



6

Guidelines for Excellence  
**Community Engagement**



**naaee**

North American Association  
for Environmental Education

For more than four decades, the North American Association for Environmental Education (NAAEE) has been a leader in promoting excellence in environmental education throughout North America.

With members in more than 30 countries, and affiliations with more than 50 state and provincial environmental education organizations, NAAEE's influence stretches across North America and around the world. Our mission is to bring the brightest minds together to advance environmental literacy and civic engagement through the power of education.

NAAEE supports the field with a variety of programs and services, including:

**Annual Conference and Research Symposium**—NAAEE has convened an annual conference for environmental education professionals since 1972. The conference is the largest national gathering of environmental education professionals in North America and promotes innovation in the field, networking, new tools and resources, and dissemination of research and best practices.

**Resources and eePRO**—Through its website and eePRO, our online professional development hub, NAAEE provides its members and supporters with high-quality professional resources including books, resource guides, essays, peer-reviewed research, best practices, research reviews, job listings, grant opportunities, news across the field, and more.

**Professional Development**—NAAEE offers unique services in professional development and support. Through online networking and professional learning, training seminars, online learning modules, strategic convening of environmental education leaders, and support of certification programs, NAAEE promotes leadership development and builds the capacity of its members and Affiliates.

**Policy**—NAAEE is a nonpartisan organization that plays a leadership role in raising the profile of environmental education at an international level. NAAEE works with partners to advocate for environmental education with agencies, organizations, foundations, and others to increase funding and support for the field.

**Inspiring Innovation**—NAAEE is committed to bringing new voices, ideas, and innovation to the field and broadening the reach and impact of environmental education.

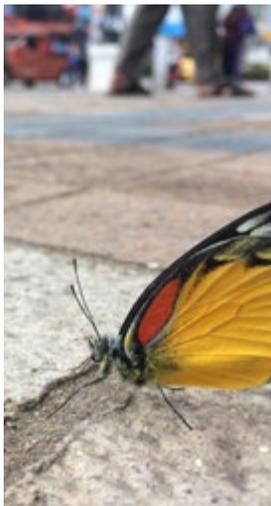


[naaee.org](http://naaee.org)



[naaee.org/eepr](http://naaee.org/eepr)

2000 P Street NW, Suite 540, Washington, DC 20036 • (202) 419-0412



# Guidelines for Excellence

## Community Engagement

*Community Engagement: Guidelines for Excellence* is part of a continuing series of documents published by the North American Association for Environmental Education (NAAEE) as part of the National Project for Excellence in Environmental Education. The project is committed to synthesizing the best thinking about environmental education through an extensive process of review and discussion. Hundreds of individuals and organizations representing all aspects of environmental education reviewed working outlines and drafts.

This project was funded by the Office of Environmental Education at the U.S. Environmental Protection Agency (EPA) through the Environmental Education and Training Program.

The contents of this document do not necessarily reflect the views and policies of the U.S. EPA, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.

Copies of this publication can be obtained by contacting:

NAAEE  
2000 P Street NW, Suite 540, Washington, DC 20036  
202-419-0412 (phone), 202-419-0415 (fax)

[naaee.org](http://naaee.org)

NAAEE is a nonprofit organization dedicated to advancing environmental literacy and civic engagement to create a more sustainable future for all.

ISBN # 978-0-692-87079-2. Copyright © 2017 by the North American Association for Environmental Education (NAAEE). Commercial reproduction of any material in this publication is strictly prohibited without written permission from the publisher, NAAEE. Educators may photocopy up to 100 copies of these materials for noncommercial educational purposes.

Printed on FSC paper with environmentally friendly inks

## Acknowledgements

This project would not have been possible without the support of hundreds of individuals and organizations that gave their guidance, reviewing draft versions of the guidelines and providing background information, leads on case studies, and references. In particular, we'd like to thank Richard Plate for his research assistance, members of the NAAEE Professional Learning Community (Kay Antunez de Mayolo, Mary Kay Connolly, Rebecca Davis, A. Michael Marzolla, Kris Scopinich, and Elena Takaki) as well as Traci Price, Elaine Andrews, Martha Monroe, Dave Chase, and Elizabeth McCann for their thoughtful input into the development of these guidelines. We also want to thank Akiima Price, who shepherded this project through its early phases. Her work gathering input at workshops and other listening sessions across the country was foundational.

### Project Director

Bora Simmons  
National Project for Excellence in  
Environmental Education

Gus Medina  
St. Catherines, ON, Canada

Ginger Potter  
U.S. Environmental Protection Agency,  
Washington, DC

### Writing Team

Michele L. Archie  
The Harbinger Consulting Group

Marcia Pradines  
U.S. Fish and Wildlife Service,  
Cambridge, MD

Susan Clark  
Slow Democracy

Darryl Ramos-Young  
West Basin Municipal Water District,  
Carson, CA

Judy Braus  
NAAEE

Gladys Ruiz  
Audubon Society of Portland,  
Portland, OR

### Copyediting

Lori Mann  
NAAEE

Rafael Salgado  
Cal-Wood,  
Jamestown, CO

Kristen Kunkle  
NAAEE

Sarah Sowell  
U.S. Environmental Protection Agency,  
Washington, DC

### Advisory Council

Lamar Gore  
U.S. Fish and Wildlife Service,  
Philadelphia, PA

Flisa Stevenson  
Naval Medical Research, Joint Base  
San Antonio, Fort Sam Houston, TX

Kathayoon Khalil  
Seattle Aquarium,  
Seattle, WA

Melissa Hopkins Taggart  
NAAEE,  
Washington, DC

Marianne Krasny  
Cornell University,  
Ithaca, NY

Chandra Taylor Smith  
National Audubon Society,  
Washington, DC

Pepe Marcos-Iga  
Western National Parks Association,  
Phoenix, AZ

Anne Umali  
EECapacity,  
Washington, DC



# Guidelines for Excellence **Community Engagement**

## **Table of Contents**

Preface	7
Introduction	9
Guidelines Summary	16
Key Characteristic #1: Community Centered	19
Key Characteristic #2: Based on Sound EE Principles	29
Key Characteristic #3: Collaborative and Inclusive	38
Key Characteristic #4: Oriented Toward Capacity Building and Civic Action	47
Key Characteristic #5: Long-Term Investment in Change	53
Ten Great Resources for Community Engagement	59
Supporting Resources	61





*Average people and the average community can change the world. You can do it just based on common sense, determination, persistence and patience.*

—Lois Gibbs

## Preface



Environmental education is about creating healthier communities for all—with ecological integrity, shared prosperity, and social equity as our long-term goals. Environmental educators have been working in, with, and for communities for decades. As communities have evolved, so has the field of environmental education. In creating the *Community Engagement: Guidelines for Excellence*, NAAEE brings the field’s professional standards to environmental educators’ dynamic work in today’s communities.

Why are these guidelines important? Environmental educators everywhere work in a constantly shifting landscape, from changing demographics that offer new opportunities and challenges, to an increase in the scale and scope of environmental and social issues facing every community on the planet.

Given these changes, we find a new array of settings, partnerships, and opportunities to take our work more fully into communities. Consider a few scenarios from this document:

- An informal working group interested in conserving Alabama’s species-rich Mobile-Tensaw River delta delved into the deep social and political divisions that have limited conservation options in the surrounding urban and rural areas. Learn how they started to address the barriers they found (see page 21).
- In Lafayette, Colorado, 20 groups have come together to bring a comprehensive continuum of environmental education experiences to the area, including career pathways for young people to become environmental leaders. Find out how they reached out to create programming that engages Latino families and students, as well as low-income residents (see page 23).
- Massachusetts Audubon wanted to create nature trail experiences for people who need accommodations for vision, mobility, or other physical, sensory, or brain-based challenges. See how they engaged users in designing and testing the trail (see page 30).
- Community groups in a low-income Portland, Oregon neighborhood with poor walkability and transit access, a lack of open space, and numerous contaminated industrial sites came together to pursue sustainable economic development. Learn how transforming a landfill into a park galvanized a long-term, community-based strategy (see page 67).

These case studies, and so many other examples of the work in our field, demonstrate the complexity and types of issues we face across regions and backgrounds. No matter where we work, we share a need to understand how to support the concerns and interests of diverse learners in varied settings.

Trends among the world's population suggest dramatic geographic, demographic, and economic shifts. More people are living in urban and suburban areas than ever before. For example, in the United States, the population is graying, with the percentage of people 65 years of age and older projected to more than double from 46 million today to over 98 million by 2060. Poverty is a continuing problem. Estimates suggest that more than 45 million people, or nearly 15 percent of the U.S. population, struggle to eat a nutritious meal even once a day. By 2043, the United States will become a "majority-minority nation" with no single racial group making up more than 50 percent of the population. Across the country, racial and ethnic diversity will become the norm, creating enormous opportunities to build an inclusive environmental movement that leverages the power of diversity and education in addressing community challenges.

While we are facing significant societal change, the good news is that we have many more communication tools to connect with communities. With easier access to data people can readily engage community members as collaborators, working less like a hierarchy and more like a wiki. We also have more efficient ways to network, inform others about issues and ideas, and identify new partners. Although this unfettered public access to information may create challenges, it also highlights the important role environmental educators can play in providing the context and deeper understanding needed to address increasingly complex issues.

We hope these community guidelines and the accompanying supporting resources offer insights into how we can continue to grow as educators and leverage the diversity in our communities across the country. We encourage you to adapt the tools, activities, resources, and case studies in ways that best meet your needs and help deliver more effective programs, partnerships, and results.

We look forward to working with you to help create more civically engaged communities that embrace change, diversity, and new ways of working together toward a more sustainable future.

**Judy Braus**  
Executive Director  
NAAEE

**Pepe Marcos-Iga**  
Board Chair  
NAAEE

# Introduction



## ***Community Engagement: Guidelines for Excellence*** serves a broad diversity of individuals and organizations dedicated to environmental quality and community well-being. It was created by environmental educators, for environmental educators who want to work in partnership with communities to strengthen the underpinnings of well-being—environmental quality, social equity, shared prosperity, and the capacity to pursue these goals together.

These guidelines draw on best practices honed by scholars and practitioners in diverse fields including education, environmental education, social change, community development, communication, sociology, management, government, and business. Drafts of this document were reviewed by a large number of educators and other experts who work with communities across North America. The resulting document reflects our collective wisdom.

Whether you work with youth or adults, on behalf of an organization, or as an individual, these guidelines and the accompanying resources can help you design programs that strengthen the interwoven strands of environment and community. They point to steps for creating more inclusive working environments that support social equity, effective partnerships and coalitions, and long-term change. And, to help you prepare for this work, the guidelines highlight needed skills and resources, how to put those in place, and the kinds of outcomes you might expect.

Whether you work with youth or adults, on behalf of an organization, or as an individual, these guidelines and the accompanying resources can help you design programs that strengthen the interwoven strands of environment and community. They point to steps for creating more inclusive working environments that support social equity, effective partnerships and coalitions, and long-term change. And, to help you prepare for this work, the guidelines highlight needed skills and resources, how to put those in place, and the kinds of outcomes you might expect.

## **A note from the research and writing team**

Developing these guidelines has been a deliberative process informed by input from hundreds of people with diverse experiences and expertise. This process has confirmed that there is no single “ideal” model for community engagement. While trying to remain true to a core of collaborative and educational principles, we have also worked hard to make this document equally relevant to a variety of communities—from urban, suburban, and rural communities; to educators who are part of the communities they serve and those who come from outside; and to initiatives that arise from collaborative partnerships as well as those driven more by the vision and energy of a single educator or organization.

We also wrestled with achieving a balance between guidelines and indicators aimed at educators and organizations, and those that apply more to partnerships, communities, and collaborations. We hope the end result is a set of guidelines and related resources that fit a wide range of situations and invite readers to select and adapt components that help them work more collaboratively and effectively with their communities.



In these guidelines, you will:

- Find suggestions for working in collaborative and inclusive partnerships and coalitions that help root your environmental education efforts in the community's interests, issues, and capacities
- Receive guidance for supporting community capacity and action toward sustainability and resilience
- Learn what it might mean to make a long-term investment in community change, and how to incorporate learning and adaptation over time
- Reflect on your personal, organizational, and community capacities for engagement
- Discover how to keep your practice rooted in the professional underpinnings of the field

The guidelines are supported by a selection of resources (starting on page 59) to help you dive more deeply into aspects of community engagement that may be unfamiliar.

## What Is Community?

*Community Engagement: Guidelines for Excellence* focuses on work in neighborhoods, towns, cities, and other geographically based communities. The guidelines, resources, and case studies may also be useful for educators working with communities of interest, identity, culture, or belief—in the United States or around the globe. Or they can be used with communities united by a common craft or profession and a commitment to learning together.

From the perspective of environmental education, it makes sense to think of community as a system—or a system of systems. From the natural systems that sustain us (e.g., forests, wetlands, soils, water, air), to the social systems that shape our lives (e.g., housing, transportation, legal, educational, spiritual), to governmental and economic systems, no element of community exists in isolation. An understanding of the interlocking systems is a critical foundation for building people's capacity to create a healthy, sustainable, and resilient future.

See [Resource #1](#), page 63, to learn more about using systemic ways of thinking about healthy communities in your work, including community well-being, sustainability, and resilience.

## DID YOU KNOW?



### Environmental Education and Healthy, Sustainable, Resilient Communities

*Underlying the preservation and improvement of the environment should be constant regard for human needs and aspirations and respect for fundamental balances; it should seek to achieve controlled growth and be mindful of the need for an equitable distribution of the benefits of progress. ... An education that seeks the solution of concrete environmental problems implies not only the development of knowledge and techniques but also, and more important still, practical action by the community in specific environments.*

—UNESCO<sup>1</sup>

*Environmental education is most effective when it speaks to local issues, problems, and priorities. People are more likely to participate in and benefit from environmental education if they see the direct link to personal as well as community well-being.*

—U.S. EPA<sup>2</sup>

Environmental education has long recognized the profound connections between the health and welfare of human communities and the quality of the environment that supports us. Humans rely on the environment for the air we breathe, the water we drink, the food we eat, and our sense of well-being.

But communities face many issues of concern, leading some practitioners in the fields of environmental quality and those who work with human health or social justice to see themselves in different lines of work with different—and even conflicting—priorities. With its long-standing goals of strengthening our capacity to address environmental, social, and economic challenges, the field of environmental education is uniquely positioned to convene and partner with diverse stakeholders around the issues that interest them most. Environmental educators can, and do, facilitate communities' pursuit of health, sustainability, and resilience in the face of threats such as climate change, natural disasters, and environmental hazards.

Within environmental education and related fields such as community conservation, participatory science, and youth development, there is vast experience with engaging communities in ways that explicitly connect to their well-being. Many of the stories, case studies, and supporting resources in these guidelines tap the knowledge and insights of those working in these fields.

<sup>1</sup> *Environmental Education in Light of the Tbilisi Conference*. Paris, France: UNESCO, 1980.

<sup>2</sup> *Community Culture and the Environment: A Guide to Understanding a Sense of Place*, 2002, U.S. EPA (EPA 842-B-01-003), Office of Water, Washington, DC. Accessed September 9, 2016. [https://naaee.org/sites/default/files/community\\_culture.pdf](https://naaee.org/sites/default/files/community_culture.pdf).



## The Heart of Community Engagement

Many environmental educators are well versed in what makes a good environmental education initiative. *Community Engagement: Guidelines for Excellence* builds on that foundation, offering insights into joining forces with diverse partners to forge common purposes and collaborate toward shared outcomes. Successful approaches to engagement respect the important similarities and differences experienced at the community level. Our communities are complex tapestries of gender, age, race, religion, and lifestyles. We are urban, suburban, and rural; we are students, customers, workers, and visitors. We know differences in race, wealth, and poverty, ability and disability, language and culture, empowerment and disengagement. We have different access to and familiarity with technologies used for learning and communication.

Teaming with communities enables environmental educators to work in situations or on issues that may be outside the typical conception of the field and to include people who may not be reached by traditional environmental education efforts.

These collaborations allow for broader and deeper involvement among community members, expanding their role from “learners” to “participants.” At the same time, community and educational organizations may see their role broaden from “service provider” to “partner.” This is the heart of community engagement.

Your partners may or may not share your focus on an environmental issue, but they may care about related issues, work with overlapping audiences, or be similarly committed to civic engagement. For example, if your organization cares about green space to protect biodiversity, and another group cares about green space because it provides safe places for kids to play, teaming up to pursue similar goals may make the most of the synergistic connections among environment, health, nature, and children’s well-being.

So where does an environmental educator's work in community engagement start? It often begins with reflection and research that lays the foundation for new partnerships and for allying environmental aims firmly with community interests, capacities, and issues. Those who work most successfully at the community level often examine themselves and their organizations first, assessing their own capacities for engagement. And they learn together over time, collaborating with the community in every aspect, from developing strategies and implementing environmental education programming, to evaluating the broader initiatives that can be cemented by community engagement.

As you will see in the stories that accompany the guidelines and supporting resources, many environmental educators across North America are embracing creative, ground-breaking community engagement approaches. These educators have raised the bar, and *Community Engagement: Guidelines for Excellence* brings their voices to you, offering encouragement to consider new modes of work.

#### DID YOU KNOW?

### The Roots of the Environmental Education Field

The Belgrade Charter, (UNESCO, 1976) was developed by a United Nations working group in 1975 and provides a widely accepted goal statement for environmental education. Two years later, in 1977, the world's first intergovernmental conference on environmental education adopted the Tbilisi Declaration (UNESCO, 1978). Built on the Belgrade Charter, the declaration established three broad objectives for environmental education. These objectives provide the foundation for much of what has been done in the field since that time:

- To foster clear awareness of and concern about economic, social, political, and ecological interdependence in urban and rural areas
- To provide every person with opportunities to acquire the knowledge, values, attitudes, commitment, and skills needed to protect and improve the environment
- To create new patterns of behavior of individuals, groups, and society as a whole toward the environment

As the field has evolved, these objectives have been researched, critiqued, revisited, and expanded. They still stand as a strong foundation for an internationally shared view of the core concepts and skills that environmentally literate global citizens need to develop a sustainable, equitable, and positive society. Since the late 1980s, bodies such as the Brundtland Commission (United Nations, 1987), the United Nations Conference on Environment and Development in Rio de Janeiro (UNCED, 1992), the International Conference on Environment and Society in Thessaloniki (UNESCO, 1997), the World Summit on Sustainable Development in Johannesburg (United Nations, 2002), the International Environmental Education Conference in Ahmedabad (2007), and the Rio+20 Conference on Sustainable Development in Rio de Janeiro (United Nations, 2012) have emphasized the importance of viewing the environment within the context of human influences. This has guided the work of many environmental educators, focusing increasing attention on social equity, economics, culture, and political structures.

## Essential Underpinnings of Environmental Education

Environmental education builds from a core of key principles that inform its approach. Some of these important underpinnings are:



**Systems:** Systems help make sense of a large and complex world. A system is made up of parts. Each part can be understood separately. The whole, however, is understood only by understanding the relationships and interactions among the parts. And systems can be nested within other systems.

**Interdependence:** Human well-being is inextricably bound with environmental quality. We and the systems we create—our societies, political systems, economies, religions, cultures, technologies—impact the total environment. Since we are a part of nature rather than outside it, we are challenged to recognize the ramifications of our interdependence.

**The importance of where one lives:** Beginning close to home, learners forge connections with, explore, and understand their immediate surroundings. The sensitivity, knowledge, and skills needed for this local connection provide a base for moving out into larger systems, broader issues, and an expanding understanding of causes, connections, and consequences.

**Integration and infusion:** Disciplines from the natural sciences to the social sciences to the humanities are connected through the medium of the environment and environmental issues. Environmental education offers opportunities for integration and works best when infused across the curriculum, rather than being treated as a separate discipline or subject area.

**Roots in the real world:** Learners develop knowledge and skills through direct experience with the environment, environmental issues, and society. Investigation, analysis, and problem solving are essential activities and are most effective when relevant to the real world.

**Lifelong learning:** Critical and creative thinking, decision making, and communication, as well as collaborative learning, are emphasized. These skills are essential for active and meaningful learning, both in school and over a lifetime.

**Sustainability:** Learning is future-oriented, focused on environmental and social responsibility as drivers of individual and institutional choices.



## Selected References

North American Association for Environmental Education. *K-12 Environmental Education: Guidelines for Excellence*, Washington, DC: NAAEE, 2010.

Agenda 21: Programme of Action for Sustainable Development. 1992. *United Nations Conference on Environment and Development: Rio Declaration on Environment and Development*. New York, NY: United Nations. Accessed September 9, 2016. <https://naaee.org/sites/default/files/agenda21.pdf>.

United Nations Educational, Scientific, and Cultural Organization (UNESCO) in Cooperation with United Nations Environment Programme (UNEP). *Final Report Intergovernmental Conference on Environmental Education*. October 14-26, 1997: Tbilisi, USSR. 1978: Paris, UNESCO ED/MD/49. Accessed September 9, 2016. [https://naaee.org/sites/default/files/ee-tbilisi\\_1977.pdf](https://naaee.org/sites/default/files/ee-tbilisi_1977.pdf).

UNESCO. "Thessaloniki Declaration." Conference on Environment and Society, Paris, France, 1997. Accessed September 9, 2016. <https://naaee.org/sites/default/files/117772eo.pdf>.

UNESCO-UNEP. "The Belgrade Charter." *Connect: UNESCO-UNEP Environmental Education Newsletter* 1, no. 1 (1976): 1-2. Accessed September 9, 2016. <https://naaee.org/sites/default/files/153391eb.pdf>.

United Nations. *Report of the United Nations Conference on Sustainable Development Rio de Janeiro, Brazil*. June 20-22, 2012: New York, NY. Accessed September 9, 2016. <https://naaee.org/sites/default/files/n1246164.pdf>.

United Nations. *Report on the World Summit on Sustainable Development*. 2002. New York, NY. Accessed September 9, 2016. [https://naaee.org/sites/default/files/131302\\_wssd\\_report\\_reissued.pdf](https://naaee.org/sites/default/files/131302_wssd_report_reissued.pdf).

United Nations. *Report of the World Commission on Environment and Development. General Assembly Resolution 42/187*. 1987. New York, NY. Accessed September 9, 2016. <https://naaee.org/sites/default/files/our-common-future.pdf>.

U.S. EPA. *Community Culture and the Environment: A Guide to Understanding a Sense of Place*. 2002. Washington, DC: (EPA 842-B-01-003), Office of Water, 16. Accessed September 9, 2016. [https://naaee.org/sites/default/files/community\\_culture\\_1.pdf](https://naaee.org/sites/default/files/community_culture_1.pdf).

# Guidelines Summary



Photo credit: Michael Marzolla



These guidelines are organized around five key characteristics that provide a high-level framework for working with communities.

Under each key characteristic, we've included three to five guidelines that focus on what it takes to embody that characteristic in our work as environmental educators.

In the sections that follow, each guideline is accompanied by several indicators. The indicators are clusters of attributes you might look for to help gauge whether the characteristic is reflected in existing environmental education practices and community partnerships—or to generate ideas about actions you might take to better incorporate the characteristic into your work.

## Guidelines Format

### Key Characteristic

#### 1.1 Guideline

- Indicator
- Indicator

#### 1.2 Guideline

- Indicator
- Indicator
- Indicator



Photo credit: Nina Suzuki, Green Leadership Academy for Diverse Ecosystems (GLADE)

Throughout the document, you'll find case studies about programs and collaborations that illustrate the guidelines in practice. The guidelines are also accompanied by supporting resources that provide further insight into aspects of community engagement that may be helpful. And, at the end of each of the supporting resources, you'll find selected references to help you find out more about the work that others have done.

This structure was designed to help educators drill down to the level of specificity that lets them best shape and evaluate their work.

## Five Key Characteristics

Environmental education that successfully engages communities has five characteristics in common.

---

### Key Characteristic #1

#### Community Centered

Anchoring environmental aims within the context of community interests, issues, and capacities puts the community at the heart of environmental education.

#### Guidelines

- 1.1 Get to know and understand the community
  - 1.2 Connect environmental education interests and capacities with community concerns, assets, and aspirations
  - 1.3 Consider the appropriateness of community engagement
  - 1.4 Focus on community assets and shared priorities
  - 1.5 Reach beyond usual partners and program-delivery modes
- 

### Key Characteristic #2

#### Based on Sound Environmental Education Principles

Environmental education engages communities in ways that rely on established principles and proven practices of the field.

