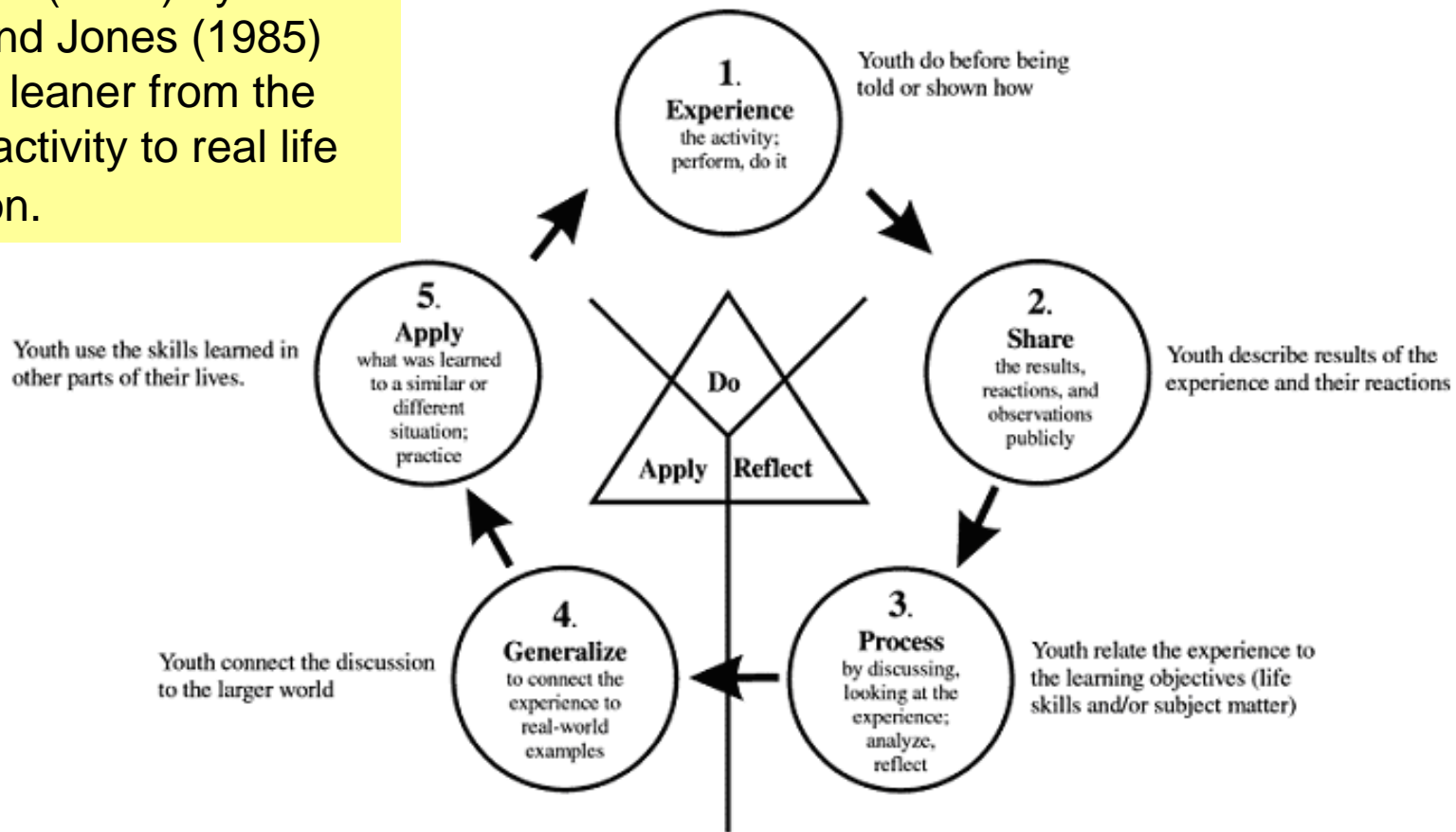
<http://cesyes.net/jsyYouthbyage.html>



➤ Experiential Learning Model

- <http://cesyes.net/jsyExperimental.html>

The five-step ordered cycle adapted from the work of David Kolb (1984) by Pfeiffer and Jones (1985) takes the learner from the physical activity to real life application.



➤ NAAEE Guidelines for Learning about the Environment



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Guidelines for Learning about the Environment

The North American Association for Environmental Education has developed "Excellence for EE - Guidelines for Learning (K-12)", a broad four strand approach to environmental education used to encourage the development of environmental literacy.

These guidelines set a standard for high-quality environmental education, based on what an environmentally literate person should know and be able to do after participating in environmental education programs. Therefore, 4-H Youth Development Environmental Education Programs should also ensure that the four strands of environmental literacy are present in programs being implemented.

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.

<http://cesyes.net/jsyGuidelineslearning.html>

TIPS FOR PLANNING



Key elements of success

- **Set goals**
- **Use latest scientific info and protocols**
- **Enlist community partners**
- **Correlate K-12 activities to education and EE standards**
- **Understand youth needs**
 - **Provide choices and time for reflection**
 - **Include games, arts, action, and fun**
- **Evaluate and assess**



Holding onto the GREEN ZONE

Action Guide

A Youth Program for the Study and Stewardship of Community Riparian Areas



A Joint Project of the Bureau of Land Management, the University of Wisconsin-Extension, and the USDA Cooperative State Research, Education, and Extension Service



Leader Guide

Holding onto the GREEN ZONE

A Youth Program for the Study and Stewardship of Community Riparian Areas



A Joint Project of the Bureau of Land Management, the University of Wisconsin-Extension, and the USDA Cooperative State Research, Education, and Extension Service

www.uwex.edu/erc/youth/riparian

Critter Cubes Activity

- P. 28 in the Leader Guide
- Instructions on p. 43 for indoor macroinvertebrate biotic index activity (critter cubes)
- Instructions on p. 67 for field trip “Macroinvertebrate Survey”

A large teal star with a white outline is centered on a blue background. The background features several concentric white circles representing water ripples. The word "THANKS!" is written in bold, orange, sans-serif capital letters across the center of the star.

THANKS!



Extension Youth Water Education

Expanding Community-based Outreach Efforts

2009 USDA/CSREES National Water Conference, St. Louis. MO