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Recommendations and Best Practices for Youth Environmental Education Programs[1]

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Introduction

People need a healthy environment to live healthy lives and develop in a healthy manner. However, many people and communities do not have positive interactions with or impacts on the natural environment around them or globally (Roberts, 2013). It is essential to find ways to help create behavior changes in communities and individuals that promote more positive human-environment interaction. Research shows that youth who interact with natural environments are physically, mentally, behaviorally, and socially healthier (Zhang et al., 2018). Environmental educators, youth professionals, and organizations can implement simple strategies and practices to foster youth interaction with the environment in youth education and programming. This publication is based on research conducted in 2024 focused on environmental education at a 4-H camp in Florida (Gariton, 2024).

What Is Environmental Education?

Environmental education (EE) is a process that leads individuals and communities to learn about the environment and develop the knowledge and skills to engage in discussions, work to solve problems, and take action to improve the environment (EPA, 2012; NAAEE, n.d.).

Recommendations and Best Practices from Extension Professionals and Environmental Educators

A three-part research study identified best practices for youth environmental education.

The first two studies assessed educators and youth at a weeklong environmental education camp; the third study was a survey of nonformal environmental educators. The camp educators found that only a few practices encouraged in the environmental education literature were not frequently used. The study also found that educators used hands-on learning to promote youth capacity to relate to nature. The second study, conducted with youth participants, found that they developed more personal capacity to relate to nature because of camp participation. Youth participants indicated that free exploration was the most effective technique for increasing their ability to relate to nature. The third study found that many literature-supported good environmental education practices were consistently used by environmental educators (Gariton, 2024).

Recommendations and Best Practices for Youth Environmental Education

The recommendations below represent strategies and best practices used by environmental educators in the previously mentioned studies.

Recommendation 1: Create Educational Programs Based on Identified Needs

Educational programs and activities should be built on identified and prioritized needs to ensure the highest possible impact within the community (Witkin & Altschuld, 1995). Identifying the needs of your community and prospective participants should be completed during the planning stage when developing educational programs. The Ask IFAS *Conducting the Needs Assessment* series provides in-depth resources and tools for conducting a needs assessment (https://edis.ifas.ufl.edu/collections/series_conducting_the_needs_assessment). Specific needs assessment topic areas might include the following.

- What EE activities are currently occurring within the community?
- What are the barriers to providing EE activities within the community?
- What EE attitudes, awareness, and/or knowledge are needed within the community?

Educators can also create an asset map to identify the assets and resources held by other organizations you could

utilize (Kramer et al., 2012). Asset maps are also helpful for identifying gaps or deserts where assets and resources are lacking within specific communities. The Institute of Education Sciences offers a detailed plan and description for creating an asset map (https://ies.ed.gov/sites/default/files/rel-appalachia/document/2025/01/RELAP_3.3.1.8_03_Handout-1_Creating-an-Asset-Map.pdf).

Recommendation 2: Build Capacity in the Environmental Educator's Competency

Developing an educator's competency is crucial to improving the quality of educational activities and programs. Competency development is the intentional and ongoing process to develop an individual's skills, knowledge, and attributes so they can effectively perform the tasks required of them (McClelland, 1973). The environmental educator can develop their skills by:

- Conducting a self-assessment to determine what types of knowledge or skills could be improved. If you are an environmental educator, you can self-assess your current EE teaching practices by asking yourself:
    - What do you teach?
    - How do you teach it?
    - Are there other ways you might teach your programs?
- Asking a friend or colleague to observe them teaching and then comparing it to what they think they do. Peer assessments can be an important tool for competency development and practice sharing.
- Sharing self-assessed needs with their supervisor to receive guidance and direction for improvement.
- Joining an environmental education association. Many associations provide webinars, trainings, and conferences that help educators grow professionally.

An EE organization can also use a competency approach to developing environmental educators. Using the same needs assessment resources mentioned above, the EE organization can:

- Regularly assess educators' knowledge and skills for continued improvement and performance.
- Conduct regular in-service trainings in pedagogical methods, youth developmental practice, and EE knowledge. Environmental educators with natural science backgrounds may have little knowledge of the pedagogical or developmental needs of the youth.
- Hire a staff development member (SDM) to lead training and development efforts. An SDM can serve as a point of contact for environmental educators to communicate their ongoing needs and barriers to success.