#### Guidelines

- 2.1 Build on interests, issues, and settings familiar to the community
  - 2.2 Facilitate broad accessibility
  - 2.3 Use appropriate instructional strategies
  - 2.4 Select, adapt, or develop effective educational materials
  - 2.5 Match engagement strategies and tools to the interests, issues, and capacities of your partnership and community
- 

### Key Characteristic #3

#### Collaborative and Inclusive

Environmental education works in collaborative and inclusive relationships, partnerships, and coalitions.

#### Guidelines

- 3.1 Build coalitions and partnerships strategically
  - 3.2 Value and incorporate diversity, equity, and inclusion
  - 3.3 Plan and implement collaboratively
  - 3.4 Learn from and resolve conflict
- 

### Key Characteristic #4

#### Oriented Toward Capacity Building and Civic Action

Environmental education supports capacity building for ongoing civic engagement in community life, contributing to long-term community well-being, sustainability, and resilience.

#### Guidelines

- 4.1 Integrate environmental education with complementary communication, education, and social-change approaches
  - 4.2 Support and build community capacity
  - 4.3 Move toward civic action
- 

### Key Characteristic #5

#### A Long-Term Investment in Change

Working in communities to create change is typically a long-term initiative, requiring a commitment to relationship building and an ongoing and evolving process of engagement.

#### Guidelines

- 5.1 Assess individual and organizational readiness for community engagement
- 5.2 Invest in building capacity for engagement
- 5.3 Incorporate learning, improvement, and adaptation
- 5.4 Plan for long-term support and viability
- 5.5 Embrace change and celebrate progress



*We can begin by doing small things at the local level, like planting community gardens or looking out for our neighbors. That is how change takes place in living systems, not from above but from within, from many local actions occurring simultaneously.*

—Grace Lee Boggs

## Key Characteristic

1

### Community Centered

Anchoring environmental aims within the context of community interests, issues, and capacities puts the community at the heart of environmental education.

Most educators and organizations approach community engagement with a set of possible ideas about the kind of program or outcome needed. Having a vision about what environmental quality and community well-being could look like, and a commitment to transparency about the beginning points of the agenda, are important to successful community engagement. Equally key is a willingness to listen, adjust, and respond to new information, ideas, and opportunities that arise from other community members.



*Community-based education means more than “education based in the community.” It implies an education plan created as a result of community involvement and designed to match community interests.*

—Elaine Andrews, University of Wisconsin Cooperative Extension–Environmental Resources Center<sup>3</sup>

*Sustainable solutions must understand the process of personal empowerment and social transformation in order for local ownership to take hold. Communities need to actively participate in the planning, execution, and maintenance of any development solutions that affect them. ... This allows the community to engage with the work in ways that conform to local traditions and ways of thinking.*

—Foundation for Sustainable Development<sup>4</sup>

See [Resource #2](#), page 70, to learn more about Community-Based Environmental Education, an approach aimed at using environmental education to support community involvement in decision making about the environment.

<sup>3</sup> Andrews, Elaine. “Supporting Community Based Environmental Education.” U.S. EPA/Cooperative Extension Partnerships, No. 1. Accessed August 29, 2016. <https://naee.org/sites/default/files/epa1.pdf>.

<sup>4</sup> Foundation for Sustainable Development, “Our Approach.” Accessed October 6, 2016. <https://www.fsd.org/our-approach/>

## Guideline 1.1 Get to know and understand the community

Successful engagement rests on an evolving understanding of the community and its interests, priorities, aspirations, and norms. This requires ongoing interaction with the community and its members.

### Indicators:

- Identify the community or communities you want to work with. Consider geographical communities as well as other types of community, such as communities of interest, identity, or practice.
- If you are a member of the community, think about what you already know, who you've worked with in the past, and how to expand your understanding.
- If you are not part of the community, learn how the community defines itself by engaging with its members and participating in community events.
- Identify and meet with other organizations that have existing relationships in the community. These initial meetings may seed deepening of relationships over time.
- Investigate and describe community characteristics, assets, and challenges, including the effects of environmental issues.
- Choose community assessment approaches that fit the scale, needs, and resources of your community, partnership, and organization.
- Learn about community well-being, sustainability, and resilience plans and related efforts.
- Understand past efforts relevant to your area of interest, as well as possible barriers to change.
- Recognize the impact of the involvement of local elected officials and government agencies on policies and procedures related to your area of interest.
- Learn about local policies, structures, traditions, and history that may be relevant to your work—including past and ongoing public engagement efforts and how community members participate.

See [Resource #3](#), page 76, for an example of a step-by-step approach to help understand the community in which you are working or intend to work.

See [Resource #11](#), page 105, may help you consider how some of the organizations, individuals, and agencies you are connecting with now may form the basis of a collaborative partnership as you move forward.

## Understanding the Past and Barriers to Change

The Mobile-Tensaw River delta in southern Alabama drains one of the nation's richest aquatic systems. It is surrounded by some of the world's most diverse temperate forests and supports species found nowhere else. An informal working group interested in furthering conservation in this region wanted to involve the National Park Service (NPS). But, more than 30 years prior, studies that could have supported the designation of a national park in the delta had sparked deep divisions that lingered to the present—including debates about how to protect species and key landscapes, attract visitors, and still promote economic development.

Three dozen formal interviews with community leaders in the seven-county area, along with numerous other informal conversations, helped the working group identify barriers to advancing conservation in the delta region, including NPS involvement. These included:

- Different perceptions about the severity of ongoing threats to habitat and water quality
- Perception that the state's Forever Wild land conservation program had accomplished most of the needed conservation in the delta
- Lack of familiarity with, and direct experience in, the delta and surrounding uplands
- Limited resources available for conservation
- Few forums for regional collaboration
- Desire to maintain local control over land-use decisions and skepticism about federal government involvement
- Limited understanding and misperceptions of different NPS designations



Together with a regional economic development organization, the working group started the Delta Roundtable. This was a collaborative learning effort in which leaders educated each other and learned about current threats such as sea-level rise, residential development, and water pollution; conservation needs and ongoing efforts; and new opportunities in and around the delta. Learning about how the National Park Service works was part of the Roundtable. The working group also connected a local bicycle trail organization with technical support from the NPS Rivers, Trails, and Conservation Assistance program.

To link conservation interests with the communities' desire for economic development, especially in the more rural parts of the seven-county area, the working group also commissioned an economic study and supported collaborative efforts to develop and promote nature, heritage, and cultural tourism in the region and to connect sustainable tourism development with land and water protection.

See the economic study at <https://naaee.org/sites/default/files/mtd-npp-econ-reportfinal-050815.pdf>.

## A Resource for Urban Wildlife Refuges: Engaging City-Dwellers in Wildlife Conservation

With more than 80 percent of Americans living in urban areas today and spending measurably less time outdoors, government officials charged with protecting wildlife and wildlife refuges realize the need to work harder to connect people with nature. Recognizing, too, that Americans are becoming more racially and ethnically diverse, the U.S. Fish and Wildlife Service and the National Wildlife Refuge System have created a framework for collaboration with inclusive community engagement in mind. “Standards of Excellence for Urban National Wildlife Refuges” features eight standards:

- 1) Know and Relate to the Community
- 2) Connect Urban People with Nature via Stepping Stones of Engagement
- 3) Build Partnerships
- 4) Be a Community Asset
- 5) Ensure Adequate Long-Term Resources
- 6) Provide Equitable Access
- 7) Ensure Visitors Feel Safe and Welcome
- 8) Model Sustainability

Online, the standards offer useful “big picture questions” to assess progress toward each goal, a list of “pay-offs” that show the value of meeting each goal, and “guideposts” describing things practitioners might see, hear, or otherwise notice if they are making progress toward the goals. It also provides strategies for implementing the standards, a variety of resource links, and other valuable tools. Access the standards at [https://naaee.org/sites/default/files/urban\\_standards\\_of\\_excellence.october2014.pdf](https://naaee.org/sites/default/files/urban_standards_of_excellence.october2014.pdf).

### Guideline 1.2 Connect environmental education interests and capacities with community concerns, assets, and aspirations

Working effectively with communities relies on understanding the connected systems that influence the community’s environmental, social, and economic health and well-being. This enables the educator to link conservation and environmental education goals and capacities with the interests, aims, and resources of the community.

#### Indicators:

- Understand environmental health and other aspects of community well-being.
  - Identify community visions and interests.
  - Identify indicators of willingness and capacity to act.
  - Consider the interaction of historic and current health, economic, cultural, natural, and political systems.
  - Consider socio-economic status and disparities.
- Describe how environmental issues impact the community—from air and water quality to open space and other issues.
- Identify groups, individuals, and efforts already addressing environmental and sustainability issues and other related issues that influence community well-being and resilience.
- Find allies—trusted by others in the community—who can help build bridges among groups with common goals.
- Broadly consider how environmental education efforts could contribute to addressing environmental issues in the context of other community concerns and priorities.

See [Resource #1](#), page 63, for more insights into how to use concepts such as community well-being, sustainability, and resilience to align environmental education with broader community interests and alliances.

## Kids and Community Steer Project Design

Carlos likes to see birds in the trees. Jenny appreciates seeing water flow. Gale is partial to moss and other plants, and enjoys picnicking outside. And Nikki likes to feel slime and mud.

These were the kinds of answers that Nature Kids/Jovenes de la Naturaleza Lafayette (NKJN) organizers heard when they asked local children what they liked about nature. Then, they followed up with the children—and parents and community members—to learn how they'd like to improve outdoor spaces and nature programs to make them even more inviting.



A partnership in the Lafayette, Colorado, area, NKJN comprises more than 20 groups including environmental education providers, the school district, and local environmental organizations. With the goal of bringing a comprehensive continuum of environmental education experiences to the Lafayette area, including providing pathways for youth to become environmental leaders, NKJN partners were especially interested in learning about the needs and interests of low-income families. They also wanted to find out more about how Latino families felt about environmental education and improving outdoor connections. They knew that community engagement was critical.

Thanks to team members who had existing relationships with the community, NKJN organizers were able to reach out to families and find many interested in nature and outdoor programming. A launch celebration that included family activities, music, dinner, and presentations by NKJN had 150 attendees. Through the event, organizers were able to recruit two dozen adults (80 percent Latino) to participate in focus groups they conducted in both Spanish and English. Written surveys supplemented their research.

Organizers also held multiple gatherings at the elementary, middle, and high schools, where focus groups and in-depth discussions with students helped organizers get a better understanding of young people's specific interests in nature.

"Understanding the community's point of view was crucial. It helped us to uncover barriers that prevent families from participating in outdoor programming we did not know were there, and nail down the barriers we already knew about," said Carlos Lerma, an environmental educator with NKJN coalition partner Thorne Nature Experience. "This gave folks in the community the vehicle to express their thoughts and feelings."

The process offered insights into places and programs that would appeal most to pre-K, elementary, middle-school, and high school youth, as well as to families. It also identified ways to improve people's ability to get outside, such as a community bike-share program, gear rental (tents, sleeping bags, etc.), and a bilingual information hub.

They also learned about scheduling, transportation, and language issues that would need to be overcome in order to create effective pathways to nature and outdoor employment opportunities for area youth.

The insights gleaned from the NKJN initiative will guide the design of environmental education programs and related capital projects. The engagement process had the added benefit of strengthening relationships with, and interest within, the Lafayette community—a valuable investment in the future.

To learn more, contact the Thorne Nature Center at [www.thornenature.org](http://www.thornenature.org).



### **Guideline 1.3 Consider the appropriateness of community engagement**

Community engagement is a strategy that is well suited to some, but not all, situations, organizations, partnerships, and goals.

#### **Indicators:**

- Reflect on your existing relationships with the community and your readiness for community engagement.
- Analyze what happened to create the issue you want to address, and how working with others in the community might help.
- Test your own presumptions and perceptions about the issue and the community—and the appropriateness of community engagement—with other community members and potential partners.
- Evaluate the appropriateness of a community-based approach for the situation, your organization and its aims, potential partners, and the community as you understand it.
- Consider community readiness for change.

See [Resource #4](#), page 80, to help you reflect on whether you and your organization are ready for community engagement, and what you can do to better prepare.

See [Resource #5](#), page 84, for insights into understanding how ready your community is for engagement and change.

## Community Engagement: Is It Right for Your Project?

All projects are not alike, and not every endeavor will benefit from extensive community engagement. Community engagement should be authentic, matching the form of engagement to the actual role the community will play. See Resource #9, page 96, *Designing Civic Engagement*, for help determining your goals, which may range from simply informing participants (one-way communication), to consulting or involving participants, all the way to full partnerships.

Projects are especially likely to benefit from more comprehensive, collaborative engagement if one or more of the following factors apply:



- **Complexity:** The topic you are addressing is difficult to understand, values-based, or controversial.

*Successful participation will help the community understand issues better, and will allow the project to benefit from an array of perspectives.*

- **Size and Diversity of Stakeholder Group:** Your project will impact a large or diverse group. A stakeholder is anyone who can affect, or who will be affected by, your project.

*More interactive types of engagement are helpful if you are still in the process of defining the stakeholder group, or if you know there is a wide array of stakeholders.*

- **Balance of Power:** There is a pre-existing imbalance of resources or decision-making authority among stakeholders.

*Effective engagement can help build trust, and with effort can invite in stakeholders who may be outside the existing power structures.*

- **Legitimacy and Buy-In:** There is no well-established public agreement on a course of action.

*If the public has concern or suspicion around the issues you are addressing, well-structured community engagement is often crucial to finding a clear path forward.*

- **Timing:** You are in the early stages of the project.

*Tasks like generating ideas, setting goals, and prioritizing alternatives are excellent opportunities for interactive public engagement. Once decisions have been made, public involvement should focus on communication regarding project implementation. (Pretending to “engage” the community in a decision that has already been made will only lead to frustration.)*

Clark, Susan and Woden Teachout, *Slow Democracy: Rediscovering Community, Bringing Decision Making Back Home*. 2012. White River Jct., VT: Chelsea Green Publishing.

## Guideline 1.4 Focus on community assets and shared priorities

Community-centered environmental education builds on community assets and resources to address shared priorities and strengthen sustainability and resilience into the future.

### Indicators:

- Identify community priorities that may be relevant to your professional or organizational area of interest or expertise.
- Explore existing assets and capacity in the community to address community priorities. Think broadly about community resources, such as buildings, organizations, parks, and businesses to institutional interests, professional resources, public services, relationships, and enthusiasm.
- Work with community partners to complete an assessment of the group, neighborhood, or region under consideration as a precursor to, or part of, the planning process. Use a technique such as asset mapping.
- Consider community assets, including resources and capacity as they relate to future planning as well as the current situation.
- Explore how environmental education can support local strategies that improve community environmental, social, and economic health and well-being and the ability to adapt to future conditions.

See [Resource #6](#), page 86, for pointers on using asset mapping—a way to collaboratively inventory resources—with your community.

## Guideline 1.5 Reach beyond usual partners and program-delivery modes

Engaging communities opens up a wide range of potential partners, programmatic approaches, and tools.

### Indicators:

- Consider potential areas of community concern and activity—such as health, physical fitness, economic redevelopment, religion, sports, youth development, farm-to-table, and others—as you look for potential collaborators.
- Continue, or begin, the process of relationship building by consulting residents and leaders who understand and connect with the broader community.
- Work with organizations like the Cooperative Extension Service that have community development, communication, education, and training expertise.
- Identify service-oriented or culturally specific organizations that have roots in the community as potential collaborators.
- To involve the broader public or community, consider using a combination of communication, education, training, demonstration, and outreach approaches—as well as specific strategies, such as social marketing, that promote adoption of beneficial innovations. (There's more about this in Guideline 4.1.)

## Climate Change Meets Health Care

Which environmental issues affect community life most? Ask a health care worker.

Across the country, a growing number of community health professionals now define their work holistically. Rather than simply treating illnesses, nurses and other health workers are partnering with community members to address health-related issues such as anxiety, addiction, violence, and environmental concerns.



In Philadelphia, four organizations—two environmental groups, a university, and a nonprofit health organization—recognized their common interest in building local knowledge about climate change and health. Grant funding allowed them to design and deliver workshops, “Be Air Aware” and “Talking About Climate Change,” that gave low-income neighborhood residents information and tools needed to take personal action. Community health workers—trained health educators and advocates who often have lived the experiences of the populations they serve—were also critical to the project’s success. Their deep understanding of the community allowed them to tailor the workshops to meet interests, language abilities, and other factors.



Climate change and other environmental issues can lead to unhealthy households, exacerbating asthma and other diseases. Problems include moisture (which can lead to mold), excessive heat (especially dangerous for children and the elderly), and indoor air pollutants. Workshops included an interactive home-mapping activity revealing likely sources of health problems, and a hands-on lesson in making natural cleaners. They also covered how to use social media to spread the word about how small, individual actions can improve community conditions.

The workshop “dispelled some myths and gave practical ways to make change,” said one participant. Wrote another, “I will be using these resources ... to help prepare for my son as well as myself and my mother to support our health.”

Find out more about how cities are engaging communities around climate change from the Climate and Urban Systems Partnership at <http://cuspproject.org>. For details on the workshops, see <http://www.envirohealthsense.org/project/climate-change-indoor-environments-health/> <http://www.envirohealthsense.org/project/climate-and-health/cusp-2015/>.



*Our mission in this new century is clear. For good or ill, we live in an interdependent world. We can't escape each other. Therefore, we have to spend our lives building a global community of shared responsibilities, shared values, shared benefits.*

—Bill Clinton

## Key Characteristic



### Based on Sound Environmental Education Principles

Environmental education engages communities in ways that rely on established principles and proven practices of the field.

#### Guideline 2.1 Build on interests, issues, and settings familiar to the community

Environmental education often begins close to home. It supports people as they explore and understand their surroundings and develop knowledge and skills through direct experience with the environment and local issues. For communities of practice and other types of communities that are not geographic, shared knowledge and experiences provide a rich context for environmental education.

##### Indicators:

- Link environmental education activities to assets, issues, priorities, and visions identified through assessments, mapping, and other community engagement efforts.
- Co-create goals, objectives, and activities in collaboration with community partners and leaders to ensure that they further community priorities.
- Provide clear pathways and practical opportunities that enable people to directly apply their knowledge and skills and make a difference in matters that concern them.
- Work with participants to communicate how their actions are making a difference.
- Use culturally relevant instructional approaches that help strengthen community identity, sense of place, and other desired benefits.

#### Guideline 2.2 Facilitate broad accessibility

Programming in community settings is designed to be inclusive and culturally appropriate for diverse audiences.

##### Indicators:

- Co-design programs with a diverse group of partners or community advisors to ensure that a variety of perspectives and practices are represented.
- Design your program and publicize it in ways that are sensitive to, and inclusive of, cultural, racial, ethnic, gender, age, and other differences appropriate to the situation.
- Incorporate different learning preferences and abilities into program design.
- Encompass concepts and standards in the Americans with Disabilities Act.
- Create inclusive learning environments that welcome different languages, cultures, ages, genders, and abilities as appropriate to the community.
- Ensure that educational materials and programs are delivered in the languages and literacy levels appropriate for the participants.

See [Resource #13](#), page 121, for an introduction to participatory design, also known as co-creation/co-design.



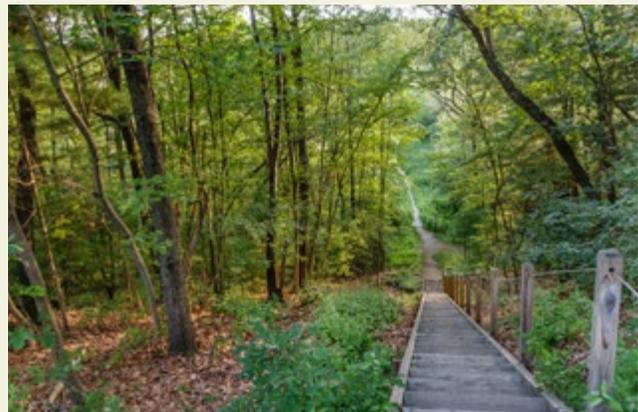
## Nature Trails Accessible to Every Nature Lover

What's the best way to create nature trails that are accessible to everyone? A first step is to make the planning process itself accessible to everyone.

Mass Audubon's "All Persons Trails" offer self-guided trail experiences for people who need accommodations for vision, mobility, or other physical, sensory, or brain-based challenges. To create the trail system, planners began by reaching out to accessibility professionals, including government officials and staff from a school for the blind. These partners in turn helped connect the project with their local constituents, so that during planning, every trail was tested by five to ten people representing a range of perspectives on accessibility.

"The most effective way to design and provide a community resource is to work collaboratively with the community to develop that resource," organizers noted. "Together you must take the time, and be open-minded and open-hearted about how the project will unfold."

By welcoming expertise from what became a team of collaborative partners, the project soon benefitted from both paid and volunteer effort to help plan and test trail experiences, review visitor materials (including braille publications and signs), conduct personnel training, and help with grants and outreach. The trails project was changed in many ways thanks to tester suggestions, including trail design, use of cell phones in the audio interpretation, and specific navigational instructions.



"Be prepared," organizers note, "to find inspiration and awe at the energy, commitment, and contributions of those who work to make the world more accessible and inclusive."

Mass Audubon's All Persons Trails manual of guidelines and best practices for developing and operating universally designed interpretive trail experiences, and accompanying videos of participants and their stories, are available at [www.massaudubon.org/accessibility](http://www.massaudubon.org/accessibility).

See **Resource #7**, page 89, to learn about ways to make your program broadly accessible, and the guidance and requirements of the Americans with Disabilities Act.

## DID YOU KNOW?

### The National Project for Excellence in Environmental Education

The National Project for Excellence in Environmental Education, initiated by NAAEE in 1993, has developed a series of guidelines that set the standards for high-quality environmental education. Each of these publications was developed by a diverse team of professionals, and each has undergone substantive review by hundreds of professionals prior to its publication.

Through the National Project for Excellence in Environmental Education, NAAEE has taken the lead in establishing guidelines for the development of balanced, scientifically accurate, and comprehensive environmental education programs and materials. Quality environmental education programs help develop an environmentally literate global citizenry that can compete in our economy; has the skills, knowledge, and inclinations to make well-informed choices; and exercises rights and responsibilities as community members.

Learn more and access the guidelines at [naaee.org/our-work/programs/guidelines-excellence](http://naaee.org/our-work/programs/guidelines-excellence).

### Guideline 2.3 Use appropriate instructional strategies

Use instructional approaches that are designed to meet community priorities and support the local situation.

#### Indicators:

- Use research-based instructional methods that meet your goals and objectives and align with the needs of your targeted audience.
- Be open to innovative and novel ways to achieve objectives that meet the needs of the audience and build on best practice in the field as well as traditional knowledge.
- Select instructional approaches that address participants' interests and needs and expand their skills and understandings.
- Use hands-on, minds-on strategies that support learning processes such as those described in the experiential learning cycle (experience, process, generalize, apply).
- Encourage systems thinking, emphasizing the whole instead of parts, and focusing on relationships, processes, and context.
- Use technology as appropriate for program aims.

See **Resource #8**, page 91, for a framework and supplemental tools that help you select instructional strategies that fit the purposes of your educational effort.

## Systems Thinking in Environmental Education

John Muir famously wrote, “When we try to pick out anything by itself, we find it hitched to everything else in the universe.”

A system is a set of interrelated elements that make a unified whole. Individual things—like plants, people, schools, watersheds, or economies—are themselves systems and at the same time cannot be fully understood apart from the larger systems in which they exist.

### Shifts in Perception

Thinking systemically requires several shifts in perception, which lead in turn to different ways to teach, and to different ways to organize institutions and society. As articulated by Center for Ecoliteracy cofounder Fritjof Capra, these shifts are not either/or alternatives, but rather movements along a continuum:

#### From parts to the whole

With any system, the whole is different from the sum of the individual parts. By shifting focus from the parts to the whole—from the parts of the honeybee to the bees in their natural setting—we can better grasp the connections between the different elements. This shift can also mean moving from single-subject curricula to integrated curricula.

#### From objects to relationships

The relationships between individual parts may be more important than the parts. An ecosystem is not just a collection of species, but includes living things interacting with each other and their nonliving environment. In the systems view, the “objects” of study are networks of relationships. This perspective emphasizes relationship-based processes such as cooperation and consensus.

#### From objective knowledge to contextual knowledge

Shifting focus from the parts to the whole implies shifting from analytical thinking to contextual thinking. This shift may result in focusing on project-based learning instead of prescriptive curricula. It also encourages educators to be facilitators and fellow learners, rather than experts dispensing knowledge.



#### From quantity to quality

Western science has often focused on things that can be measured and quantified, sometimes with the implication that they more important—and perhaps even that what cannot be measured and quantified doesn’t exist at all. Some aspects of systems, however, like the relationships in a food web, cannot be measured. Rather, they must be mapped. This shift can lead to more comprehensive forms of assessment.

#### From structure to process

Living systems develop and evolve. Understanding these systems requires a shift in focus from structure to processes such as evolution, renewal, and change. This shift can mean that how learners solve a problem is more important than getting the right answer. It may mean that the ways in which decisions are made are as important as the decisions themselves.

#### From contents to patterns

Within systems, certain configurations of relationship appear again and again in patterns such as cycles and feedback loops. Understanding how a pattern works in one natural or social system helps us to understand other systems that manifest the same pattern. For instance, understanding how flows of energy affect a natural ecosystem may illuminate how flows of information affect a social system.

“Systems Thinking” was originally published by the Center for Ecoliteracy © Copyright 2004-2015. Center for Ecoliteracy. Reprinted with permission. All rights reserved. For more information visit [www.ecoliteracy.org](http://www.ecoliteracy.org).



## Guideline 2.4 Select, adapt, or develop effective educational materials

Established principles for environmental education materials provide a foundation for selecting or developing high-quality materials.

### Indicators:

- Use established guidelines for environmental education instructional materials as a foundation.
- Engage community partners in choosing or developing content and materials.
- Ensure that materials are fair, accurate, balanced, and relevant.
- Use materials that have been reviewed by educational and subject-matter experts. Ask community partners to review materials.
- Ensure that materials are culturally relevant and inclusive, reflect community composition, and are appropriate for the age of your audience, community priorities, and program goals.
- Work with community partners, members, and leaders to determine what languages, literacy levels, and formats would work best for the community.

See [Resource #9](#), page 96, to learn more about the field's guidelines for the development, assessment, and selection of environmental education materials.

See [Resource #12](#), page 112, for insights into working inclusively with partners and community members.

## Agua Pura Fotonovela—Comics Connect a Community with Its Water

If a picture says 1,000 words, how about a book full of them—along with a story that speaks to people’s experience? That was the idea behind the Agua Pura Fotonovela, a creative initiative in Santa Barbara, California.



Photo credit: Michael Marzolla

With the goal of increasing water quality awareness in the city’s growing Latino neighborhoods, Agua Pura organizers began their initiative by seeking interested community partners. They collaborated with a Latino community center, as well as a group of *promotoras*—peer educators (generally women) serving as advocates, outreach workers, translators, and liaisons between their communities and health and social organizations.

Together, the partners used dialogue meetings and a community survey to learn about people’s water use and concerns. While residents expressed strong interest in water quality and health, there was generally low awareness about tap water safety, household chemical disposal, and sources for water quality programs and information.

Given what they found, how could Agua Pura best inform the community about the issues they cared about most? Here’s where the *fotonovela* came in.

A *fotonovela* is a comic book-style story illustrated with photos. The *fotonovela* has long been used as a community empowerment tool. The engaging format helps leapfrog communication barriers, from the challenges of multiple languages used in multicultural neighborhoods to literacy challenges in marginalized communities.

The creation of the Agua Pura *fotonovela* was participatory, with students from the community designing cartoon storyboards vetted by community members. In the final story, *Carlos y el Agua Limpia* (*Carlos and Clean Water*), teenager Carlos helps his family with chores while educating them on proper waste disposal, how to keep water clean, and tap water safety.

With community members as actors and using local filming, printing, and distribution resources, Carlos’s story proved to be a popular and engaging educational tool. Over 2,000 copies of *Carlos y el Agua Limpia* were distributed to interested community members.

For more information on the Agua Pura Fotonovela project, and to see Carlos in action, see <http://cetehama.ucanr.edu/?impact=758>.

Agua Pura originated as a partnership among the University of Wisconsin’s Environmental Resources Center, Santa Barbara City College, and the Santa Barbara County Cooperative Extension 4-H Youth Development Program. See *Agua Pura: A Leadership Institute Planning Manual for Latino Communities*. University of California, Cooperative Extension, and University of Wisconsin-Madison, Environmental Resources Center. Available at <https://naaee.org/sites/default/files/aguapuracomplete.pdf>.



## **Guideline 2.5 Match engagement strategies and tools to the interests, issues, and capacities of your partners and community**

Work with partners to customize an engagement strategy and select methods for a level of engagement that fits your partnership and community.

### **Indicators:**

- Define your program audiences, topics, and goals.
- Select approaches and a level of engagement that meet your purposes and that match the skills and resources of community members.
- Select strategies that match your engagement goals and whether your aim is to inform, involve community members, create new approaches, or motivate people to take action.
- Use strategies that ensure inclusive, authentic involvement of diverse community members.
- Incorporate proven environmental education instructional methods to support your goals, such as issue investigation, when addressing specific issues within the community.

See [Resource #8](#), page 91, for help with selecting instructional strategies that match different purposes.

See [Resource #10](#), page 98, for resources, tips, and worksheets to help you match civic engagement goals to appropriate processes.

## Wind, Water, and Confidence Building

By far the most important natural feature in Burlington, Vermont, is Lake Champlain, the sparkling 125-mile-long waterway that separates the state from neighboring New York. With the mission “Lake access and life lessons for all,” Burlington’s 22-year-old Community Sailing Center (CSC) uses innovative methods to engage community members and visitors to learn from this remarkable natural resource.



Photo credit: Community Sailing Center, Burlington, VT

Along with traditional non-motorized boating programs for adults and youth, the CSC runs four programs that balance water recreation, environmental education, accessibility, and inclusion.

“Floating Classrooms” uses an environmental science curriculum to engage students both on shore and through sailing. In a city where nearly 25 percent of the population lives below the poverty level, and the majority of children who live less than a mile from the lake have never worn a life jacket, sailing offers students an unusual experience in learning to love Lake Champlain. The full-year curriculum features elements of the Reach Curriculum (a national program from U.S. Sailing) and is aligned with state standards so teachers accomplish academic learning goals while students experience the lake and boating first-hand. School programs also offer a chance for the area’s growing population of new Americans, part of the state’s refugee resettlement program, to be introduced to the lake.

Observing that many women lack the opportunity to practice leadership in team settings, the center’s “Women in Wind” program partners with local high school, college, and human service groups to offer confidence-building programs for women of all ages. Participants challenge themselves while practicing communication, collaboration, and problem solving.

The center’s “Adaptive Watersports Program” uses specialized equipment and adapted teaching methods to remove barriers to marine education, allowing people with cognitive and physical disabilities to realize their recreational and educational goals.

Youth access the CSC’s programs thanks to partnerships with teen centers and other social service groups. Many young people, although living within walking distance of the lakeshore, have never been on a boat other than a ferry. The center’s “Leader Ship” program is a youth character-development initiative that uses sailing as a medium to teach life skills. The program is designed to build an increased sense of self-worth, interpersonal communication and collaboration skills, and tolerance for adversity.

Learn more about the Lake Champlain Community Sailing Center at <http://communitysailingcenter.org>.



*Whatever community organization, whether it's a women's organization, or fighting for racial justice ... you will get satisfaction out of doing something to give back to the community that you never get in any other way.*

—Ruth Bader Ginsburg

## Key Characteristic



### Collaborative and Inclusive

Environmental education works in collaborative and inclusive relationships, partnerships, and coalitions.

#### Guideline 3.1 Build coalitions and partnerships strategically

By working with diverse partners and coalitions who share your interests, concerns, and goals, environmental educators strengthen their connections with the community and the effectiveness of their efforts.

##### Indicators:

- Identify existing coalitions and partnerships and develop strategies to work with them.
- Identify potential partners with complementary concerns and goals to your environmental education aims.
- Work with partners to identify how the strengths, networks, and contributions of members could complement each other in working toward shared goals, while also accomplishing individual aims.
- When appropriate, jointly develop an agreement that defines the purpose and shared commitment of the partnership.
- Establish clear roles and responsibilities for partners.
- Stay open and flexible so the partnership or coalition can evolve. Be willing to learn and adjust your strategies as needed.
- Nurture the partnership and build relationships through regular communications, transparency, follow through, and support.
- Recognize that authentic, effective partnerships take time to develop and require a willingness to learn continually from each other's experiences.

See [Resource #11](#), page 105, for tips, resources, and exercises to help you build relationships and forge strategic, effective partnerships and coalitions.

## Openlands: Gardening for Education, Creativity, and Spirit



Operating in the diverse landscape in and around Chicago, Openlands is one of the oldest metropolitan conservation groups in the United States. Their wide-ranging efforts include offering youth and adult environmental education programs and encouraging access to nature through hiking, birding, and growing food. Openlands has helped protect over 55,000 acres for parks, wildlife refuges, and water access, and pursues issue-related advocacy initiatives.

“Space to Grow” is an Openlands school partnership program that greens up Chicago schoolyards, creating space for outdoor play and exploration as well as native rain gardens, vegetable gardens, and outdoor classrooms. The improved schoolyards offer multiple community benefits since they are available for family and neighborhood use and also reduce stormwater runoff.

Elvia Rodriguez Ochoa serves as Neighborhood Programs Director for Openlands. She said that collaborating with communities on the Space to Grow program has involved building connections with the surrounding neighborhoods, understanding what partners the schools already had, and reaching out to elected leaders.

Openlands’ other gardening partnerships include working with Faith In Place, a collaboration of area churches, synagogues, mosques, and other faith-based organizations working to engage their communities in protecting the environment.

“In building partnerships, it’s really important to get to know the community,” Rodriguez Ochoa noted, “because we know that no one person has all the answers.” She has pushed to make sure Openlands reaches out in multiple languages, and has translated some of the organization’s work into Spanish.

With a background in the arts, Rodriguez Ochoa has long worked to engage with community members through the creative enterprises that interest them the most. “It’s a different way of looking at being an artist,” she said. Engaging residents and fostering connections among diverse neighbors, students, gardens, and trails is a creative effort,” she said, and “I see the whole city as a place to help create positive change.”

You can read an NAAEE interview with Elvia Rodriguez Ochoa at <https://naaee.org/eepro/blog/interview-between-climate-fellows>.

For more information on Openlands, see [www.openlands.org](http://www.openlands.org)  
For details on Faith in Place, see [www.faithinplace.org](http://www.faithinplace.org).

## Guideline 3.2 Value and incorporate diversity, equity, and inclusion

Community engagement encourages environmental educators to work with individuals, groups, and organizations that may have different experiences, abilities, cultural backgrounds, and operating styles.

### Indicators:

- View differences in skills, abilities, and perspectives as resources and opportunities to build stronger programs.
- Examine, acknowledge, and work with your own biases.
- Provide ways for partners to talk and learn about their differences, including areas outside the focus of the collaboration.
- Consider recruiting an experienced facilitator to help diverse partners build relationships across differences.
- Be sensitive to and address dominance and issues of power and privilege among partners. Ensure that all partners' perspectives are valued.
- Recognize that power differentials within the community and society as a whole may also be relevant.
- Identify interactions that might create tensions around cultural differences and provide opportunities for growth.
- Pay attention to differences in language and how it is used, especially differences rooted in various cultures, native languages, and communities. Be willing to educate partners and community members about language preferences and ability, and to accommodate differences.
- Continually hone your cultural awareness and competency. Organize cultural trainings or interactions with and for partners and the broader community.
- Advocate for diversity, equity, and inclusivity within your organization and those of your partners.

See [Resource #12](#), page 112, to learn more about diversity, equity, and inclusion, and how to increase your cultural competence and your ability to work with diverse partners and community members.

## Including Everyone in Nature Exploration

Just off a busy highway in the Boston neighborhood of Mattapan is the Boston Nature Center (BNC), a 67-acre wildlife sanctuary operated by Mass Audubon. Wandering the trails, you might hear the song of a red-wing blackbird or a tree swallow. You might also hear youthful voices speaking in English, Spanish, and Creole.



Photo credit: Boston Nature Center

The diverse neighborhood surrounding the nature center is home to a large population of African Americans and Caribbean immigrants. BNC has made itself a welcoming place for all cultures. In addition to offering science programs at five area schools, BNC runs a nature-based preschool and environmental education camps during the summer and school breaks. It also engages visitors with interactive exhibits, wildlife programs, and community events. The site features an expansive community garden, an all-persons universal trail, and the city's first green building.

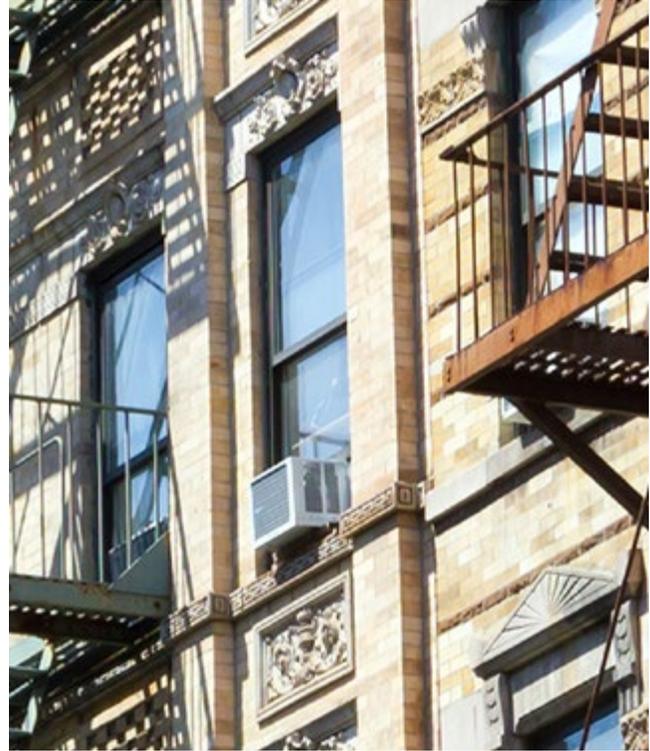
At BNC, cultural competency is woven in throughout the day. Families are welcomed by Youth Leaders, staff members from local high schools who reflect the area's diverse make-up. Exhibits and publications are offered in multiple languages. Many area students have had little or no access to nature, and BNC uses a variety of tools, such as annotated maps and hands-on activities, to build on the unique interests and experiences of each student and foster environmental discovery.

Being responsive to the area's culture includes understanding the schedules of wage-earning families. Summer camps, serving some 1,500 children annually, are offered on a sliding scale, and entrance to the nature center is free to all. "We adjust our programs to meet the needs of our community," Director Julie Brandlen says. "When our community says to us ... we need to open earlier and we need to stay open later, then we do that."

When Mass Audubon first acquired the land for the Boston Nature Center in 1997, it collaborated with local residents to design community access. Founders saw access to green space, environmental education, and outdoor recreation as central to civic engagement in environmental and social justice. As reflected in its founding documents, BNC works to increase access not only through excellent, affordable environmental education programs, but through training and hiring practices aimed at employing qualified women, low-income workers, and people of color at all levels.

To ensure statewide relevance, Mass Audubon continues to adapt its operations and activities to respectfully reflect the cultural diversity of the Commonwealth of Massachusetts. Boston Nature Center's commitment to cultural competency is named as a core value in its strategic plan. BNC's long-lasting partnership with the area's diverse schools and community partners shows that the commitment is paying off, through mutual learning about how best to collaborate with students, teachers, and the community.

You can learn more about the Boston Nature Center's programs at <http://www.massaudubon.org/get-outdoors/wildlife-sanctuaries/boston-nature-center>.



### Guideline 3.3 Plan and implement collaboratively

Collaborative planning and implementation opens projects and initiatives to participation by, and leadership from, a range of community partners.

#### Indicators:

- Create a collective vision for the future that supports the development of community well-being, sustainability, and resilience.
- Agree upon a decision-making process that meets the needs of the partners.
- Rely on leadership that is diverse, equitable, and inclusive.
- Respect partners for what they bring, and demonstrate equity, fairness, and transparency.
- Agree upon clear, measurable, goals and objectives that are adaptable and responsive to changing conditions.
- Define and agree upon the relationship between environmental education and other strategies that achieve the aims of the collaboration.
- Agree to a shared timeline from the outset. Think about how partners will work together throughout the life of the project.

See [Resource #11](#), page 105, for an overview of collaborative and participatory decision-making models.

See [Resource #13](#), page 121, for an introduction to “participatory design” or “co-creation,” a participatory approach to project and initiative planning.

See [Resource #14](#), page 123, to learn about qualities of collaborative leadership and gain tips for being a more collaborative leader.

See [Resource #15](#), page 125, for tools and tips for identifying and determining priorities for engaging those with an interest in the outcome of a program, partnership, or initiative.

## Evolving Cultural Competence: Opening the Way Toward Diversity and Inclusion



Investing in cultural competence opens up the ability to work with people throughout the community, and benefit from their experiences and perspectives. Cultural competence opens an array of benefits including:

### **Building a bigger, more powerful constituency.**

Engaging diverse audiences makes sense for the simple reason that it increases the number of participants. Working with new audiences can bring new energy to your work and create new supporters, leaders, and problem-solvers.

**Becoming more effective and gaining competitive advantages as an organization.** The skills you will develop through increased cultural competence are invaluable, and can attract diverse public and political audiences who can greatly benefit your mission.

**Developing a stronger fundraising base** by widening the number and types of grants for which you are eligible. You will also be able to solicit support from a more diverse base of individual donors.

**Becoming preferred employers in the field** by increasing your capacity to recruit and retain staff from all backgrounds.

**Developing resilience.** Greater biodiversity in a natural system makes that system more resilient and adaptable to change. In an organization, it can provide resilience and adaptability in the face of crises.

**Connecting with a broader network of partners.** A commitment to diversity can enable connections to new individuals and organizations that can provide leverage, new sources of funding, and new pathways to environmental education.

**Nurturing creativity and innovation.** Diversity provides a pool of creativity and energy for problem solving that a less diverse organization often lacks.

Adapted from: Bonta, Marcelo, Tony DeFalco, and Chandra Taylor Smith. *Diversity and the Conservation Movement*. Edited by John Carey. New York, NY: National Audubon Society, 2015.  
[https://naaee.org/sites/default/files/eepr/resource/files/diversity\\_module.9.22.15.pdf](https://naaee.org/sites/default/files/eepr/resource/files/diversity_module.9.22.15.pdf).



### **Guideline 3.4 Learn from and resolve conflict**

Addressing conflict skillfully can strengthen your partnership and community while diffusing unnecessary tensions.

#### **Indicators:**

- Promote listening to alleviate conflict due to miscommunication.
- Commit to transparency in all aspects of your work, from decision-making processes to budgeting and communications.
- Use a facilitator, especially for difficult discussions or for groups that tend to be dominated by a few individuals.
- Make it a priority to build relationships among partners, learning from tension and exploring the roots of conflict.
- Use shared decision-making processes, communication tools, and other practices that help address or reduce conflict.
- Arrange for conflict resolution training, as appropriate, for partners, staff, volunteers, and others.

See [Resource #16](#), page 130, to learn more about how to strengthen relationships and programs by addressing conflict well.

## Dudley Street Neighborhood Initiative: Resolving Conflict, Neighbor-to-Nighbor

In 1984, a unique community-based planning and organizing nonprofit was formed out of the passion, ingenuity, and determination of residents in Boston's Roxbury and North Dorchester neighborhoods. Residents sought to reclaim a community that had been ravaged by disinvestment, arson, and dumping. When others had given up, the Dudley Street Neighborhood Initiative (DSNI) gathered neighbors together to create a comprehensive plan and a shared vision for a new, vibrant urban village. A critical element of the organization's success has been its ability to navigate through disagreements and conflict.

DSNI is built on a foundation of shared values, as described on its website, "Values are the beliefs or principles we hold precious. These principles are our internal guidelines for distinguishing what is right from what is wrong and what is just from what is unjust. These principles are held tightly and are not changed or swayed by external forces."

DSNI values range from "Collective Resident Leadership and Control" to "Vibrant Cultural Diversity" where "Anything Is Possible." These values underpin the collaborative and inclusive culture of DSNI, guide decision-making processes and priorities, and assist the organization in conflict resolution. A democratically elected board provides leadership with equal representation by the community's four major cultures—African American, Cape Verdean, Latino, and White—in addition to local business, nonprofits, youth, and religious and community-development organizations. The community elects board members every two years, building trust in the ability of leadership to represent diverse community interests.

Because DSNI's leadership is by the community for the community, "if conflict arises, we can only point fingers back at ourselves," said Benjamin Baldwin, DSNI's Community Land Trust Operations and Project Manager. If the community needs additional support to work through conflict, staff members facilitate or mediate discussions to make sure all perspectives are heard and that the community reaches decisions that are in line with their shared values. When broader community input is needed, DSNI has facilitated a platform for community residents to create a decision-making process responsive to their wants and needs. Such a process was used in establishing DSNI's Real Food Hub, a mechanism intended to support local food systems. It helps that DSNI has been established for more than thirty years, building trust and relationships internally and externally to the community. This longevity means that DSNI can call on outside resources, including the governor in 2012, when they needed to remind policymakers that agriculture does not happen only in rural and suburban communities, and that urban areas like DSNI can be vibrant centers of food production.

Trust, transparency, shared values, and leadership of the community, by the community are a few of the reasons why DSNI has become the go-to organization for neighborhood revitalization.

Learn more at <http://www.dsni.org> and [https://naaee.org/sites/default/files/dudley\\_grows\\_case\\_study\\_tufts\\_uep.pdf](https://naaee.org/sites/default/files/dudley_grows_case_study_tufts_uep.pdf).





*You cannot get through a single day without having an impact on the world around you. What you do makes a difference, and you have to decide what kind of difference you want to make.*

—Jane Goodall

## Key Characteristic



### Oriented Toward Capacity Building and Civic Action

Environmental education supports capacity building for ongoing civic engagement in community life, contributing to long-term community well-being, sustainability, and resilience.

*EE interventions that enable sustainable actions are building capacity for effective citizenship in a complex world. ... [T]hese strategies tend to include economic and equity concerns. Grappling with different dimensions of the same problem, and redefining the problem as a result, can help bring about new solutions.*

—Martha Monroe, et al.<sup>5</sup>

#### Guideline 4.1 Integrate environmental education with complementary communication, education, and social change approaches

Community engagement creates opportunities to connect environmental education with other communication and social change approaches under a unified strategy.

##### Indicators:

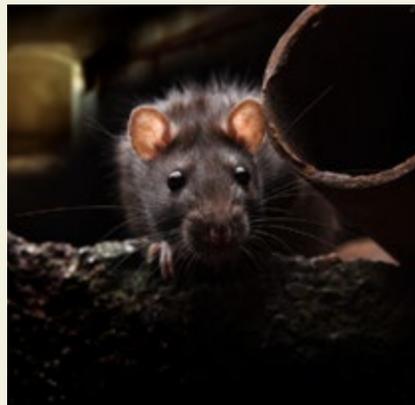
- Consider a variety of tools to involve the broader public or community of interest, including a combination of communication, education, outreach, and social change approaches.
- Identify your aims (convey information, build understanding, improve skills, enable sustainable actions) and select specific strategies that support those aims.
- Select communications technologies that are broadly accessible to the community.
- Focus your strategy on encouraging the community to move to informed action to achieve shared goals.
- Match your strategy to partnership goals and the community context.

See [Resource #17](#), page 135, to learn more about social change strategies that can mesh well with environmental education.

See [Resource #2](#), page 70, and [Resource #8](#), page 91, for reviews of foundational concepts related to connecting environmental education with building community capacity and achieving specific outcomes.

<sup>5</sup>Monroe, Martha C., Heidi L. Ballard, Annie Oxarart, Victoria E. Sturtevant, Pamela J. Jakes, and Emily R. Evans. "Agencies, educators, communities and wildfire: partnerships to enhance environmental education for youth." *Environmental Education Research* 22, no. 8 (2015): 1098-1114. doi:10.1080/13504622.2015.1057555.