Recommendation 3: Create a Resource Repository of Programs and Activities

An internal resource hub can be created for curricula, tools, guides, and lesson plans, providing educators with the resources needed to conduct their EE programs. This resource hub can include internally created items as well as curricula and tools created by outside organizations that meet the criteria of the organization. When creating a resource repository:

- Develop guidelines for program lengths, settings, and locations. Ensure environmental educators are involved in the process so that guidelines are realistic and practical.
- Consider including resources related to the following:
    - Environmental information relevant to your state and regions within your state.
    - Environmental challenges associated with economics, transportation, food systems, etc.
    - Content appropriate for different age groups and audiences (e.g., individuals who are neurodivergent or who have mood disorders).
    - Pedagogical methods such as teaching techniques, learning experiences, and class management skills.
- Get ideas from other resource hubs.
    - Georgia 4-H Environmental Education: https://extension.uga.edu/programs-services/detail/59/4h-environmental-education.html
    - North Carolina Environmental Education: https://www.eenorthcarolina.org/resources/classroom-visits-and-school-field-trips
    - Jonathan Bird's Blue World YouTube channel: https://www.youtube.com/channel/UCFH-Qa1s6rQRTrQjFg8N84Q

Recommendation 4: Establish EE Partnerships and Networks

Partnerships and networks expand the resources, clientele network, and programs available to environmental educators. According to the *Journal of Extension*:

"Developing a partnership is a continual process that requires effective interpersonal relationships developed over a period of time. The unique capabilities of each partner create a dynamic synergy for problem solving. With each partner providing a different perspective, we have an exciting opportunity for people in the community to act as peers. At some time during the problem-solving process, each member is at the center by providing his/her special expertise" (1986, paragraph 4).

Developing relationships with potential partners and networks takes time. Opportunities for partnerships can emerge in professional associations and organizations, as well as the local community. The following strategies can help build networks and strong partnerships.

- Join a professional organization of environmental education. Engage in professional communities offered through the organization and attend professional development webinars or conferences that the organization conducts.
- Collaborate with local EE agencies, groups, and schoolteachers. They can help you learn educational and developmental techniques, and you can help them with environmental topics.
- Team teach with other environmental educators by inviting them to assist in teaching specific activities or content.
- Connect with online professional learning communities through social media. Consider joining the North American Association for Environmental Education (https://naaee.org/) or a state-affiliated organization (https://naaee.org/affiliates).

Recommendation 5: Utilize Exploration as a Teaching Tool

Exploring and exercising one's curiosity helps their critical thinking, psychological development, and physical development. Yost (2022) explained that educators need to ensure that adequate time and resources are available for exploration of important topics. Students "need time to think and ruminate on ideas, formulate questions, and analyze arguments from multiple perspectives if true, deeper learning is going to take hold" (paragraph 4). Environmental educators can allow for exploration within their programming and activities by:

- Planning time for youth participants to explore nature within the teaching setting.
    - Walk in a forest, on a beach, or in a grassy area of the parking lot.
    - If you cannot go out to nature, bring it inside with a terrarium.
    - If the setting does not allow direct interaction with nature, then show videos of nature (Jonathan Bird's Blue World on YouTube is good for most ages).
- Building in time to ask youth participants what they thought or learned. If you do not have time for discussion, ask questions and allow participants to self-reflect for a short time. Example questions to ask:
    - What did you see?
    - Why do you think you noticed different things?
    - How do you think X is impacted by you?
    - How do you think X impacts you?

Recommendation 6: Implement Relatability into EE Programming and Clientele Assessments

Relatability to nature is understanding how you impact nature and how nature impacts you (Gariton, 2024). Relatability begins by creating interest in the environment. Lancelot (1944) suggested that a learner's interests are important in learning and that those interests play a critical role in the development of a person's ability to think about complex subjects. Therefore, educators need to help connect the interests of youth with the EE topics being taught. Below are ways an EE educator can modify or create more focused connections to nature.

- Talk with youth about how they are part of nature. Encourage being curious, liking, not being afraid of nature, and not thinking of nature as strange or unfamiliar. Walking in nature, watching bugs, and playing outside are all activities that can build relatability.
- Talk about positive, tangible things youth can do for nature, such as planting trees.
- Talk about negative, tangible things youth can do that negatively affect nature, such as smashing bugs, pulling leaves off plants, and littering.
- Talk about how nature impacts participants' everyday activities. The environment is all around us and is necessary for everyday life. For example, you could talk about products that come from nature.

Conclusion

Environmental education can build positive environmental behaviors in youth. Implementing the recommendations outlined in this article will help young people see the nature around them from different perspectives. These recommendations will also help youth educators enhance EE programming within their communities.

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