## Collaborative Science for a Better Neighborhood



Urban residents of Providence, Rhode Island, helped U.S. EPA staff understand how concerned they were about rats in their city. Some 4,000 vacant lots provided plenty of habitat for these rats, perpetuating the related health threats and environmental problems.

The city's plans for selling the lots to residents willing to make improvements was stalled because the public believed the land might be contaminated. EPA partnered with the city and local residents, asking the community to identify high-priority lots. EPA then trained community volunteers in soil sampling techniques and conducted tests on the collected soil.

Test results were reported in a community forum, and worked through collaboratively to determine what they meant and which lots were clean. EPA used that information to develop a bilingual education effort that informed residents and eased their concerns. The quick sale of the lots—at \$1 apiece—took a bite out of the rats' territory and set an example for future action.

Adapted from Thomas, Christopher and Elaine Andrews. *Building Capacity: Community-Based Environmental Education in Practice*, No. 8. Madison, Wisconsin: U.S. EPA and University of Wisconsin Cooperative Extension, (2000). <https://naaee.org/sites/default/files/epa8.pdf>.

### Guideline 4.2 Support and build community capacity

Community engagement focuses on building community capacity for effective learning, decision-making, and action, while at the same time addressing specific environmental and social goals.

#### Indicators:

- Emphasize direct experiences, knowledge, and skill building to support independent thinking, deliberation, informed decision making, self-reliance, and civic action.
- Involve participants and partners in preliminary research and assessment, program design, and evaluation.
- Use a community asset approach, looking for the skills, resources, and capacities in a community, rather than the deficiencies and needs.
- Focus on the development of skills and capacities that build community resilience and the long-term ability to plan for and respond to adverse conditions such as climate change.
- Take direction from the community to determine which capacities to cultivate and how you can best support them.
- Partner with culturally specific community-based organizations to adapt program delivery and approaches to support different cultures and subgroups coming together around common goals.
- Strengthen relationships in communities and connect partners to a range of other organizations, agencies, and networks able to provide support during times of adversity.

See [Resource #18](#), page 138, for an introduction to “appreciative inquiry,” an asset-based, community-enhancing process that can be used in the design, evaluation, and improvement of programs and partnerships.

See [Resource #19](#), page 142, for an overview of asset-based approaches to community change and capacity-building.

## Making Connections for Air Quality

Sometimes an environmental educator's most important tool is simply listening.

Rebecca Davis is an environmental education consultant in Washington, DC, who works on air quality and its effects on human health and the environment. Davis was presenting before a local health advocacy alliance when an elected community member approached her with questions regarding air contamination in a place called Buzzard Point. First listening to people's concerns, then conducting a site visit and launching a deep dive into technical reports, Davis agreed there was a problem. Proposed development at Buzzard Point meant contaminated soil from industrial waste would be excavated, with the potential for added health risks.



At first Davis simply provided baseline knowledge about air quality and its impact on health. But as discussions progressed, she was able to connect residents with key government officials and business leaders. While Davis's and the residents' request for a health advocate was denied, their demand for a community health assessment to help gauge cumulative impacts was approved. Their activism also resulted in the creation of an air quality plan for the project.

The issues at Buzzard Point have not yet been solved. However, residents are now much better connected to decision makers and to experts they can call on for information, data collection, and support. Local leaders are more attuned to community members who are active, rather than passive or uninterested. "And that creates greater transparency and more accountability," said Davis.



"As an environmental educator—really, as any educator—I feel that your role is not to be an expert, it is not to have all the answers," Davis said, "but to incessantly help people find the resources that shed light onto the questions posed."

"If you listen, and are open to the needs of local people," she noted, "an educator can be the conduit who helps community members come together to address issues."

For more information about the Buzzard Point story, see <https://buzzardpointstory.wordpress.com/2016/04/14/the-beginning/>

### Guideline 4.3 Move toward civic action

A central aim of environmental education is informed, committed action by individuals, groups, or communities that improves the quality of the environment and addresses related issues. Community engagement enhances the focus on environmental, social equity, resilience, and economic, cultural, and political structures that are essential to long-term sustainability.

#### Indicators:

- Work with the community to identify goals (short and long-term) related to action and policy change (environmental stewardship, climate change, health, and so on), and determine steps for achieving them.
- Place goals related to individual and group learning, awareness, and motivation in a larger context of community support, action, sustainability, and resilience.
- Consider a variety of types of actions as outcomes, including fundraising, community improvement, habitat restoration, political action, and others.
- Promote a sense of responsibility and willingness to act on the immediate issue and larger, related concerns of community well-being.
- Support the community's ability to prepare for and adapt to disruptions—often natural—and use adversity to inspire efforts to build a sustainable future.
- Frame issues and select engagement techniques to invite common ground and move toward action.



## Building Relationships Through the River



We've all seen neglected land like this—bounded on one side by railroad tracks, on another by a highway. In the case of Sutter's Landing near downtown Sacramento, California, the riverfront parcel contains, among other things, a closed municipal landfill and an asphalt recycling facility. Sutter's Landing was the kind of place that, perhaps, only an environmental educator could love—at least at first.

In the mid-2000s, three neighbors, all inspired by Richard Louv's book, *Last Child in the Woods*, decided to organize monthly walks along this mile-long stretch of the American River. Calling themselves Friends of the River Banks, the group wanted to share this hidden jewel of their urban neighborhood—a riparian asset even close neighbors were not aware of.

Over the years, the group's informal structure and neighbor-to-neighbor connections have sustained people's engagement. Informal Second Saturday walks are led by local volunteer naturalists (professional and amateur), each focusing on a simple theme such as "Return of Swainson's Hawk," "Native American Perspective of the River," "Welcome Back, Salmon" and simply, "Bugs." A walk on New Year's morning has become a tradition. Thanks to a website, word of mouth, and connections with local nature groups, the group now has more than 350 entries on its email list and each month's event attracts 25–100 participants.

Interest has also turned into action. Members participate in river cleanup and stewardship activities, and have developed relationships with rangers, police, and local leaders. Casual photographers not only share shots of otters and sea lions, but also have helped document wildlife—critical evidence in informing development proposals. A second organization has spun off to work on natural resource protection, and both groups serve as networks for supporting natural resource values. Perhaps most importantly, neighborhood pride in the river has grown immensely, as have Sutter's Landing neighbors' feelings of ownership, stewardship, and sense of responsibility for active oversight.

Read more about Friends of the River Banks at <http://www.friendsoftheriverbanks.org>.



No. 1/2024  
 Owner: [unclear]  
 Farm: [unclear]

	soil	water	temp	humidity	note
radish					
carrot					
kale					
tomato					
eggplant					
spinach					
lettuce					
corn					
cabbage					
broccoli					
cauliflower					
potato					
bell pepper					
pumpkin					
garlic					
onion					
More:					

\* additional soil tests  
 \* please be thorough

*There is no power for change greater than a community discovering what it cares about.*

—Margaret J. Wheatley

## Key Characteristic



### A Long-Term Investment in Change

Working with communities to create change is typically a long-term initiative, requiring a commitment to relationship building and an ongoing and evolving process of engagement.

#### Guideline 5.1 Assess individual and organizational readiness for community engagement

A realistic view of the capacity and readiness of environmental education organizations and staff to work closely with the community can help lay the groundwork for long-term success.

##### Indicators:

- Make community engagement—and the investments it could entail—a part of your organization’s strategic plan.
- Strengthen organizational commitment to inclusivity in foundational documents, policies, and practices.
- Ensure that the initiative is amply funded and has the resources, skills, and experience to support engagement.
- Consider the potential risks of engagement.
- Commit to needed professional development for staff and volunteers.
- Be willing to compromise, work with a facilitator, and cede control when necessary to support the success of a partnership.
- Allow a realistic time period for meaningful change to occur.

See [Resource #4](#), page 80, to help you reflect on whether you and your organization are ready for community engagement, and what you can do to better prepare.

See [Resource #20](#), page 145, to learn more about “collective impact” and how you can put this strategic collaboration method to work to help build a community partnership that achieves its shared goals.

## Watch Us Change: Tracking Progress Toward Inclusion

In Washington State, one primarily white EE organization has taken steps not only to improve its diversity and inclusion work, but also to track its progress. The process has been one of hard work, but of great discovery.

IslandWood serves more than 12,000 school-age students annually through programs in Seattle schools, a school overnight program on Bainbridge Island, and an environmental learning center partnership providing day trips. It is well known for awakening students' sense of interest in and connection to the natural world. For years, IslandWood has worked to include more non-white employees. But now, IslandWood has taken an even more systemic approach to emphasizing equity and social justice, and expanding the cultural capacity within the organization and its service to the community.

One step has been incorporating inclusion and diversity as a priority in the strategic plan, making them central to every initiative. Another step is team-level self-assessment and professional growth planning. Based on the self-assessment themes that emerged, IslandWood provided staff training in conflict management and problem solving across cultures. Additionally, each team focused on systemic issues important to their work. With the help of an intern to track and analyze their progress, staff have been able to explore differences in their experiences. They've also identified specific actions for change, including reviewing organizational policies for bias, exploring implicit bias in curriculum, and making hiring practices more equitable.

IslandWood Director of Program Impact Corll Morrissey noted that the inquiry has raised difficult questions, such as how IslandWood should change curriculum, instruction, and workplace practices as well as how equity and social justice show up in our daily work.

"How can we better understand children and families hesitant to come to an overnight experience at IslandWood? Or of [job] applicants uncertain about applying to a predominately white environment?" Morrissey asked. At times, she said, pursuing these questions has felt like "a sea of dissonance. ... I don't want to suggest it is easy. Fortunately I work with brave people, willing to walk into the tough conversations."

Suggestions for internal changes have included communicating more understandably with fewer acronyms, offering support and trainings in teams, and creating career pathways within the organization to help retain diverse staff members.

"The results? We're realistic and hopeful," Morrissey reported. "I can't help believe that when others see how hard this organization is working to be honest with itself and improve our practice, they will want to join in our odyssey."

For more on IslandWood's inclusion work and to download their Self-Assessment of Cultural Capacity Rubric, see <https://naaee.org/eeopro/groups/diversity-equity-and-inclusion/discussions/how-one-primarily-white-ee-organization-0>.

And learn more about how IslandWood is tracking its progress at <https://islandwood.org/about/blogs/entry/tracking-our-progress-toward-becoming-more-culturally-capable-organization>.

## Guideline 5.2 Invest in building capacity for engagement

Some of the skills and capacities for community engagement may be outside the experience of partners, staff, volunteers, and leadership. Enhancing these may require investing resources and creativity.

### Indicators:

- Support partners, staff, volunteers, and leadership in assessing their personal, professional, and organizational cultural competencies and biases.
- Invest in diversity training and experiences for partners, staff, volunteers, leadership, and perhaps participants to build awareness and understanding.
- Provide opportunities for partners, staff, volunteers, and leadership to hone facilitation, conflict resolution, and communication skills.
- Develop personal and professional leadership and other partnership building skills among partners, staff, volunteers, and community leaders.
- Tap different perspectives and experiences to strengthen your initiative.

## Guideline 5.3 Incorporate learning, improvement, and adaptation

Building in evaluation and ongoing adaptation is especially important in the long-term partnerships and initiatives that often underpin community engagement efforts.

### Indicators:

- Incorporate a variety of assessment, evaluation, and feedback mechanisms into program planning using strategies such as adaptive management.
- Use participatory tools for assessment.
- Track changes over time and measure progress towards meeting goals and objectives at regular intervals.
- Create a participatory culture within the partnership to build trust and support sustained engagement.
- Incorporate opportunities for partners to reflect on, evaluate, and adapt their partnership, using these guidelines and other feedback.
- Consider how the measurement or monitoring of community well-being, sustainability, and resilience indicators can be incorporated into evaluation efforts.

See [Resource #21](#), page 149, for a sampling of program-planning and process-design tools created specifically for conservation and environmental education efforts.

See [Resource #22](#), page 152, for an overview of the field's professional recommendations for developing and delivering high-quality nonformal environmental education programs.

See [Resource #23](#), page 154, to learn more about types of evaluation and how to incorporate them into your environmental education and community work.

See [Resource #24](#), page 157, to learn about "ripple effect mapping," a participatory and capacity-building evaluation process.



## Guideline 5.4 Plan for long-term support and viability

Given the long-term nature of many community engagement efforts, planning to support the initiative over time is essential.

### Indicators:

- Match program plans to the scale, resources, and organizational capacity of partners.
- Account for needed resources in any plans to expand the initiative.
- Solicit or distribute resources to partners and collaborators equitably.
- Envision and allow for change and new opportunities when planning.
- Account for cycles of issues, and the initiative's place in the larger, longer process of community change.
- Build relationships that can continue and grow beyond the initial collaboration.
- Continue to engage and educate elected officials and other decision makers.

## Riding the Tides of Organizational Viability

The Spanish word “merito” translates as “merit,” and the MERITO Foundation has earned its name. MERITO stands for Multicultural Education for Resource Issues Threatening Oceans. An ocean education and conservation initiative focused on multicultural communities, the MERITO Foundation has provided ocean and climate science education to more than 10,000 K–12 students, and professional development to more than 300 teachers in southern and central California since 2005.

The MERITO Foundation’s environmental education products and services are tailored around the environmental issues and community needs of the region, including aligning curricula to the state’s science standards. Field experiences are designed to be culturally appropriate, and are bilingual because so many of the students in southern and central California are of Latin American descent.

But the MERITO Foundation is also an example of riding the tides, and gaining hard-won lessons about organizational viability. MERITO was originally a program of Office of National Marine Sanctuaries within the National Oceanic and Atmospheric Administration (NOAA). However, with federal budget cutbacks, the program was threatened. With NOAA’s permission, community members coalesced to save it by forming the nonprofit MERITO Foundation. The path was often arduous, with political and administrative hurdles to clear.



“It took years of planning, volunteering, and negotiating,” said MERITO Foundation’s founder and director Rocío Lozano-Knowlton, adding, “If I’d been younger, I might have given up. But I’ve done enough in my life to know this was worthwhile.”

While the goals of community-based multicultural environmental education are laudable, MERITO partners say their experience is a reminder that agencies and organizations should not launch programs without clarity about how they will be sustained.

Supporters now acknowledge that government funds may serve more effectively as a catalyst than as reliable long-term support. Knowing that community engagement initiatives require long-term relationships and trust, participants benefit from identifying realistic partnership strategies.

Overcoming struggles and growing pains associated with the evolution from a program into an organization has led to new approaches, diversified educational initiatives, and new ways to support them. Ultimately, diversifying funding has allowed the initiative not only to be more self-sufficient, but has also opened up options for other partnerships.

Read about MERITO Foundation director Rocío Lozano-Knowlton’s work empowering students to address climate change and ocean acidification at <https://naaee.org/eepro/blog/eecapacitys-ccc-fellowship-and-eecoa>.

More information on the MERITO Foundation is available at <http://www.meritofoundation.org>.

## Guideline 5.5 Embrace change and celebrate progress

Even if aimed at long-term change, community engagement creates progress in increments. Celebrating change and program success when it happens strengthens essential relationships.

### Indicators:

- Practice a facilitative style of leadership that supports inclusion, community engagement, inspiration, and positive change.
- Nurture trust in personal relationships and coalitions.
- Look for progress—including where you might not usually look—and celebrate it as a way to renew and strengthen the initiative.
- Tell the story of the partnership and share evaluation results widely.
- Imagine new models for success and celebrate them.
- Honor contributions, including those of leadership.

See [Resource #25](#), page 161, to help you reflect on your capacity and orientation toward the kind of leadership that supports community change, and skills, qualities, and attitudes you can foster in yourself and look for in partners.

## GUIDELINES IN PRACTICE

### Long-Term Commitment to a Watershed

In Montana’s Big Hole river basin, concern about a growing population and housing development near the wild and remote river prompted the Big Hole Watershed Committee to embark on two years of outreach, education, and consultation with residents in four counties along the river. Efforts included educational watershed tours, community meetings, a survey of residents, and community-based learning about the implications of land use planning for land values and tax revenue.

Led by a diverse group of ranchers, conservation professionals, hunters, and recreational users, the committee worked with technical advisers, local planners, county commissioners, land trust experts, appraisers, real estate professionals, landowners, and other community members to draft a land use plan based on a vision and principles developed by local residents. Four years after the effort started, the Big Hole Land Use Plan and a related set of River Conservation Standards were adopted by all four county governments. Working together, the four counties also created a review board with representatives from each county and the watershed committee to make recommendations about development proposals and zoning decisions.

One area planner says the River Conservation Standards “have not been a silver bullet,” but have greatly expanded the counties’ ability to influence development in the Big Hole River corridor. The planning effort has also sparked new initiatives, as the Big Hole Watershed Committee and its partners identify other ways to work together to protect streamside vegetation, wildlife habitat, water quality, and stream flows.

For more information, see Sonoran Institute, 2009. *Planning for People and Wildlife: A Handbook for Montana’s Citizens and Local Officials*. <https://naaee.org/sites/default/files/planning-for-people-and-wildlife-a-workbook-for-montanas-citizens-and-local-officials-01152009.pdf>.

# Ten Great Resources for Community Engagement

Throughout, *Community Engagement: Guidelines for Excellence* refers to websites, organizations, and publications you can use to explore unfamiliar topics, approaches, and practices. Some of these resources rise to the top as so broadly helpful that they belong in everyone's library or bookmarks folder. Here's a top ten:

## Everyday Democracy

[www.everyday-democracy.org](http://www.everyday-democracy.org)

Everyday Democracy's programs and services help create communities that work better for everyone because all voices are included in public problem solving, and help strengthen our democracy. Everyday Democracy offers community assistance and training to support a process of "dialogue to change." Its website features many case studies and a variety of tools and techniques.

## National Audubon Society's Diversity and the Conservation Movement

[https://naaee.org/sites/default/files/eepro/resource/files/diversity\\_module.9.22.15.pdf](https://naaee.org/sites/default/files/eepro/resource/files/diversity_module.9.22.15.pdf)

Developed in partnership with National Audubon Society, NAAEE, Toyota TogetherGreen, the U.S. Fish and Wildlife Service, and EE Capacity, *Diversity and the Conservation Movement* offers context, case studies, and tools to inform dialogue and action toward strengthening diversity and inclusion in conservation. Bonta, Marcelo, Tony DeFalco, and Chandra Taylor Smith. *Diversity and the Conservation Movement*. Edited by John Carey. New York, NY: National Audubon Society, 2015.

## National Audubon Society's Tools for Engagement

<https://naaee.org/sites/default/files/eepro/resource/files/toolsofengagement.pdf>

This comprehensive toolkit is organized into twenty steps for engaging people in conservation work. Emphasizing the need for flexibility and adaptability, the authors provide a wide variety of examples, tips, worksheets, and links to resources.

Braus, Judy, Ed. *Tools for Engagement: A Toolkit for Engaging People in Conservation*. New York, NY: National Audubon Society, 2011.

## National Coalition for Dialogue and Deliberation (NCDD)

[www.ncdd.org](http://www.ncdd.org)

NCDD represents dialogue and deliberation practitioners and scholars from a wide variety of fields. NCDD hosts conferences, creates educational materials, and facilitates online and in-person professional networking. NCDD's online resource center offers thousands of resources for dialogue, deliberation, and public engagement. Here you can find descriptions and links to books, articles, case studies, evaluation tools, videos, organizations, and foundations.

## National Extension Water Outreach Education

<http://fyi.uwex.edu/wateroutreach/>

This website features extensive resources, research, and practical tools, including "Water Outreach Education," which encourages the use of best education practices to plan an effective natural resources outreach strategy, and "Changing Public Behavior," which offers tools to increase involvement using target audience information.

## North American Association for Environmental Education (NAAEE), eePRO

<https://naaee.org/eepro>

This online resource for environmental education professional development offers resources, research, and listings of webinars, workshops, and other learning opportunities. eePRO is also an online forum for special-interest discussions in which peers and experts exchange ideas and resources.

### Public Participation for 21st Century Democracy

<http://www.wiley.com/WileyCDA/WileyTitle/productCd-1118688406.html>

This book explores public participation in decision-making and problem-solving, illustrated with examples of innovative participatory activities. The book's website offers free public engagement resources for download, including a 45-page skills module for public participation that includes everything from recruiting participants to managing discussions and conflict to helping participants generate ideas and make decisions together.

Nabatchi, Tina and Matt Leighninger. *Public Participation for 21st Century Democracy*. Hoboken, NJ: John Wiley & Sons, Inc., 2015.

### Standards of Excellence for Urban National Wildlife Refuges

<http://www.fws.gov/urban/soe.php>

This online framework for collaboration and inclusive community engagement was created in 2014 by the U.S. Fish and Wildlife Service and the National Wildlife Refuge System. It features a variety of tools and resources for building a robust conservation constituency in urban populations.

### The University of Kansas Community Toolbox

<http://ctb.ku.edu/en>

This website offers an array of practical, "how-to" guidance in specific skills (e.g. communication, strategic planning, analyzing community problems, cultural competence, fundraising, and social marketing). It also offers a simple action model for projects, from planning and implementation to evaluating and sustaining your efforts. You can dip into the toolbox for specific needs, link from your organization's website to specific tools, or even create a personalized "mashup" of tools that fit with your group's framework for change.

### University of Minnesota Extension—Civic Engagement

<http://www.extension.umn.edu/community/civic-engagement/>

Drawn from research and best practices, this website provides background information, tip sheets, case studies, and resources on ways of engaging community members successfully. Topics range from designing community meetings to understanding and growing social capital to community decision making. Free, downloadable "how to" guides offer practical advice on essential subjects.



# Supporting Resources

## Overview

This collection of resources is designed to augment the guidelines, providing background information so you can dive more deeply into aspects of environmental education and community engagement that may be unfamiliar. The purpose stated at the top of each resource provides an overview. At the end of each resource you will find a list of selected references that point the way to more information and guidance.

You will see links from the resources to specific guidelines or indicators. Navigate back and forth between the guidelines and the resources, as you explore new ideas for designing environmental education practices and programs that strengthen the interwoven strands of environment and community, create more inclusive programs and working environments, and support social equity, effective partnerships and coalitions, and long-term change.

Some of the resources might encourage you to stretch beyond your areas of expertise and your professional comfort zone. You may need to develop new skills or seek training in order to apply these ideas fully and use the results to your best advantage. Find out what your partners or potential partners know, and consider adding partners who have expertise where you do not. Keep in mind that you can gain much understanding by applying the general strategies and concepts outlined in these resources, even if you don't use each approach fully or with a rigorous methodology.

## Contents

<b>Resource #1:</b> Community Well-Being, Sustainability, and Resilience	63
<b>Resource #2:</b> Community-Based Environmental Education: An Overview	70
<b>Resource #3:</b> Community Assessment	76
<b>Resource #4:</b> Organizational and Professional Readiness for Community Engagement	80
<b>Resource #5:</b> Community Readiness for Change	84
<b>Resource #6:</b> Community Asset Mapping	86
<b>Resource #7:</b> Making Environmental Education Programs and Places Accessible	89
<b>Resource #8:</b> A Framework for Environmental Education Strategies	91
<b>Resource #9:</b> Environmental Education Materials: Guidelines for Excellence	96
<b>Resource #10:</b> Designing Civic Engagement	98
<b>Resource #11:</b> Creating Strategic and Effective Partnerships and Coalitions	105
<b>Resource #12:</b> Engaging with Diverse Partners and Community Members	112
<b>Resource #13:</b> Participatory Design	121
<b>Resource #14:</b> Collaborative Leadership	123
<b>Resource #15:</b> Stakeholder Engagement	125
<b>Resource #16:</b> Addressing Conflict	130
<b>Resource #17:</b> Connecting Environmental Education with Other Social Change Strategies	135
<b>Resource #18:</b> Appreciative Inquiry	138
<b>Resource #19:</b> Asset-Based Community Development	142
<b>Resource #20:</b> Collective Impact	145
<b>Resource #21:</b> Program Planning and Process Design	149
<b>Resource #22:</b> Nonformal Environmental Education Programs: Guidelines for Excellence	152
<b>Resource #23:</b> Evaluation	154
<b>Resource #24:</b> Ripple Effect Mapping: A Participatory, Capacity-Building Evaluation Tool	157
<b>Resource #25:</b> Leading for Change	161



## Resource #1

### Community Well-Being, Sustainability, and Resilience

**Purpose:** Provides insights into using systems-based concepts such as community well-being, sustainability, and resilience to align environmental education with broader community concerns, capacities, partners, and alliances.

*Community well-being is about the happiness and health of the community in which we live. Our sense of well-being is affected by our physical and mental health, the relationships between us, the natural and built environments in which we live, the economy, and our ability to have a say in the decisions that matter to us.*

*Community well-being is about how all these things come together to support us to live happy, healthy and meaningful lives.*

—City of Darwin, Community Well-being Plan<sup>6</sup>

*Sustainability is based on a simple principle: Everything that we need for our survival and well-being depends, either directly or indirectly, on our natural environment. To pursue sustainability is to create and maintain the conditions under which humans and nature can exist in productive harmony to support present and future generations.*

—U.S. Environmental Protection Agency<sup>7</sup>

*To be able to declare that community resilience has been achieved, we must develop systems that address the needs and provide protection for those most vulnerable and marginalized.*

—National Association for the Advancement of Colored People<sup>8</sup>

The quality of our environment is inextricably bound with human health and well-being. Protecting a healthy environment is essential to addressing a broad range of community issues, sustaining community vitality over time, buffering against damage, and adapting to changing conditions such as climate instability.

However important, environmental quality may not be at the top of everyone's agenda. Although they may see tackling environmental problems as important to community health, many community members and groups are likely to prioritize other issues as starting points for improving community conditions and well-being. Or they may be advancing environmental solutions in ways difficult to recognize for those accustomed to looking through an environmental education or traditional advocacy lens.

<sup>6</sup> City of Darwin. "Community Wellbeing Plan." Accessed June 18, 2016. <http://www.darwin.nt.gov.au/cwp>.

<sup>7</sup> U.S. EPA. "Learn About Sustainability." Accessed September 24, 2016. <https://www.epa.gov/sustainability/learn-about-sustainability#what>.

<sup>8</sup> Patterson, Jacqui. "Equity in Resilience Building for Climate Change Adaptation Planning." NAACP, 2015. Accessed September 24, 2016. <http://www.naacp.org/latest/equity-in-resilience-building-for-climate-adaptation-planning>.

Environmental educators can highlight connections between environmental quality and other aspects of community health. Three related concepts—community well-being, sustainability, and resilience—can help illustrate these connections and forge partnerships among community efforts with compatible aims. (See, for example, the “Guidelines in Practice” case study that highlights collaboration among environmental groups, a university, and a nurse-led care consortium in Philadelphia, Pennsylvania, around climate change and human health, page 27.)

The concepts of sustainability, resilience, and community well-being are united by a common understanding that cultural, social, natural, and economic systems are interdependent.

### DID YOU KNOW?

## Sustainability, Resilience, and Community Well-Being



**Sustainability**—Originally an ecological concept referring to how biological systems endure and remain diverse, sustainability is now commonly used to describe the viability of interdependent human and natural systems over time. The United Nations Brundtland Commission defined sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”<sup>9</sup>

**Resilience**—The capacity of a complex system—such as a company, a city, or an ecosystem—to survive, adapt, and grow in the face of unforeseen changes and catastrophic incidents.<sup>10</sup> Urban ecology professor, Timon McPhearson, points out that our efforts at building resilience need to be linked with sustainability so that we move toward the sustainable natural and human systems that we desire, and not get locked into trajectories that are not sustainable.<sup>11</sup>

**Community well-being**—The conditions which maximize the potential for individuals, communities and societies to flourish and fulfill their potential.<sup>12</sup> Contributors to community well-being include social equity, economic prosperity, environmental sustainability, and cultural vitality.

<sup>9</sup> United Nations World Commission on Environment and Development. Our Common Future: Report of the World Commission on Environment and Development, 1987. [https://naaee.org/sites/default/files/report\\_of\\_the\\_world\\_commission\\_on\\_environment\\_and\\_development.pdf](https://naaee.org/sites/default/files/report_of_the_world_commission_on_environment_and_development.pdf).

<sup>10</sup> Definition based on one used by the Center for Resilience at The Ohio State University. <http://resilience.osu.edu/CFR-site/concepts.htm>.

<sup>11</sup> See, for example, McPhearson, Timon. (2014). “The Rise of Resilience: Linking Resilience and Sustainability in City Planning,” on the Nature of Cities website. <https://www.thenatureofcities.com/2014/06/08/the-rise-of-resilience-linking-resilience-and-sustainability-in-city-planning>.

<sup>12</sup> Wiseman, John, and Kathleen Brasher. “Community Wellbeing in an Unwell World: Trends, Challenges, and Possibilities.” *Journal of Public Health Policy* 29, no. 3 (2008): 353-66. doi:10.1057/jphp.2008.16.

## Understand the Interconnecting Systems

There would be little argument that a community's well-being would be in jeopardy if the water were undrinkable, if no one cared for vulnerable populations, or if parts of the population were chronically unemployed. But, as with many complex concerns, the component parts—the need for well-paying jobs, increased asthma or obesity rates, affordable and available childcare, the quality of the air, under-investment, and other systemic ways in which some communities are marginalized—may well be seen as separate issues to be tackled one at a time by individual groups or organizations.

Seeing how component systems are interdependent is fundamental to the ideas of community well-being, resilience, and sustainability. Overlapping domains of social equity, economic prosperity, environmental sustainability, and cultural vitality underlie community well-being and sustainability. And the relationships among these interdependent systems, and their responsiveness, diversity, and adaptability, are important determinants of community resilience.



All three concepts provide holistic lenses through which to view and connect community dynamics, concerns, and issues that are routinely treated separately by community actors, government agencies, laws, and policies.

This holistic understanding reveals that water quality, for example, is not only an environmental issue. It may well affect how people recreate, whether employers are willing to locate in the community, or the long-term health of families who don't have access to properly treated water or who eat fish from the river. Understanding the systems and how they are interconnected with one another can help you identify possible synergies, partnerships, and shared goals.

## Equity Is Central



Equity is central to each of these systems-based concepts, and in the policies, practices, and engagement through which communities seek well-being, sustainability, and resilience.

In the United States, communities of color tend to fare worse in many aspects of community well-being than do white populations. Participatory research conducted in Multnomah County, Oregon (where Portland is located), found significant disparities between communities of color—including Native American, African American, Latino, and Asian and Pacific Islander—and whites in employment, education, economic status, juvenile crime, social services, and economic opportunity.

Many of these disparities have deep roots in a structure of policies, institutional practices, and access to resources and opportunities that perpetuates racial and ethnic inequality. In addition, American society still wrestles with disparities based on gender, physical ability, age, and other characteristics, often similarly rooted in these structural inequities.

Social justice and environmental justice advocates may play important roles in communities' efforts to move toward sustainability, community well-being, and resilience. They help to identify these disparities, raise awareness, and highlight the importance of equity within broader partnerships and coalitions. A commitment to addressing the socioeconomic disparities, institutional bias, and inequity of services experienced by communities of color and other marginalized groups is critical to sustainable progress, as is working with these communities to act collectively for greater self-determination, wellness, justice, and prosperity.

See Curry-Stevens, A., A. Cross-Hemmer, and Coalition of Communities of Color (2010). *Communities of Color in Multnomah County: An Unsettling Profile*. Portland, OR: Portland State University. [www.coalitioncommunitiescolor.org/ccs-dataresearch/](http://www.coalitioncommunitiescolor.org/ccs-dataresearch/).

## Advancing Economic, Social, and Environmental Goals

Cully is Northeast Portland's largest neighborhood, with a population of 13,322 residents and covering over three square miles. Standing on the site of a historic native (Chinook) village called Neerchokikoo, Cully includes, by some measures, the most racially and ethnically diverse census tract in Oregon. Some 26 percent of residents live in poverty, 51 percent of residents are people of color, and almost nine in ten students qualify for free or reduced lunch.



The rapidly developing inner neighborhoods of Portland are generally rich in amenities such as parkland, open space, bike lanes, and neighborhood services. However, Cully suffers from low household incomes, poor walkability, scarce access to transit, relative lack of open space, and numerous brownfields (contaminated, post-industrial land), leading to deficiencies in commercial and recreational opportunities.

In 2010, an innovative collaboration called “Living Cully” was formalized, made up of Cully-based organizations with a deep understanding of the community, a rich history of working together, and complementary strengths. Hacienda Community Development Corporation (CDC), Native American Youth and Family Center (NAYA), Habitat for Humanity Portland/Metro East, and Verde banded together to advance sustainability as an anti-poverty strategy. Living Cully planned to generate economic, ecological, and social benefits for low-income people and people of color through green infrastructure, housing, and workforce programs and projects.

“In transforming Cully Park from a 25-acre landfill into a park, we’ve generated jobs and job training opportunities for minority-, woman- and locally-owned companies and local residents,” said Tony DeFalco, Living Cully Coordinator at Verde. “We’ve created meaningful opportunities for youth to design elements of the park and obtain exposure to environmental career pathways. We’ve also listened to and created space for Native residents to express themselves in the city’s first Inter-Tribal Gathering Garden,” he said.

Living Cully is a long-term, community-based strategy that supports cross-organizational collaboration in one geographic area, and demonstrates that economic, social, and environmental goals are mutually reinforcing.

Learn more at [www.livingcully.org](http://www.livingcully.org).

## Three Ways to Use these Systems-Related Concepts in Community Work

How can the concepts of resilience, sustainability, and community well-being support the work of environmental educators in community partnerships and coalitions? Here are three ideas:

### 1) Enhance Capacity for Effective Change

Environmental education can help build capacity needed for a sustainable, healthy, and resilient community (as defined by the community), develop skills and pathways for action, build on existing concerns and ways of taking care of the community, and promote a sense of responsibility and willingness to act—all with environmental quality as an integral component.

Monroe, Anderson, and Biedenweg articulate a useful framework for selecting the appropriate educational tools for different situations. The EE framework details four categories of learning based on overarching purposes and matches these categories to specific strategies and methods:

- Convey information (e.g., information campaigns, poster, brochure)
- Build understanding (e.g., issue investigation, workshop, guided nature walk)
- Improve skills (e.g., environmental monitoring, mentoring, cooperative learning)
- Enable sustainable actions (e.g., action research, adaptive collaborative action service learning)<sup>13</sup>

See [Resource #8](#), page 91, to learn more about the framework for matching your purposes to educational approaches and tools.

### 2) Identify Co-Benefits and Allies

Placing environmental sustainability within the context of community well-being and resilience serves as a powerful planning and communication tool for addressing issues more fully. It helps explain why those who care about obesity, children's health, employment, and disaster-preparedness should also care about water quality, for example. It also offers a framework in which they can connect related actions to the primary goals of their organizations—and vice versa. Using these broad frameworks provides opportunities for learning together and relationship building.

It helps frame climate change, food production, air quality, habitat restoration, and other environmental issues in terms of co-benefits. For instance, considerable work has been done internationally on identifying the co-benefits of climate change mitigation—identifying win-win strategies. Looking at health benefits, the World Health Organization (WHO) states:

*Potential health gains of a shift from private motorized transport to prioritized walking, cycling, and rapid transit/public transport systems include reduced respiratory/cardiovascular disease from air pollution, less traffic injury, and noise stress. In addition, large benefits are expected from increased physical activity, which can prevent some cancers, type 2 diabetes, heart disease and other obesity-related risks. Improved mobility for women, children, the elderly, and low income groups enhances health equity.*<sup>14</sup>

<sup>13</sup>. Monroe, Martha C., Elaine Andrews, and Kelly Biedenweg. "A Framework for Environmental Education Strategies." *Applied Environmental Education & Communication* 6, no. 3-4 (2008): 205-16. doi:10.1080/15330150801944416.

<sup>14</sup>. Hosking, Jamie, Mudu Pierpaolo, and Dora Carlos. *Health Co-Benefits of Climate Change Mitigation—Transport Sector Health in the Green Economy*. Geneva, Switzerland: World Health Organization, 2011.

Identifying co-benefits of promoting a healthy environment leads to thinking about who—who is working on these related components of community well-being, resilience, and sustainability? Successful capacity building often requires the involvement of people and organizations with different skills, perspectives, and expertise. Partnerships can make it easier to address environmental issues and community well-being at the same time.

See [Resource #11](#), page 105, to learn more about creating partnerships and coalitions.

How might a focus on habitat restoration, for instance, link to other community issues and concerns? Mapping out the possible connections—quality drinking water, increased recreational opportunities, job creation—will help you think about the groups (e.g., public health, faith-based groups, job training and development, city planning) that are already working on these issues and how you might collaborate. Undertaking this exploratory mapping process together with other community groups and members provides an opportunity to explore and learn from one another and build relationships across differences.

### 3) Identify Indicators of Progress

Identifying useful and appropriate indicators is a challenge common among efforts to understand and track community performance and improvement across community health, well-being, sustainability, and resilience. Using a collaborative process to select measures by which to assess the situation and progress is another way to leverage the breadth of these systems-based concepts as practical frameworks for community change.

#### Selected References

Colussi, M. *Overview of Community Resilience Models and Toolkits*. Transition United States. [https://naaee.org/sites/default/files/overview\\_of\\_community\\_resilience\\_models\\_and\\_toolkits\\_1.pdf](https://naaee.org/sites/default/files/overview_of_community_resilience_models_and_toolkits_1.pdf).

Community Indicators Victoria. *Community Indicators Victoria: A Resource Guide Using CIV as a Tool for Council Planning* (2016). <https://naaee.org/sites/default/files/civresourceguide.pdf>.

International Federation of Red Cross and Red Crescent Societies. *IFRC Framework for Community Resilience*. Geneva: International Federation of Red Cross and Red Crescent Societies, 2014. [https://naaee.org/sites/default/files/1284000-framework\\_for\\_community\\_resilience-en-lr.pdf](https://naaee.org/sites/default/files/1284000-framework_for_community_resilience-en-lr.pdf).

Patterson, J. "Equity in Resilience Building for Climate Change Adaptation Planning—Resilience Indicators." NAACP, 2015. [https://naaee.org/sites/default/files/equity\\_in\\_resilience\\_building\\_climate\\_adaptation\\_indicators\\_final.pdf](https://naaee.org/sites/default/files/equity_in_resilience_building_climate_adaptation_indicators_final.pdf).

Sustainable Communities Online. <http://www.sustainable.org>.

Wiseman, John, and Kathleen Brasher. "Community Wellbeing in an Unwell World: Trends, Challenges, and Possibilities." *Journal of Public Health Policy* 29, no. 3 (2008): 353-66. doi:10.1057/jphp.2008.16.

## Resource #2

### Community-Based Environmental Education: An Overview

**Purpose:** Introduces Community-Based Environmental Education (CBEE), an approach that was developed by Cooperative Extension education and outreach professionals. CBEE is designed to use environmental education to support community involvement in decision making about the environment.

Community Based Environmental Education<sup>15</sup> is based on the understanding that the nation's environmental future will, for the most part, be determined locally. National forces may encourage action through regulation, money, or information, but Hometown, USA, is most often where the "rubber" of decision and action meets the "road" of environmental impact.

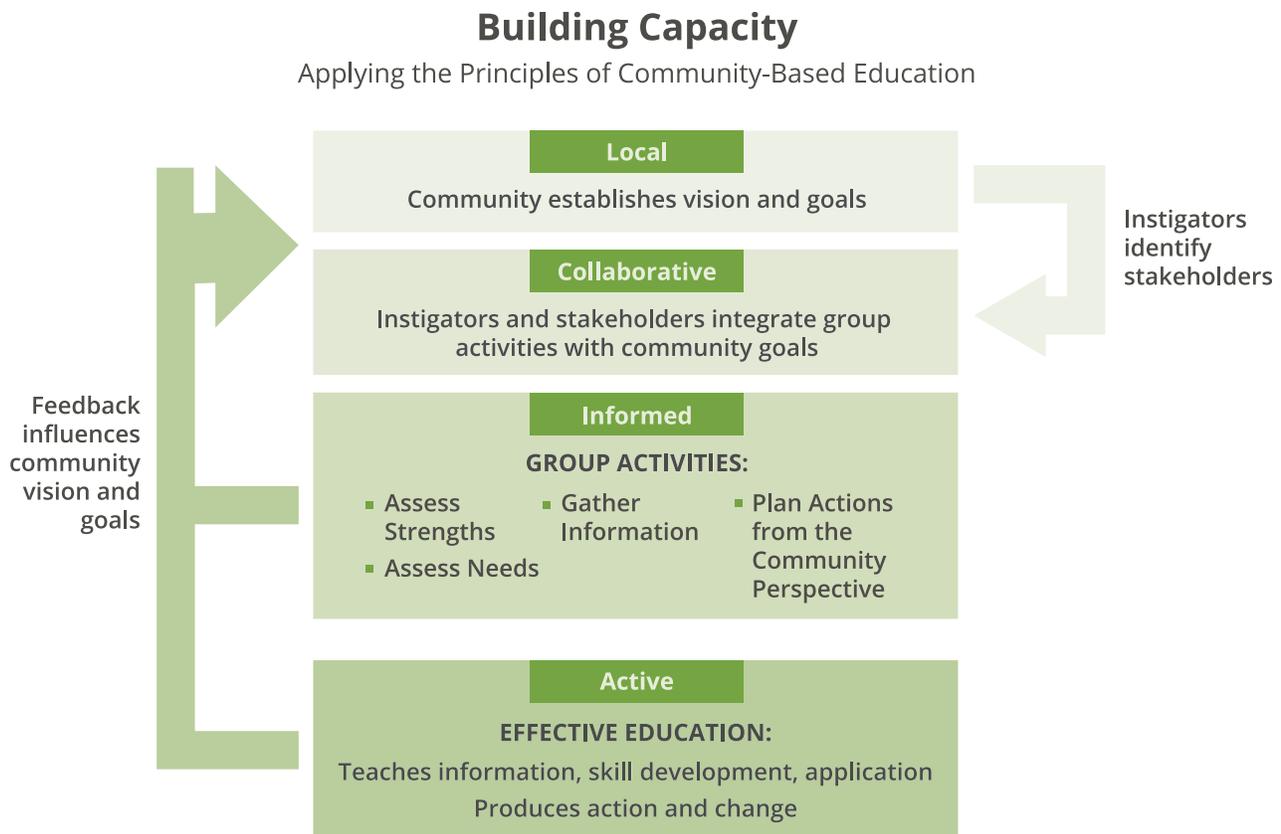
Community-based education means more than "education based in the community." Typically, an environmental educator selects a strategy, basing the decision on the topic, audience, available resources, and the educator's skills. In CBEE, however, the environmental educator's role is different, focused on collaborating with the community at every step and facilitating community efforts toward environmental sustainability. By collaborating with the community on an education plan that matches residents' interests—and fits the social, economic, and political context—environmental educators can support community initiatives and enhance local capacity to manage the environment.



<sup>15</sup> The CBEE model is a result of a 1996-98 collaboration that investigated ways to strengthen partnerships among USDA Cooperative Extension, US EPA, and communities in the service of these environmental management and education efforts. The model's creation process included an examination of community environmental management efforts, review of academic studies, identification of commonalities, and peer review of the model. The project is summarized in An EPA/USDA Partnership to Support Community-Based Education: Discussion Paper, EPA 910-R-98-008, US Environmental Protection Agency, Region 10, August 1998, 31 pp. [http://naaee.org/sites/default/files/discussion\\_paper.pdf](http://naaee.org/sites/default/files/discussion_paper.pdf).

Some content for Resource #2 has been summarized from Andrews, E., M. Stevens, and G. Wise. "A Model of Community-Based Environmental Education." Edited by Thomas Dietz and Paul C. Stern. Chapter 10 of *New Tools for Environmental Protection: Education, Information, and Voluntary Measures*. National Research Council Division of Behavior and Social Sciences and Education: Committee on the Committee on the Human Dimensions of Global Change. National Academy Press, 2002.

## A Model of Community-Based Environmental Education



Applying a community-based approach is both an art and a science. The art is in the educator’s ability to notice and take advantage of connections and opportunities. The science involves applying skills needed for working with a coalition or groups. How the approach is applied depends on the characteristics of the community and of the groups or agencies involved. The success of Community-Based Environmental Education is defined by results: it leads to positive actions. In addition to environmental education, this approach may incorporate social marketing, public participation, and right-to-know strategies, as well as volunteer management research. To be effective, CBEE must meet four criteria: local, collaborative, informed, and active.<sup>16</sup>

<sup>16</sup> E. Andrews, M. Stevens, and G. Wise. “A Model of Community-Based Environmental Education.” Edited by Thomas Dietz and Paul C. Stern. Chapter 10 in *New Tools for Environmental Protection: Education, Information, and Voluntary Measures*. National Research Council Division of Behavior and Social Sciences and Education: Committee on the Committee on the Human Dimensions of Global Change, National Academy Press, 2002. Figure is reprinted with permission from the National Academies Press, from page 164.

### **Local: Address a locally identified issue and work toward a positive outcome**

Effective CBEE is created in response to local concerns and builds on local strengths. To address an issue or concern effectively, community members must recognize the link with their local interests and be able to find and use the resources they need to take action.

Because they are developed collaboratively with local community members, CBEE programs identify and build on community strengths. They can take advantage of timely events and opportunities, and collaborate with all interested groups including members of the target audience.

### **Collaborative: Work with a coalition or group, giving attention to supporting group effectiveness**

Collaboration requires active, consistent, continuing leadership. Two skills are crucial: facilitating group progress using goal setting and consensus decision making; and building partnerships, networks, and teams. Effective CBEE leaders attend as much to group “process” objectives as to addressing a substantive issue successfully.

When time and money are in short supply—a chronic condition for most programs—being efficient and focused are important. But paradoxically, focusing too heavily on speed and short-term efficiency in Community-Based Environmental Education may delay, or even derail, the program. Long-term improvement of environmental quality ultimately depends on building community capacity to devise and meet environmental management goals. This takes time. Content experts may be relatively inexperienced with process skills. Training can help, but experts can increase their impact by working jointly with local leaders and educators who are skilled in and comfortable with group process.

CBEE project leaders or managers are also more effective when they know and apply strategic planning tools. These tools can help identify vision or purpose; generate, organize, analyze, and prioritize ideas or issues; identify tasks and assign responsibilities; define and solve problems; perform assessments; collect data; and monitor and evaluate programs.

### **Informed: Take action based on information, within the context of community goals**

CBEE programs are integrated into a community planning process and help strengthen individual and collective skills to plan with the environment in mind.

The product or outcome of an effective CBEE project has three parts: (1) informed action on (2) a substantive issue, which leads to (3) lasting change. When one element is missing the effort can be wasted.

For effective action, listen, listen, listen. Gather information about community wants and needs—environmental and socio-economic conditions; local strengths, skills, and resources; and data about the particular issue of concern.

Involving community members in collecting and analyzing data is a powerful and effective tool. By combining new information with their understanding of local people and local preferences, community members can help develop action plans that will motivate them. The key is making a clear connection between the effort and the community's wants and needs.

Successful CBEE actions also relate to long-term community vision and goals; consider the community as a whole (history, culture, and economic or socio-political influences); build on community resources and skills; and match the scope and complexity of the action to the community's resources.

Outside experts must be aware that they bring their own set of information and experiences, and may be concerned about substantive issues that are not apparent to community members. If these issues are to be the project focus, professionals must meet the challenge of translating their concerns in ways that evoke genuine local concern and commitment. Action and information must address a substantive issue that community members see as relevant. Otherwise real change is unlikely.

### **Active: Engage the broader group by using tested education practices**

Community-based environmental education implies an education plan created as a result of community involvement and designed to match community interests. It takes advantage of educational theory and research and uses tested techniques for promoting action and behavior change.

Elements include presenting all points of view; relating to the audience's specific needs and learning styles; presenting behavior choices that are relatively low cost in time, energy, money, and materials; giving the audience opportunities for self-assessment and applying new skills; and using creative approaches.

Social marketing and the study of how innovations diffuse into society also offer useful insights. Research from both the social marketing and environmental education fields shows that two conditions are necessary for learning and change to occur: the education experience (1) presents behaviors that are similar to what people already do, and (2) provides immediate, observable consequences.

An active CBEE project also provides training for community members to support the initiative and build long-term capacity. Training topics might include planning, data gathering and analysis, or other skills identified by the group.

## Implementing Community-Based Environmental Education

Community involvement is the key to successfully implementing plans for natural resource management initiatives, such as clean and safe water. But implementing outreach techniques that lead to measurable impacts is not a simple or straight-forward process. Natural resource professionals and environmental educators may have little experience in how to use social science tools to better understand and relate to audience needs.

Examples, tools, and training materials can help educators to:

- Assess personal accomplishment of skills helpful in facilitating behavior change
- Analyze social components of a particular environmental situation
- Choose which indicators to use to measure change
- Use assessment data to select a strategy that is most likely to lead to desired outcomes

For four case studies highlighting the critical CBEE components, see U.S. EPA/Cooperative Extension Partnership Factsheet No. 8, "Building Capacity: Community-Based Environmental Education in Practice." Examples include programs on urban environmental health and public health, wetland resource management, county-wide groundwater quality, and youth-oriented lake water quality. A PDF copy is available online (see Selected References below).

Here are two online resources specifically focused on applying the CBEE model. Use these links to identify additional learning opportunities:

- National Extension Water Outreach Education: "Facilitating Access to Resources and Best Education Practices," and "Changing Public Behavior," both at <http://fyi.uwex.edu/wateroutreach>
- Changing Public Behavior: People and the Environment, <http://campus.extension.org/course/search.php?search=Changing+Public+Behavior><sup>17</sup>

### Selected References

Andrews, E. An EPA/USDA Partnership to Support Community-Based Education. 910-98-008. US Environmental Protection Agency, Region 10. (1998). Accessed May 2016. [http://naaee.org/sites/default/files/discussion\\_paper.pdf](http://naaee.org/sites/default/files/discussion_paper.pdf).

Andrews, E. and L. Entine. "Building Capacity: Educating for Community Action." US EPA/Cooperative Extension Partnerships. No. 6. (2000). Accessed May 2016. <https://naaee.org/sites/default/files/epa6.pdf>.

Andrews, E. and D. Cantrell. "Building Capacity: From Transferring to Transforming." US EPA/Cooperative Extension Partnerships, No. 7, (2000). Accessed May 2016. <https://naaee.org/sites/default/files/epa7.pdf>.

Changing Public Behavior: People and the Environment, <http://campus.extension.org/course/search.php?search=Changing+Public+Behavior>.

National Extension Water Outreach Education: "Facilitating Access to Resources and Best Education Practices," and "Changing Public Behavior." These and many related resources are available at <http://fyi.uwex.edu/wateroutreach/>.

Thomas, Christopher and Elaine Andrews. "Building Capacity: Community-Based Environmental Education in Practice." US EPA/Cooperative Extension Partnerships, No. 8, (2000). Accessed May 2016. [https://naaee.org/sites/default/files/epa8\\_0.pdf](https://naaee.org/sites/default/files/epa8_0.pdf).

<sup>17</sup>The Changing Public Behavior Project and resources are based upon work supported by the Cooperative State Research, Education, and Extension Service (CSREES), U.S. Department of Agriculture, under Agreement No. 2006-51130-03749.



## Resource #3

### Community Assessment<sup>18</sup>

**Purpose:** Details a proven approach to quickly and accurately define and understand the community in which you are working or intend to work, and offers a variety of other assessment resources.

Community assessments allow you and your partners to quickly and accurately understand the community in which you intend to work so that you can execute your project most effectively.

You can use community assessments to reach a variety of goals, from broad to specific. If the project is not yet clearly defined, a community assessment can help gather baseline information that, in turn, helps set appropriate goals and develop effective strategies. On the other hand, if clear goals and strategies have been set, a community assessment can help refine the strategies identified. For example, the assessment might help identify audiences most affected, understand their needs and desires, identify participation barriers they may face, and so on. In either case, community assessments can serve as a valuable tool.

See **Resource #5**, page 84, to learn more about how community assessment can gauge a community's readiness for change.

Although conducting a community assessment could seem daunting, the U.S. EPA provides useful guidance, outlining six steps:<sup>19</sup>



#### Step One: Conduct Pre-Project Planning

Before the assessment project can begin, ultimate goals need to be clarified. Consider questions such as, “How well do we understand why we’re undertaking this community assessment?” and “How well do we understand the community we’re assessing?” The answers to these questions can help gauge your readiness to start the community assessment, and what you expect to gain from it.

Next, form a team. The team should consist of five to ten people with diverse backgrounds and interests, ideally including at least one person with experience conducting assessments. Consider the pros and cons of involving stakeholders in the assessment phase. Working with a limited number of partners might be faster and offer more control of the goals and methods. But, involving stakeholders can help integrate more ways of thinking, broaden the scope and utility of the project, and enhance the potential reach in the community, among other benefits.

<sup>18</sup>. Resource #3 Community Assessment was adapted from: Braus, Judy, Ed. *Tools for Engagement: A Toolkit for Engaging People in Conservation*. National Audubon Society, 2011. <https://naaee.org/eepro/resources/tools-engagement-toolkit-engaging-people-conservation>.

<sup>19</sup>. Summarized from: U.S. EPA. *Community Culture and the Environment: A Guide to Understanding a Sense of Place*. Washington, DC: U.S. EPA (EPA 842-B-01-003), Office of Water, 2002, 16. Accessed September 9, 2016. [https://naaee.org/sites/default/files/community\\_culture\\_0.pdf](https://naaee.org/sites/default/files/community_culture_0.pdf).

Pre-assessment planning also involves searching for similar studies that have already been completed in the community. Such studies can provide baseline information and can help refine goals and scope, identify key information sources, and suggest additional partners and resources.

Finally, consider the availability of financial resources as planning begins; they'll determine the scope of the assessment. Consider carefully the expected costs (including staff time, travel, outside technical assistance, and costs associated with certain assessment methods) and possible funding sources (including available funds in your existing budget, grants, and in-kind contributions). For example, another group might be willing to contribute resources if you share the results.

## Step Two: Define Goals and Community

The next step involves defining assessment goals. This will likely be an iterative process as you and your partners learn more about the community. But it's important to start out with clear goals that allow you to gauge your progress.

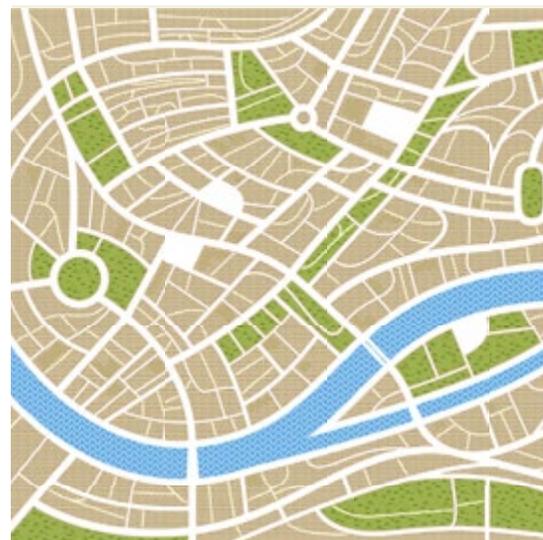
Similarly, you and your partners need to be clear about what community is being assessed. A community can be described by physical or administrative boundaries, local groups or organizations, local activities, and community participation roles. Remember that the assessment process is likely to affect what you know and think about your community, and this is something you are likely to revisit and revise throughout the community assessment.

The EPA community assessment guide provides helpful worksheets for considering your goals and defining your community.

## Step Three: Identify Community Characteristics

This step helps identify what information will help you understand your community and its interests. The following are some of the community characteristics you might assess:

- Community boundaries
- Community capacity and activism
- Community interaction and information flow
- Demographic information
- Economic conditions and employment
- Education levels
- Environmental awareness and values
- Governance
- Infrastructure and public services
- Local identity
- Local leisure and recreation
- Natural resources and landscapes
- Property ownership, management, and planning
- Public safety and health
- Religious and spiritual practices



For example, the assessment might begin with geographic boundaries and landscape characteristics that help better define the physical community. Then you might establish a baseline with descriptive information such as demographics, employment, and infrastructure. Next you might focus on characteristics such as environmental values and religious practices. The specific characteristics you study will depend on your project's goals. The EPA guide provides extensive information and planning tools related to each of the community characteristics you might explore.

## Step Four: Identify Assessment Methods

Once you have defined your goals, defined your community boundaries, and identified the characteristics you want to analyze, you need to select the methods that will help you collect the desired information. The following are some of the most common data collection methods:

- **Background research**—Collecting information from existing sources
- **Census data research**—Using U.S. Census data to collect demographic and economic information
- **Focus groups**—A facilitated meeting of community members in which the moderator helps explore the participants' feelings, beliefs, knowledge, and attitudes related to specific issues or topics
- **Interviews**—Asking individuals or small groups questions and recording their responses, which can be analyzed for patterns or themes that reflect perceptions, opinions, knowledge, and so on
- **Maps and geographic research**—Using maps (both current and historical) can reveal physical boundaries, the relationship between the community and the larger geographic context, and changes over time
- **Meetings**—A gathering of community members representing a variety of interests in which participants discuss community issues and provide input that can help define the community, refine goals, and identify and coordinate with stakeholders
- **Observation**—Watching and tracking the behavior of community members, or tracking other phenomena, to understand or confirm community characteristics or to complement other assessment methods such as surveys and focus groups
- **Regional economic data research**—Organizing specific information about industries, jobs, employers, income, and other factors to understand both economic health and the role of natural resources in a community's economic base
- **Social maps**—Collecting, organizing, analyzing, and illustrating social data about a community. Social maps illustrate connections in a community and can include asset maps (focused on capacities and assets in the community), cognitive maps (based on personal perceptions and experiences), concept maps (identifying causes and effects in a community), and social network maps (depicting patterns of information, communication, and relationships).
- **Surveys and polls**—Written questionnaires, online surveys, or interviews (in person or telephone) that collect information from community members. Survey responses can be linked with characteristics of the respondents (such as income, employment sector, residential location, or others) for the purposes of comparison between groups.
- **Visual methods**—Using photographs, video, illustrations, or other methods to gather information about social, cultural, or ecological features of a community or to help create a tangible vision for the future



## Step Five: Analyze Results

Analyzing the results of your data collection efforts requires five steps:

- Store the data in a way that makes it readily accessible.
- Revisit your goals and community characteristics to reestablish what you wanted to know.
- Organize your data by the method you used to collect it.
- Analyze the data by type (quantitative, qualitative, and graphic).
- Summarize and present your findings in a way that others can understand.

The EPA guide provides direction for analyzing quantitative, qualitative, and graphic data.



## Step Six: Select and Implement Best Strategies

Based on the results, input from your partners and stakeholders, and your initial goals, your assessment can help you select and implement the best strategies for your project. And just as the community assessment results inform your strategies, your strategies might point to the need for further community assessment work in the future.

See [Resource #6](#), page 86, for an introduction to asset mapping and pointers on using this process with your community.

## Selected References

Community Assessment Tools—A Resource for Rotary Projects. Rotary International, Evanston: IL. <https://www.rotary.org/myrotary/en/document/community-assessment-tools>.

Community Action Partnership. Comprehensive Community Needs Assessment Tool and Mapping Hub. <http://www.communitycommons.org/groups/community-action-partnership/>.

Community Culture and the Environment: A Guide to Understanding a Sense of Place, 2002, U.S. EPA (EPA 842-B-01-003), Office of Water Washington, DC. [https://naaee.org/sites/default/files/community\\_culture\\_0.pdf](https://naaee.org/sites/default/files/community_culture_0.pdf).

EJSCREEN: Environmental Justice Screening and Mapping Tool. EPA. <http://www2.epa.gov/ejscreen>.

KU Work Group for Community Health and Development. Chapter 3, "Assessing Community Needs and Resources." Lawrence, KS: University of Kansas. (2016). Accessed September 9, 2016. Community Tool Box: <http://ctb.ku.edu/en/table-of-contents/assessment/assessing-community-needs-and-resources>.

Vondal, P. Using Rapid Appraisal Options: Performance Monitoring & Evaluation TIPS, Washington DC: USAID Center for Development Information and Development Evaluation. (2016). <https://naaee.org/sites/default/files/tips-usingrapidappraisalmethods.pdf>.

## Resource #4

### Organizational and Professional Readiness for Community Engagement

**Purpose:** Helps you reflect on whether you and your organization are ready for community engagement, and what you can do to better prepare.

*If you want to go fast, go alone. If you want to go far, go together.*

—African proverb

To work effectively in communities, environmental educators and their organizations need to examine their motivations for working with others, and understand the capacity they have to achieve their goals. This personal and organizational reflection is an important step in designing any community initiative or intervention.

Just as you will assess the community you work with and the partners with whom you choose to collaborate, you and your organization will benefit from assessing your own readiness for community engagement. Then, as needed, you can take preparatory action to improve your likelihood of success.

See [Resource #3](#), page 76, for tools and ideas that will help you learn more about the community with which you are working.

See [Resource #11](#), page 105, to learn more about potential partners and allies as you embark on community engagement efforts.

See [Resource #12](#), page 112, for insights and tools to check on professional readiness for working with diverse partners and community members.

### Factors of Readiness: A Checklist for Success

**Define Interests:** Environmental educators should be able to compellingly explain the reasons for launching a community engagement initiative—how the project will benefit your organization, partners, and the community. In addition to key environmental considerations, your list may range from priorities of justice, inclusivity, and innovation, to such organizational goals as constituency building and increased competitiveness.

**Be Clear About Trade-Offs:** Every project has potential benefits and risks to all parties involved. Organizations should be honest with themselves, their partners, and the community not only about the plusses, but the possible minuses that may be involved in the project. Keep in mind that your personal and organizational risks and benefits may not be commensurate with community members' risks and benefits.

**Consider the Past:** Take an honest, comprehensive look at your own, your organization's, and your partners' past successes or failures with the community, with an eye toward further collaboration or potential roadblocks that need to be addressed. Be sure that staff members or volunteers who were involved with the community in the past have shared key information.

**Identify Necessary Skills:** A community engagement project requires an array of staff and volunteer capabilities. These may range from relevant cultural competence, to such skills as research and data analysis, community organizing, and outreach. Facilitation skills are especially likely to be needed with community engagement; these can be developed internally through staff training, or you may choose to hire a professional facilitator. As with any project, engagement will also require the ability to monitor, evaluate, and act on results. EE organizations need to determine which skills they have within the organization, which they might find through partnerships, and for which they may need training.

**Commit to Professional Development:** Once your organization has identified which skills will be needed, make sure your planning and budget reflect your commitment to training staff or volunteers.

**Set a Realistic Timeline:** It takes time to develop relationships and trust, and to facilitate meaningful change. Like environmental stewardship, community engagement requires a long-term commitment measured in years or decades depending on the organization's and community's goals.

**Consider Relationship Building:** Trust is developed between individuals. Staffing changes can cause a community engagement project to lose ground due to the loss of trusting relationships. To protect your organizations' investment, be sure that your group's leaders develop authentic relationships with community members, and that those working on community engagement have the potential for long-term commitment to the project. If your organization does not have established relationships with relevant community sectors, consider collaborating with partners who do (see box, "Brokers and Vouchers").

**Reflect Your Commitment:** Make sure that your community engagement project is reflected in your organization's strategic plan, and that it is sustainably funded. Help all board and staff understand the purpose and scale of the project.

#### DID YOU KNOW?

### Brokers and Vouchers

Who is the best person to reach out to multiple audiences? Research shows that successful community projects often feature a key person who has earned credibility with more than one group—someone who is trusted by multiple sectors of the community.

Sometimes referred to as a "cultural voucher," "boundary broker," or "boundary runner," this person is an authentic communicator and an active listener. In a multicultural situation, he or she is likely to be multilingual. A boundary broker may also metaphorically "speak the language" of diverse partners such as those from the business community, government, or other sectors. Because this person holds a legitimate place of respect with more than one group, a boundary broker understands and can communicate the value of collaboration opportunities.



## Unlikely Collaboration, Big Results

Land conservation can be a divisive issue in rural areas, raising concerns about higher taxes and constraints on public access. When the town of Randolph, New Hampshire, began the process of creating a community forest, organizers knew that they would need the cooperation of local people holding many different beliefs and values, and they instinctively applied the “boundary broker” concept. Launching an extensive public education and engagement process, the organizing team included an environmentalist who was an employee of a local hiking group, as well as a senior member of the New Hampshire state police who was well known in the hunting, fishing, and snowmobiling communities.

Noted the state policeman, “You need three people. One on the right,” referring to himself, “one on the left,” referring to the environmentalist, “and one in the middle,” referring to a local official who was credited with maintaining productive communication to keep the group moving.

Being able to recognize at least one like-minded representative leading the project helped politically diverse community members keep an open mind to the complexities of land conservation. Ultimately, residents agreed to protect over ten thousand acres of land.

For more information, see David L. Willcox, “The Story of the Randolph Community Forest: Building on Local Stewardship,” in *Community Forests: A Community Investment Strategy, A Report by the Community Forest Collaborative* (August 2007), <https://naaee.org/sites/default/files/randolphstory.pdf>. The Community Forest Collaborative is a partnership of the Trust for Public Land, the Northern Forest Center, and the Quebec-Labrador Foundation/Atlantic Center for the Environment.

## Are You and Your Organization Ready?

“Know thyself” is advice from the ancient Greeks that rings true in today’s complex world. To work effectively in communities, both you and the organizations you work with need to examine your reasons and readiness for working with others.

What are your interests in working with the community? Take a look at the personal motivations and attitudes you bring to the project. You will want to build on the expertise you bring, but also assess whether you will need additional training or skill development to help the project succeed.

Be sure you can compellingly explain the reasons for the engagement effort. The better you can explain the specific benefits of collaboration, as well as honestly assess its potential risks, the better your chance of success in attracting and retaining partners.



### Take a few moments to assess your own professional and organizational readiness:

- Are you a member of the community you hope to work with?
- Who invited you, and whom do they represent? In what ways do they represent the community?
- If you are not a member of the community and you have not been invited, on what basis are you engaging the community?
- How is the socio-economic and cultural make-up of the community similar to or different from your own? What bearing might this have on your ability to communicate and relate to the community?
- How long does your organization anticipate being engaged with the community? What can realistically be accomplished in the time period?
- What value does your organization bring to the community and what community residents are already doing?
- What is your organization risking compared to what the community is risking through its participation?
- What do you stand to gain from your involvement, and what will the community gain from its participation?
- Does your organization have on staff, or among its volunteers, a person or people who have developed authentic, trusting relationships with community stakeholder groups? If not, are you prepared to partner with those who have these connections?
- Have your organization's staff or volunteers been involved in past engagement initiatives with this community? If so, what lessons or observations can they offer from their experience?

### Selected References

Andrews, E., J. Heimlich, E. Farrell, R. Ponzio, and K. J. Warren. *Educating Young People About Water—A Guide to Program Planning and Evaluation*. (1995). <http://eypaw.uwex.edu/>.

Ayre, D., G. Clough, and T. Norris. *Facilitating Community Change Handbook*. The Grove Consultants and International Community Initiatives, LLC. (2002). [https://naaee.org/sites/default/files/checklists\\_for\\_assessing\\_readiness.pdf](https://naaee.org/sites/default/files/checklists_for_assessing_readiness.pdf).

Capacity Builder's Collaboration Coach. *Investing in Collaboration: Organizational Readiness to Collaborate Checklist*. <https://naaee.org/sites/default/files/organizationalreadinesstocollaboratechecklist.pdf>.

United Way Toronto. *Participating Effectively as a Collaborative Partner: A United Way Toronto Toolkit*. (2011). <https://naaee.org/sites/default/files/2013-collaborative-partnerships-toolkit.pdf>.

## Resource #5

### Community Readiness for Change

**Purpose:** Provides insights into how to understand how ready your community is for engagement and change.

*An understanding of community readiness allows you to tailor an intervention or strategy to what the community is willing to accept and get involved in. By taking small steps forward ... you can make steady progress.*

—University of Kansas Community Toolbox

Environmental educators wishing to engage with community members can begin by understanding just how ready the community is to be engaged. Making a thoughtful assessment of a community's history with, understanding of, and relationship to the environmental issue at hand will help educators devise successful strategies for engagement and action. Consider a variety of factors and how they might affect the community's attitudes and capacity for change. For instance:

- **Relationship with the local environment.** Whether a wilderness tract or an industrial site, the community's natural and built environment affects people's relationship to where they live. Consider people's recreational, aesthetic, and economic connections, as well as issues of human health and safety.
- **Parallel efforts.** Seek out the people and organizations that are working on related issues of community well-being such as asthma or food scarcity.
- **Past prioritization.** Seek out past efforts to identify local environmental values, such as community visioning and planning charettes. Sources of information (as well as possible partners) include college and school faculty, Extension, health practitioners, local media, government agencies, and nonprofits.
- **Local engagement policies.** Especially if the initiative is linked to government or policy change, be aware of local policies and mandates regarding public engagement, and how these systems work (e.g. public hearings, boards, and commissions). Civic participation opportunities and the receptivity of officials can vary dramatically from community to community.
- **Historic relationships with power and change.** Understand the community's history, stories, and ongoing patterns, including the roles that race, power, and privilege have played in the community. Considerations include political and governmental groups, but also, economic, business, and other community institutions.

### Community Readiness Model

The Tri-Ethnic Center at Colorado State University has created a Community Readiness Model to analyze where a community stands in relationship to any given issue. The model describes the following six dimensions of community readiness, each of which can be ranked on a nine-point scale.

## Six Dimensions of Community Readiness

- **Community Efforts:** The extent of the community's programs or policies addressing the issue
- **Community Knowledge of the Efforts:** The degree to which community members are aware of and have access to the local efforts
- **Leadership:** The degree to which local leaders are involved and supportive
- **Community Climate:** The community's attitude regarding the topic—e.g. powerlessness, engagement, or responsibility
- **Community Knowledge:** The degree to which community members understand the issue and its sources and consequences
- **Community Resources:** The degree to which local volunteers, organizations' time, funding, and other resources are available to support addressing this topic

Community readiness can vary widely from one dimension to another—for instance, a community may have very little knowledge about an invasive species that has come to its area, but may be rich in resources such as active volunteers willing to address the issue once awareness has been raised.

Note also that the readiness model is issue-specific. An assessment may show that a community is fully ready to take on one issue, but not yet prepared to address another related concern. For instance, a community may have a long history of addressing water quality issues, but still have work ahead to grapple with equity issues related to water access.

## Nine Levels of Community Readiness

Assess the six dimensions of community readiness on this nine-level ladder:

- 1) **No Awareness:** Community members are not aware of this issue. (It is possible that the issue is actually not important.)
- 2) **Denial/Resistance:** Some people may recognize the issue, but most either do not acknowledge it or may resist recognizing it.
- 3) **Vague Awareness:** There is some understanding, but no local motivation to take action.
- 4) **Pre-Planning:** Community members recognize the issue; there may be some local action, but efforts are generally uncoordinated.
- 5) **Preparation:** Leaders are planning to take action. Community members are offering some support.
- 6) **Initiation:** The community has gathered adequate information to launch community-level activity.
- 7) **Stabilization:** Community leaders support local action, and trained and experienced staff has been engaged.
- 8) **Confirmation/Expansion:** Local efforts on the issue are underway, and community members are engaged and supportive. Relevant local data is being collected.
- 9) **High Level of Community Ownership:** The community is well informed about the issue. Evaluation processes inform the project effectively.

See [Resource #3](#), page 76, for additional tools and ideas that will help you learn more about the community with which you are working.

## Selected References

KU Work Group for Community Health and Development. Community Tool Box, Chapter 2, Section 9: Community Readiness. Lawrence, KS: University of Kansas. (2016). Accessed September 9, 2016, <http://ctb.ku.edu/en/table-of-contents/overview/models-for-community-health-and-development/community-readiness/main>.

Tri-Ethnic Center. Community Readiness for Community Change, Colorado State University. (2014). [https://naaee.org/sites/default/files/cr\\_handbook\\_8-3-15.pdf](https://naaee.org/sites/default/files/cr_handbook_8-3-15.pdf).

## Resource #6

### Community Asset Mapping

**Purpose:** Offers an introduction to asset mapping and provides pointers on using this process with your community.

*In neighborhoods where there are effective community development efforts, there is also a map of the community's assets, capacities, and abilities. For it is clear that even the poorest city neighborhood is a place where individuals and organizations represent resources upon which to rebuild. The key to neighborhood regeneration is not only to build upon those resources which the community already controls, but to harness those that are not yet available for local development purposes.*

—John L. McKnight and John P. Kretzman, Mapping Community Capacity<sup>20</sup>

Rather than focusing on problems or needs, asset mapping identifies a community's strengths as the starting place for building sustainability. Asset mapping is simply the identification and representation of these valuable resources—an inventory that is often represented, or “mapped,” graphically.

Assets may include community-based organizations; institutions (e.g., schools, libraries); government; businesses; local associations; and groups that might not be formally organized (e.g., youth, seniors, immigrant populations, or artists). Asset mapping also helps identify key individuals and groups already working toward community well-being and sustainability (e.g., public health, faith-based groups, educators, planners). And, as John Kretzmann, one of the pioneers of asset mapping wrote, “At the center of the map, and of the community building process, lie the ‘gifts’ of individual residents—their knowledge, skills, resources, values, and commitments.”<sup>21</sup>

See [Resource #19](#), page 142, to learn more about Asset-Based Community Development, the strengths-oriented approach to community improvement in which asset mapping has its roots.

<sup>20</sup> Kretzmann, J. P., & J. L. McKnight. Mapping Community Capacity. Institute for Policy Research, Northwestern University. 1990 (Revised 1996). Accessed Sept. 23, 2016. <https://naaee.org/sites/default/files/mapping-community-capacity.pdf>.

<sup>21</sup> John P. Kretzmann. “Building Communities from the Inside Out,” Shelterforce Online, National Housing Institute, 1995. Accessed September 24, 2016. <http://www.nhi.org/online/issues/83/buildcomm.html>.

## Community Asset Mapping: Six Steps<sup>22</sup>

Asset mapping is often used to kick-start collaborative work by engaging new partners in thinking together about the community's strengths, or by providing a way for an existing partnership to consider a new area of collaboration or a new issue. Asset mapping can be useful in generating ideas about how to accomplish shared goals, next steps in an action plan, and new partners or community connections. It can also help a partnership or broader community appreciate progress they have made together.

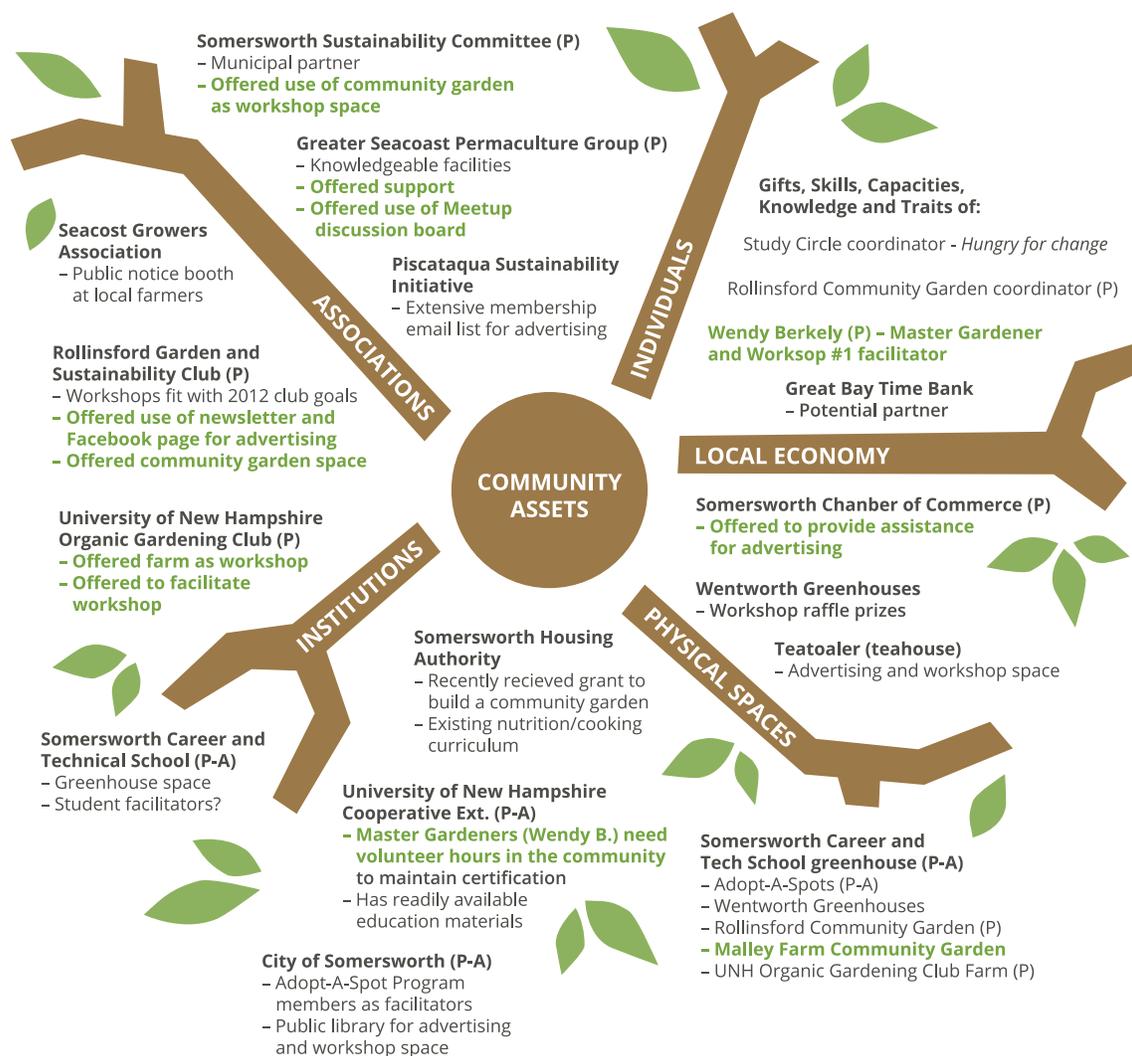
Identifying and mapping assets in your community can be a simple exercise or an in-depth process. Here are six steps to consider as you define your process:

- 1) **Identify and involve partners:** Asset mapping is a launch pad for collaborative community work. Engaging other people and organizations helps expand the capacity for successful outcomes.
- 2) **Define your community boundaries:** Determine the boundaries of your community, whether it's your street, block, neighborhood, or a larger community. Or perhaps your map will explore community resources for addressing specific interests or topics.
- 3) **Agree on the purpose:** What do you and your collaborators want to achieve by mapping community assets? Once you identify these assets, how will you help local people and organizations put them to work to build their community and meet their aims?
- 4) **Decide on types of assets to include:** Asset maps often involve many different types of resources. Consider including people, organizations, the natural and built environment, the local economy, culture and spirituality, information and knowledge, communications, political capital, and how all these systems work together. Look for assets that are especially relevant to your purpose and those that may be underused.
- 5) **Identify methods:** Decide how you will collect, organize, and analyze the information you need about the kinds of assets you'll include. You might use individual or group interviews, online or mail-in surveys, outreach at community events, and group brainstorming sessions. Once you've collected the information, how will you organize and analyze it? Will you use categories or themes, create a spreadsheet, or visually display it with post-its or pins on a map of your community or neighborhood?
- 6) **Share your findings:** How will you share the information you gather with the community, and make it accessible to everyone? Consider hosting a community presentation; creating a resource directory; showcasing results in neighborhood newsletters, local newspapers, or on a website; or mailing a report. (See Figure 1 on the following page.)



<sup>22</sup>. Adapted from *Community Asset Mapping Workbook*. Community Legacy Program of Our United Villages, 2012. Accessed September 23, 2016.  
<https://naaee.org/sites/default/files/assetmappingworkbook2013.pdf>

**Figure 1: Sample community asset map.**<sup>23</sup> This map of assets related to community gardening in Somersworth, New Hampshire, was based on a review of local directories and extensive personal interviews. The assets in green text contributed to a series of community gardening workshops.



(P): Established a partnership with this individual/instruction/association  
(P-A): Attempt made at forming partnership

## Selected References

Beaulieu, L.J. Mapping the Assets of Your Community: A Key Component for Building Local Capacity (Instructor's Guide). Southern Rural Development Center, 2002. <https://naaee.org/sites/default/files/227.pdf>.

Burns, J.C.; D. P. Paul, and R. Paz, S.R Participatory Asset Mapping: A Community Research Lab Toolkit. Los Angeles: Advancement Project, 2012. <https://naaee.org/sites/default/files/assetmappingtoolkit.pdf>.

Everyday Democracy Asset Mapping Activity (2014) and Exploring Community Demographics Activity (2015)

- <http://everyday-democracy.org/resources/asset-mapping-activity>.
- <http://everyday-democracy.org/resources/activity-explore-community-demographics>.

Johnson, E., editor. Mapped! A Youth Community Mapping Toolkit for Vancouver. City of Vancouver and International Centre for Sustainable Cities, 2009. <https://naaee.org/sites/default/files/mapped-a-youth-community-mapping-toolkit-for-vancouver.pdf>.

KU Work Group for Community Health and Development. Community Toolbox: Identifying Community Assets and Resources Checklist. Lawrence, KS: University of Kansas, 2016. [http://ctb.ku.edu/tools/en/sub\\_section\\_main\\_1043.htm](http://ctb.ku.edu/tools/en/sub_section_main_1043.htm).

<sup>23</sup>. Used with permission of Liz Wilson. Accessed September 24, 2016. [http://photos4.meetupstatic.com/photos/event/d/9/c/8/highres\\_92155752.jpeg](http://photos4.meetupstatic.com/photos/event/d/9/c/8/highres_92155752.jpeg).

## Resource #7

### Making Environmental Education Programs and Places Accessible to All

**Purpose:** Offers guidance for including people with mobility, language, sensory, and learning restrictions and needs. Provides background about the Americans with Disabilities Act and the guidance and requirements it provides for accessibility.

Including learners with different needs—ranging from those with impaired mobility to English language learners—is one key to broad community engagement. Laws such as the Americans with Disabilities Act (ADA) and the Individuals with Disabilities Education Act (IDEA) require certain accommodations to ensure accessibility for all individuals or students. Environmental educators can apply the principles of adaptation and inclusion more broadly to make their programs accessible to people who might otherwise have difficulty participating.

#### Adapt and Include

In its publication, *Including Special Education Students in Earth Force Field Work*, *Earth Force*, a nonprofit youth engagement organization, noted that reducing restrictions and removing barriers to allow people with disabilities to participate with others can demonstrate the kinds of civic relations that are valuable in community life. A guiding principle is not to “over-adapt” an experience, but rather to provide for safety and accessibility while including everyone in the same activity.

Here are some ideas from this publication that can be adapted to settings beyond outdoor field work:

- Talk directly to those with disabilities—or those familiar with those needs—and focus on the immediate action(s) you need to take to adapt the experience for them.
- Know ahead of time what components of the setting (indoor or outdoor) and situation you can control and what might need to change.
- Consider varying abilities without calling undue attention to either individuals or the accommodations you have built into the program.
- Always model appropriate, inclusive behavior.
- Ask before providing assistance, even if the individual is nonverbal.
- Select pathways that meet ADA design standards (e.g., paths with smooth firm surfaces that are wide enough for two people to pass each other or walk side-by-side).

In addition, the *Earth Force* publication (see Selected References on the following page) demystifies the terminology of ADA and IDEA that is particularly relevant to educators working in school settings or providing nonformal education to students. It also provides guidance that goes beyond working with student groups.

## The Americans with Disabilities Act

The Americans with Disabilities Act, signed into law by President George H.W. Bush in 1990 and amended in 2008, is a civil rights law prohibiting discrimination of individuals with disabilities. ADA ensures equal employment opportunities and requires private and public sectors to increase accessibility. The overall goal is to provide those with disabilities the same advantages and benefits as those without disabilities. To be considered accessible, individuals with disability are provided with direct and indirect availability to products, devices, services, and environments. For programs that service students, the Individuals with Disabilities Education Act, first passed by Congress in 1975, is also important. IDEA requires that all students with disabilities up to age 21 be provided free, appropriate public education in the least restrictive environment and with accommodations.

What does this mean for your effort? The American Bar Association has produced a series of checklists to help in organizing meetings that are inclusive, including considerations of:

- Exterior building features (e.g., barrier free entrances, easy to open doors, crosswalks with audible and visual signals)
- Interior building features (e.g., Braille and tactile signage at elevators and exits, wheelchair accessible doorways)
- Meeting room features (e.g., visible space for interpreters to stand, display tables accessible by those in wheelchairs or on scooters, toileting space, and water for service animals)
- Registration materials (e.g., request for accommodations included, ADA compliant website, staff member or volunteer identified to assist those with disabilities)
- Presentations (e.g., avoid strobe lights, face the audience, visually describe slides and other presentation materials)
- Meeting materials (e.g., prepare meeting handouts to accommodate individuals with visual impairments)

### Selected References

American Bar Association. Planning Accessible Meetings and Events: A Tool Kit, 2015. [https://naaee.org/sites/default/files/accessible\\_meetings\\_toolkit.authcheckdam.pdf](https://naaee.org/sites/default/files/accessible_meetings_toolkit.authcheckdam.pdf).

Earth Force. Including Special Education Students in Earth Force Field Work. Denver, CO. <https://naaee.org/eepro/resources/including-special-education-students>.

Snow, Kathie. Examples of People First Language, 2007. [https://naaee.org/sites/default/files/people\\_first\\_language\\_chart.pdf](https://naaee.org/sites/default/files/people_first_language_chart.pdf).

United States Access Board. Outdoor Developed Areas: A Summary of Accessibility Standards for Federal Outdoor Developed Areas. 2014. <https://naaee.org/sites/default/files/outdoor-guide.pdf>.

U.S. Department of Education. Building the Legacy: IDEA 2004. <http://idea.ed.gov/>.

U.S. Department of Justice. 2010 ADA Standards for Accessible Design. <https://www.ada.gov/regs2010/2010ADASTandards/2010ADASTandards.htm>.

## Resource #8

### A Framework for Environmental Education Strategies<sup>24</sup>

**Purpose:** Helps match instructional strategies to the purposes of your educational efforts.

Environmental educators have been working for decades to define the field. Over time, scholars and practitioners have offered definitions, objectives, and standards to help differentiate environmental education from other fields and to help professionals deliver this kind of education effectively. Martha Monroe, Elaine Andrews, and Kelly Biedenweg have developed an overarching framework that organizes EE strategies into four categories according to purpose. By connecting their purpose with strategies, environmental educators can choose educational approaches more effectively, and evaluate their success with more precision.

This framework applies to formal and non-formal education, trainings, and outreach, and includes those who design, deliver, and collaborate with learners on educational initiatives, whether they work for government agencies, NGOs, schools, or other efforts. Recognizing the evolving nature of EE and the addition of social and political dimensions to natural science and conservation-based EE efforts, the framework incorporates areas including communication and outreach, social marketing, and social change.



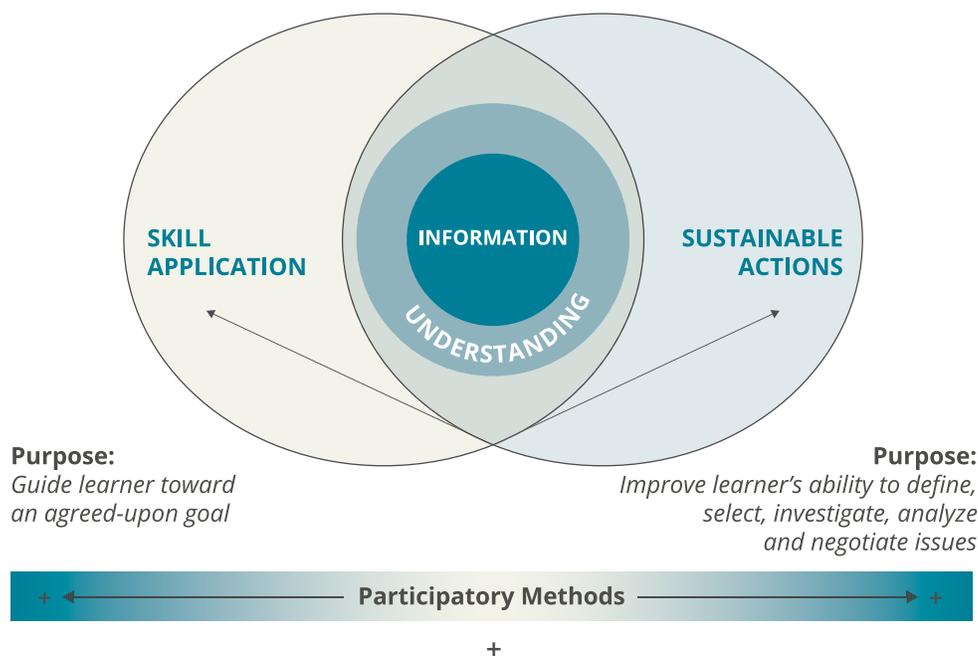
<sup>24</sup> Summarized from Monroe, Martha C., Elaine Andrews, and Kelly Biedenweg. "A Framework for Environmental Education Strategies." *Applied Environmental Education and Communication* 6, no. 3-4 (2008): 205-16. DOI: 10.1080/15330150801944416.

Building on past frameworks including Fien et al.<sup>25</sup> and Scott and Gough,<sup>26</sup> this framework places EE strategies into four categories, sorted by their purpose:

- Convey Information
- Build Understanding
- Improve Skills
- Enable Sustainable Actions

These categories are nested, so that each category may include the one before it. Among the categories, the primary variable is the role of the audience. The more involved the audience is in creating the learning experience, and the higher the quality of engagement, the closer it moves toward the subsequent category.<sup>27</sup> In addition,

*The extent to which the educator consults with, surveys, engages, and collaborates with the audience will improve the educational methods in every category and, if the educator addresses their needs, will increase the likelihood of achieving the educator's objectives. (p. 210)*



The categories are described as follows. For examples of learning strategies under each category, see Table 1 on page 94.

- **Convey Information:** The first category refers to the one-way communication of factual, conceptual, or procedural knowledge. It is most appropriately applied when the content is not controversial or disputed, when there is a pressing need for information, or when people are missing and requesting information. The learner is generally not involved in choosing the content or education strategy.

<sup>25</sup> Fien, J., W. A. H. Scott, and D. Tilbury. "Education and Conservation: Lessons from an Evaluation." *Environmental Education Research* 7, no. 4 (2006): 379-95.

<sup>26</sup> Scott, W. and S. Gough. "Rethinking Relationships Between Education and Capacity-Building: Remodelling the Learning Process." *Applied Environmental Education and Communication* 2, no. 4 (2003): 213-19.

<sup>27</sup> Monroe, Martha C., Elaine Andrews, and Kelly Biedenweg. "A Framework for Environmental Education Strategies." *Applied Environmental Education and Communication* 6, no. 3-4 (2008): 205-16. doi:10.1080/15330150801944416. Reprinted by permission of the publisher (Taylor & Francis Ltd, <http://www.tandfonline.com>).

- **Build Understanding:** This category refers to two-way communication where learners can grapple with the material and make it their own. The use of communication analysis (e.g. audience assessment and evaluation tools) is incorporated to improve the effectiveness and allow techniques to be tailored for the audience’s needs. While the educator generally drives the process and objectives, the audience may help shape the process and give feedback.



- **Improve Skills:** This category refers to programs that improve or change practices or behavior. It assumes that the audience supports the proposed outcome (e.g. workshops participants have chosen to learn a skill, or the community has named as a priority the goal intended through a social media campaign). Any strategy in this category will be more successful if the instructional materials are designed collaboratively with learners, with a focus on topics most relevant to them.



- **Enable Sustainable Actions:** The purpose of this category is transformation—whether of the audience members, the educator, the issue, or the organization. Here, the learner and educator collaborate throughout the process, from goal definition to strategy design. More than previous categories, strategies in this category tend to build civic engagement and action skills, and are likely to include economic and equity issues alongside environmental concerns. They may involve working on issues from a variety of angles and ultimately redefining the issues. For example, the authors note,



*When agencies and NGOs work collaboratively with audiences to understand stakeholder interests and preferences, to determine what stakeholders know ... what additional information will be useful, what they can monitor, and how to use the information revealed from monitoring, they are transforming themselves, their understanding of the issue, and their ability to work together.*

In this category, the educator’s role is as collaborator, facilitator, and supporter, but not director. All participants must be prepared to take direction from stakeholders involved.<sup>28</sup>

<sup>28</sup>. Monroe, Martha C., Elaine Andrews, and Kelly Biedenweg. “A Framework for Environmental Education Strategies.” *Applied Environmental Education and Communication* 6, no. 3-4 (2008): 205-16. doi:10.1080/15330150801944416. Reprinted by permission of the publisher (Taylor & Francis Ltd, <http://www.tandfonline.com>).

**Table 1. Formal and Nonformal Education Strategies Across the EE Framework**

Category	Purpose	Some formal learning strategies	Some nonformal and free-choice learning strategies
<b>Convey Information</b>	To disseminate information, raise awareness, to inform	Textbook, lecture, video, film, and Internet resources	Information campaign, electronic media, Internet resources or website, poster, brochure, sign, Public Service Announcement, news article, exhibit
<b>Build Understanding</b>	To exchange ideas and provide dialogue, to build a sense of place, to clarify and enhance the understanding of information and issues, and to generate concern	Discussion, role play, simulation, case study, experiment, game, constructivist methods, experimental learning, field study	Workshop, presentation with discussion, charette, interactive website, simulation, case study, survey, focus group, interview, peer to peer training, action research, issue investigation, environmental monitoring, guided tour, guided nature walk
<b>Improve Skills</b>	To build and practice skills	Cooperative learning, issue investigation, inquiry learning, citizen science programs, volunteer service, some types of project-based education	Coaching, mentoring, demonstrations, technical training, environmental monitoring; providing a chance to practice a specific skill or work on a task, persuasion and social marketing strategies that modify social norms, including: modeling, commitment, incentives, and prompts the encourage skills building and behavior change
<b>Enable Sustainable Actions</b>	To build transformative capacity for leadership, creative problem solving, monitoring	Inquiry-based education, some types of service learning, Environment as an Integrating Concept, and other opportunities for learners to define problems, design and select action projects, identify facts, and build skills in problem solving	Adaptive collaborative management, action research, training for organizational effectiveness, facilitating partnerships and networks, joint fact finding, mediation, alternative dispute resolution, negotiated rulemaking, learning networks

Although this article is not intended to redefine the field, the framework invites practitioners to consider expanding the list of purposes and activities that can be considered as environmental education. Environmental projects that involve conflict resolution, community-based education, and other emerging tools dovetail with the goals identified under the Tbilisi recommendations.

Given the need for more public participation in problem solving, defining purpose could be critical in helping practitioners examine a number of emerging techniques and fields and their value to environmental education, such as adaptive management, public deliberation, environmental justice, social capital, sustainable development, and many others.

## Online Resources for Selecting Instructional and Outreach Strategies

An expanded concept of environmental education opens the door to using a broader variety of instructional techniques. The University of Wisconsin Extension has developed two online resources that can help identify outreach and instructional techniques.

The **Best Education Practices Decision Tree** is designed to guide natural resources educators as they plan outreach and educational strategies. The decision tree walks the user through common scenarios, and, based on the user's response, offers advice and links to specific skills, tips, and resources that apply to that situation.

This tool offers guidance to help:

- Connect the situation with the people
- Choose achievable goals
- Select relevant outreach techniques
- Get measurable results

Access the decision tree at:

<http://fyi.uwex.edu/wateroutreach/water-outreach-education/decision-tree-start/>.

Similarly, the **Educating About Behavior and the Environment worksheet** developed by the University of Wisconsin Extension helps:

- Set measurable and achievable goals
- Identify the audience and develop audience information
- Identify outreach techniques unique to the problem and each target audience

Access the worksheet at:

[https://naaee.org/sites/default/files/cpbworksheet11\\_07.pdf](https://naaee.org/sites/default/files/cpbworksheet11_07.pdf).

Another tool, **From Informing to Transforming: An Outreach Continuum**, helps inform selection of outreach techniques using a continuum of choices that reflect how people learn and change. The continuum contrasts a content emphasis with a process emphasis, groups strategies by who is in charge, and offers ideas for selecting interventions that contribute to different stages of empowerment.

Access the continuum at:

<http://fyi.uwex.edu/wateroutreach/changing-public-behavior/self-study-module/self-study-module-step-7/vii-a-continuum-of-choices/>.

### Selected References

Monroe, Martha C., Elaine Andrews, and Kelly Biedenweg. "A Framework for Environmental Education Strategies." *Applied Environmental Education and Communication* 6, no. 3-4 (2008): 205-16. doi:10.1080/15330150801944416.

Fien, J., W.A.H. Scott, and D. Tilbury. "Education and Conservation: Lessons from an Evaluation." *Environmental Education Research* 7, no. 4 (2001): 379-95.

Scott, W., and S. Gough. "Rethinking Relationships Between Education and Capacity-building: Remodelling the Learning Process." *Applied Environmental Education and Communication* 2, no. 4 (2003): 213-19.

<sup>29</sup>. UNESCO. *Environmental Education in the Light of the Tbilisi Conference*. Paris, France. 1980. <http://unesdoc.unesco.org/images/0003/000385/038550eb.pdf>.

## Resource #9

### Environmental Education Materials: Guidelines for Excellence

**Purpose:** Introduces and connects to the field’s guidelines for the development, assessment, and selection of environmental education materials.

*Environmental Education Materials: Guidelines for Excellence* is a set of recommendations for developing and selecting environmental education materials. These guidelines aim to help developers produce high quality activity guides and curriculum, and to provide educators with a tool to evaluate the wide array of available environmental education materials.

Developed as part of the National Project for Excellence in Environmental Education, the Material Guidelines describe six key characteristics of quality environmental education materials. The Material Guidelines can help educators, administrators, curriculum designers, or materials developers evaluate the quality of environmental education materials. They provide direction while allowing flexibility to shape content, technique, and other aspects of instruction. 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.

Here is a summary of the guidelines; download the full document (see Selected References) for detailed descriptions and indicators that help users recognize the guidelines in practice.



## Environmental Education Materials: Guidelines for Excellence Summary

1. **Fairness and accuracy:** EE materials should be fair and accurate in describing environmental conditions, problems, and issues, 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
  - 1.4 Reflection of diversity
2. **Depth:** EE materials should foster an understanding and appreciation of environmental concepts, conditions, and issues, as appropriate for different developmental levels.
  - 2.1 Focus on concept
  - 2.2 Concepts in context
  - 2.3 Attention to different scales
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
  - 3.3 Action skills
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 action.
  - 4.1 Sense of personal stake and responsibility
  - 4.2 Self-efficacy
5. **Instructional orientation:** 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
  - 5.8 Assessment
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
  - 6.7 Fit with state or local requirements

### Selected References

For more information on the National Project for Excellence in Environmental Education or to download a copy of the guidelines, visit: <https://naaee.org/our-work/programs/guidelines-excellence>.

NAAEE. *Environmental Education Materials: Guidelines for Excellence*. Washington, DC: NAAEE, 2009. <https://naaee.org/our-work/programs/guidelines-excellence>.

## Resource #10

### Designing Civic Engagement

**Purpose:** Introduces a variety of civic engagement processes and techniques, and helps match civic engagement goals to appropriate processes.

*Civic engagement means working to make a difference in the civic life of our communities and developing the combination of knowledge, skills, values, and motivation to make that difference. It means promoting the quality of life in a community, through both political and non-political processes.*

— Thomas Ehrlich<sup>30</sup>

Civic engagement can take many forms, from volunteering on a habitat restoration project, to writing a letter to the editor about local water quality, to organizing a study circle to deliberate about community responses to climate change. Civic engagement in decision making and action is central to the goals of environmental education. Achieving community well-being, sustainability, and resilience requires individuals who are willing and able to act on their own conclusions, and in concert with each other on shared visions and goals.

These are complex goals. They are not easily realized, and certainly can't be accomplished with one program or intervention. First, it is worth asking whether now is the right time for civic engagement (see Guideline 1.3: Consider the Appropriateness of Community Engagement). Before you and your community partners start, step back and assess your reasons and readiness for civic engagement:<sup>31</sup>

- Do you know why you want to involve other community members? Has the issue or question prompting the engagement been articulated thoroughly?
- Do you have sufficient human and financial resources to conduct an engagement process? Does planning and implementing a civic engagement process fit within your time budget?
- Have you identified who you want to engage? Are they willing and able to participate?
- Have you and your community partners made a real commitment to meaningful engagement? Are you prepared to use input even if it runs counter to current plans or assumptions?
- Have you considered potential risks or downsides of civic engagement?
- If you are involving others in decision making, do you have a clear idea of what you want them to decide? Are you sure that the participation task is real? That is, are you sure that critical decisions haven't already been made?

If you have limited experience with civic engagement approaches, consider adding an organization or individual to your partnership to bring this expertise to the table. Resources such as the National Coalition for Dialogue and Deliberation's members map (<http://ncdd.org/map>) may be helpful as you look for advisors, facilitators, and collaborators.

<sup>30</sup>. Ehrlich, Thomas, ed. "Preface," Civic Responsibility and Higher Education. Oryx Press, 2000, p. vi.

<sup>31</sup>. Adapted from Praxis Group. 2012. Public Engagement Framework. Prepared for the City of Fort Saskatchewan <https://naaee.org/sites/default/files/fsengagementframeworkfinal.pdf>.

There are numerous civic engagement techniques designed for specific audiences and goals. Consider the following in designing your strategies:

## 1) Identify Civic Engagement Goals

Defining goals will help clarify what type(s) of engagement might be best. What do you want to accomplish with the engagement effort? Assume for a moment that you and your collaborators are working to expand the availability of fresh, nutritious foods through a community gardening initiative. Do you want to inform community members about the effort and help them understand the basics of nutrition? Do you want input on where garden plots should be located, or on the design of community plots? Do you want to involve residents in building plots, gardening, teaching gardening skills, or distributing produce? Or are you looking to engage community members in all of these at various stages of the process?

The International Association for Public Participation (IAP2) has developed a “spectrum of engagement” for public participation projects that provides a starting point for environmental educators thinking about engagement goals. Developed primarily for public participation projects such as community planning or policy development, the IAP2 spectrum delineates different levels of public impact or involvement, from no opportunity to influence (Inform) to complete control over decision making (Empower).<sup>32</sup>

- **Inform:** Providing the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities, and/or solutions
- **Consult:** Obtaining public feedback on analysis, alternatives, and/or decisions
- **Involve:** Working directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered
- **Collaborate:** Partnering with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution
- **Empower:** Placing final decision making in the hands of the public

<sup>32</sup> International Association for Public Participation. IAP2 Spectrum of Public Participation. Louisville, CO: IAP2, 2007. [https://naaee.org/sites/default/files/iap\\_public\\_participation\\_spectrum.pdf](https://naaee.org/sites/default/files/iap_public_participation_spectrum.pdf).

## 2) Match Civic Engagement Techniques and Goals

Civic engagement rarely results in one event or activity, and is often a series of strategies. For instance, hosting a gardening booth at a community event may meet an informational goal, while a workshop later that day might be designed to involve community members in prioritizing where community gardens should be located. Both of these techniques might be applied toward the larger initiative goal of empowering the community to design, implement, and maintain neighborhood vegetable gardens. Once you've identified the desired level (or levels) of participation, you can map out various tools and techniques to further your civic engagement goals. As a starting point, here are some techniques that match specific levels of participation:

- **Inform:** Brochures, newsletters, exhibits, kiosks, webinars, panel discussions, and open houses all present opportunities to provide information
- **Consult:** A variety of techniques can be tapped for gathering input, such as interviews, surveys or questionnaires, focus groups, polls, charettes, and town hall meetings
- **Involve:** Visioning exercises, deliberative forums such as Environmental Issues Forums, and conversation cafés provide participants with an opportunity to discuss issues in depth
- **Collaborate:** Civic engagement techniques in this category might include advisory committees, participatory decision making, consensus workshops, and "citizen juries"
- **Empower:** Participation supports decision making through facilitated deliberative dialogue, committees that have delegated power, or the use of inclusive techniques such as study circles, Future Search, appreciative inquiry, and Open Space Technology

Hundreds of techniques can be used for civic engagement. To learn more about specific techniques and to select those that best match your goals, audiences, settings, and capacities, consult these resources:

National Coalition for Dialogue and Deliberation (NCDD). *Resource Guide on Public Engagement*. Boiling Springs, PA: NCDD, 2010. [https://naaee.org/sites/default/files/ncdd2010\\_resource\\_guide.pdf](https://naaee.org/sites/default/files/ncdd2010_resource_guide.pdf).

Praxis Group Public Engagement Framework. Prepared for the City of Fort Saskatchewan, 2012. <http://www.fortsask.ca/home/showdocument?id=762>.

Engaging Queenslanders: A Guide to Community Engagement Methods and Techniques. [https://naaee.org/sites/default/files/intro\\_ce.pdf](https://naaee.org/sites/default/files/intro_ce.pdf).

## NAAEE's Environmental Issues Forums (EIF)

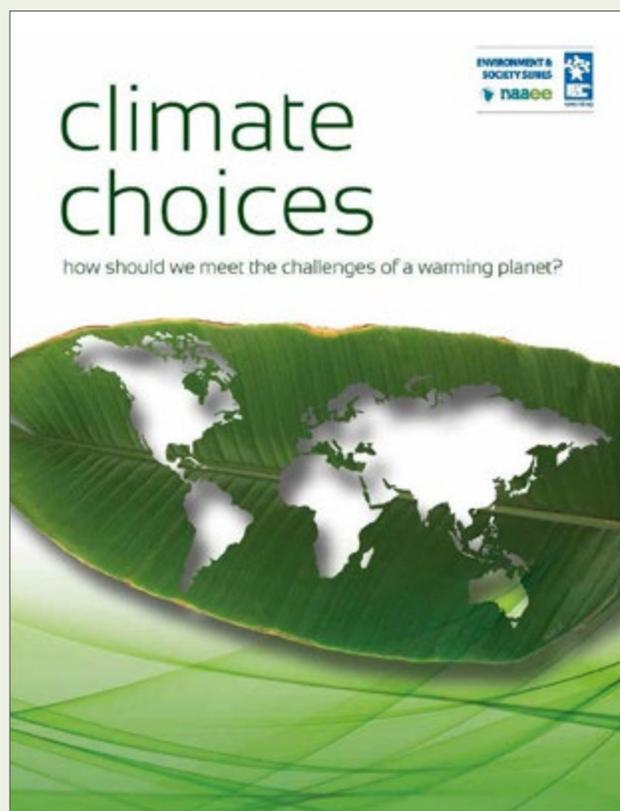
Individuals and groups continually wrestle with the ramifications of environmental issues. As members of communities, we have important choices to make—from individual and community actions to corporate policies and government regulations. Each of these choices will impact our community's well-being, sustainability, and resilience. But, how can we go about the work of making responsible decisions? How can we encourage communities to come together, avoid polarization, and instead build room for common ground?

With the goal of creating safe, productive places for individuals and communities to deliberate, NAAEE, in partnership with the Kettering Foundation, created the Environmental Issues Forums (EIF). EIF provides tools, training, and support for engaging adults and students in meaningful, productive discussions about sticky issues that affect the environment. EIF is modeled on the National Issues Forums (NIF)—a nonpartisan, nationwide network of locally sponsored public issues forums. NIF is rooted in the simple notion that democracy requires an ongoing deliberative public dialogue. People need to come together to reason and talk—to deliberate about common problems. Understand together. Decide together. Act together.

Through EIF, community members actively engage in essential environmental issues through deliberation and participation in democratic practices. They listen to one another and consider alternative perspectives. They deliberate about the choices they can make and the actions they can take in their own communities to address controversial issues. They discuss in a nonpartisan, non-confrontational manner.

In productive deliberation, community members examine the advantages and disadvantages of different options for addressing a difficult public problem, weighing these against the things they hold deeply valuable. EIF issue guides provide a framework for these discussions, describing three or four options and providing a means for avoiding polarizing rhetoric to keep the discussion moving forward. Each option is rooted in a shared concern, proposes a distinct strategy for addressing the problem, and includes roles for community members to play. Equally important, each option presents the drawbacks inherent in each action. Highlighting these drawbacks allows the participants to see the trade-offs they need to consider in pursuing any action. It is these drawbacks, in large part, that make coming to shared judgement so difficult—but ultimately, so productive.

For more information and to download issue guides and supporting materials, visit: <https://naaee.org/eif>.



### 3) Assess Resource Needs

Civic engagement can result in powerful outcomes. But some engagement strategies can require a considerable investment of time and other resources to implement. As you plan for civic engagement, inventory your resources and consider whether you and your partners can provide or access the necessary support. For instance, many civic engagement strategies depend on well-structured, facilitated public meetings. Are you or your collaborators skilled meeting planners and facilitators? Especially if the subject is controversial, it may help to engage a trained, objective facilitator from outside of your group.

Similarly, think about how to make your civic engagement activities inclusive. Is your meeting place accessible? Is the location served by public transportation? How can you accommodate people with childcare needs? Is your proposed meeting place perceived as welcoming to all of the participants? Some in your community may not feel comfortable attending a gathering in a particular neighborhood or in a specific building for reasons that may not be easy to see. In some historically segregated communities, for example, African Americans were barred from entering many public buildings, and those places may still feel unwelcoming.

Being inclusive isn't limited to the meeting space. It needs to be considered throughout—from how you get the word out in order to recruit diverse participants, to when the meeting is scheduled, to how participants are greeted, to what refreshments are served.

See [Resource #7](#), page 89, for ideas about including people with different physical capacities in your programs.

### 4) Consider Issues of Power and Control

Each level of civic engagement selected comes with its own sets of programmatic and organizational dynamics. For instance, true collaboration and empowerment require individual partner organizations and agencies to give up power and control. Continuing the example used above, once community members are actively engaged and making decisions about the design of a community garden, they may decide they want to take the issue directly to elected officials, advocating for changes in land use zoning, buying land for the garden, or diverting budget lines to pay for improvements. As you design your civic engagement strategies, consider the ramifications of power sharing and whether all stakeholders will have an equal place at the table.

## Civic Engagement Through Technology

A quickly growing assortment of technological tools can enhance public engagement. These range from free apps that you can use with little or no training, to complex packages or fee-for-service tools. They can be as simple as a two-question survey, or as complex as a facilitated online deliberative dialogue.

Public engagement through technology can have pluses, like allowing people to participate on their own schedule from home. Minuses include the fact that not everyone has equal access to technology, and online participation can make it difficult to build personal connections. Like any other element of your engagement strategy, don't expect technology to offer a magic fix, but it can be an important tool in your toolbox.

### Tech Tips:

- 1) **Use more than one method.** As with most public processes, using one technique is not enough to ensure that you are including all audiences. Use a variety of tools, including pairing online and face-to-face methods.
- 2) **Match tools with goals.** A technique that helps you reach one goal may not be right for a different circumstance. For instance, one tool might be designed to inform participants, while another might help participants grapple with an issue.
- 3) **Recruitment still matters.** Just because "everybody" is online doesn't mean that everyone will know or care about your online engagement effort. Actively pursuing participation is just as important with tech engagement as with other techniques.

To learn more, see "Using Online Tools to Engage—and be Engaged By—The Public" (IBM Center for the Business of Government). This online handbook offers guidelines on electronic engagement and features useful charts so you can match goals/tactics with digital tools. It covers a range from free tools like wikis and Google docs to much larger systems for engagement and even public deliberation.

[https://naaee.org/sites/default/files/using\\_online\\_tools\\_to\\_engage\\_the\\_public.pdf](https://naaee.org/sites/default/files/using_online_tools_to_engage_the_public.pdf).

As you map out your civic engagement strategy, and select techniques and tools, consider the following guiding questions:

- How does the tool or technique match your civic engagement goal(s)? How effective will it be in reaching your desired audience?
- What resources or expertise are needed?
- Can it be implemented within the available time?
- Who might feel comfortable/uncomfortable or included/excluded?
- To whom does this tool or technique afford power and decision-making authority?
- What obstacles need to be addressed to effectively use it?

## Portland's Public Involvement Tool

When the Portland (Oregon) Parks and Recreation Department begins a significant project involving change, the first thing the staff does is evaluate its impact on the public. Whether it is a huge project like developing a new park, or a small one like a change in programming, planners take the time to examine the change from the perspective of the community members it will affect.

Parks and Recreation staff collaborated with residents to develop a matrix to identify the appropriate engagement tool for different types of projects. The process begins with staff and stakeholders answering questions focused on public interests in the proposed change (for instance, What is the anticipated level of conflict, opportunity, controversy, or concern? How significant are the potential impacts to the public?). They then work to match the proposal with the right participation technique. Smaller changes may need an informational approach such as a pamphlet or web link. A large project such as a new park will likely need a much more interactive, collaborative strategy, including community-run meetings and deliberative forums.

In creating a new park in East Portland, an area with a significant immigrant and refugee population, park staff found the matrix offered a positive, productive model for public engagement. Elizabeth Kennedy-Wong, who manages community engagement at the parks department, notes, "This interaction will set the tone for their relationship to our parks, to the land, and to our government."

Rather than being perceived as extra work, Kennedy-Wong says the tool "has actually relieved a lot of angst on the part of project managers to see that public involvement can be focused and strategic and thoughtful."

You can find the "City of Portland Public Involvement Toolkit" and other public engagement tools at <https://www.portlandoregon.gov/oni/61413>.

### Selected References

Campbell, Sarah L. *A Guide for Training Public Dialogue Facilitators*. The Paul J. Aicher Foundation East Hartford, Connecticut, 2008. [https://naaee.org/sites/default/files/guide-training-public-dialogue-facilitators\\_everyday-democracy.pdf](https://naaee.org/sites/default/files/guide-training-public-dialogue-facilitators_everyday-democracy.pdf).

International Association for Public Participation. *IAP2 Spectrum of Public Participation*. Louisville, CO:IAP2, 2007. [https://naaee.org/sites/default/files/iap\\_public\\_participation\\_spectrum.pdf](https://naaee.org/sites/default/files/iap_public_participation_spectrum.pdf).

Kaner, Sam. *Facilitator's Guide to Participatory Decision-Making*. San Francisco: John Wiley & Sons, Inc., 2007.

Slocum, Nikki. *Participatory Methods Toolkit: A Practitioner's Manual*. King Baudouin Foundation and the Flemish Institute for Science and Technology Assessment. Belgium, 2003. <https://naaee.org/sites/default/files/pmt.pdf>.

University of Minnesota Extension. Engaging with the Public—Tip Sheets. <http://www.extension.umn.edu/community/civic-engagement/tip-sheets/>.

University of Wisconsin Extension, National Water Outreach Education Extension, Facilitating Access to Water Resources.

- Citizen Participation/Community Involvement Principles, <http://fyi.uwex.edu/wateroutreach/water-outreach-education/what-are-beps/knowledge-area-beps-2/knowledge-area-beps-citizen-participation-and-community-involvement-principles/>.
- Civic Empowerment Principles, <http://fyi.uwex.edu/wateroutreach/water-outreach-education/what-are-beps/knowledge-area-beps-2/knowledge-area-beps-civic-empowerment-principles/>.
- Facilitation Skills: Introduction, <http://fyi.uwex.edu/wateroutreach/water-outreach-education/bep-web-site-resources/use-education-resources/tools-for-teaching/facilitation-skills/>.

U.S. EPA. *Public Participation Guide*. <https://www.epa.gov/international-cooperation/public-participation-guide-introduction-guide>.

## Resource #11

### Creating Strategic and Effective Partnerships and Coalitions<sup>33</sup>

**Purpose:** Provides guidance and concrete activities to help you build relationships with partners and forge strategic and effective partnerships and coalitions.

*Sharing resources, benefits, and recognition for successes keeps the partnership from becoming lopsided, or dominated by any one player. Each partner needs to see their contribution alongside the benefit gained.*

— Brian O’Neil, former superintendent of the Golden Gate Parks<sup>34</sup>

Finding the right partners, embracing new collaborators, and being a good team member are some of the keys to any successful environmental education community engagement strategy. What can you do to create and support effective partnerships?

#### 1) Evaluate how your work will add value for community partners

With appreciation and respect for what already exists, do your homework about how your contributions might complement existing efforts, partnerships, and people. Think carefully about the costs and benefits not only for you, but for every partner.

Help create a “win-win” scenario. Every partner will not have the same cost/benefit analysis. While it is natural to consider how a partnership will help you further your mission, consider the same question for all partners involved. What can you accomplish together that each of you could not accomplish alone?

#### 2) Be deliberate but open-minded

Being thoughtful about who you work with will help you achieve your goals and make your work more enjoyable, effective, and productive. Before jumping into a partnership, it is important to understand what you care about, and to identify your strengths and gaps as an individual or organization. Support opportunities for your potential partners to do the same.

The most exciting and productive partnerships are often with those who bring different strengths from your own and help you stretch. The best partnerships are those in which everyone contributes, everyone gains something, and all the partners move closer to their goals. For example, a partnership between a group working to educate youth about environmental challenges and a group working to educate young people about health issues could bring skills from two areas of expertise to build on a joint interest in helping youth.

Discuss your long-term goals at the start so that it’s clear what you’re collectively trying to accomplish. If two or more partners have different ideas about what success looks like or disagree on outcomes, it can create problems and confusion. Work with partners whose goals overlap with yours, and who are committed to and excited about similar outcomes.

See **Resource #4**, page 80, for ideas on strengthening your group’s readiness to engage with partners.

<sup>33</sup>. Much of Resource #11 is based on Braus, J. and J. Ogden, “Developing Effective Partnerships”—presentation developed for the Emerging Wildlife Conservation Leadership and the TogetherGreen Fellowship program.

<sup>34</sup>. From Brian O’Neill’s 21 Partnership Success Factors. <https://www.nps.gov/subjects/partnerships/upload/BrianONeillBooklet-Edited-9-27-13-2.pdf>.

## Island-Wide Collaboration

Haleakalā National Park protects part of the large volcano that forms about three-quarters of the Hawaiian island of Maui. Park interpreters had seen a steady decline in the number of school groups taking field trips to the park. Reaching out to middle- and high-school teachers, they learned that teachers wanted to include the mountain and its diverse ecosystems and issues in their instruction. However, it was increasingly difficult for them to fund field trips, take time away from the classroom, and make space in a standards-driven teaching schedule.



Park service staff reached out to The Nature Conservancy, which manages a large preserve adjacent to the park, and the Maui Invasive Species Committee, a collaborative effort to eradicate harmful non-native species on the island, forming the core of a partnership to engage teachers and students in Maui natural resources issues. The working group teamed up with local teachers to develop a proposal for a standards-based curriculum that would “take the mountain to the classroom.” The Hawaii Natural History Association helped this working group develop a successful grant proposal, and administered funding.



Over time, the partners engaged a broad group of cultural leaders and natural resources and science experts in creating Hō'ike o Haleakalā, a multi-disciplinary, science-based environmental education curriculum that incorporates traditional Hawaiian culture and local issues.

More than 15 years after it was published, the standards-based curriculum continues to be used in Maui County classrooms, and the collaboration continues, branching out into service learning and volunteer projects that engage students directly in hands-on learning and conservation.

Learn more about Hō'ike o Haleakalā at <http://www.hoikecurriculum.org>.

## DID YOU KNOW?

### Before You Partner: Identify Complementary Strengths

What do you bring to a partnership? What are your strengths? What will it take to achieve success? Partners should complement each other and bring different expertise, skills, knowledge, and other talents to the table. In a good partnership, you are playing to each other's strengths and achieving more together than you could do separately.

See [Resource #20](#), page 145, for strategies to create partnerships among diverse groups with overlapping goals.

See [Resource #21](#), page 149, for help designing your partnership-building process.

### 3) Clarify Roles and Responsibilities

Have you ever been part of a partnership or coalition and felt that one partner was not living up to what you expected? Many partnerships start off without a clear understanding of roles and responsibilities. Unexamined expectations, differing cultural norms, or simply being too busy to communicate effectively can all create tension and undermine a partnership.

Consider putting agreements in writing from the start. Even with informal partnerships or where two individuals in organizations know each other and have worked together, outlining who will do what is essential. Agreements can vary from a formal contract to a more informal Memorandum of Understanding, to an agreed-upon project plan.

Depending on what you're doing, an agreement might include:

- Goals for the initiative
- Each partner's roles and responsibilities
- How decisions are made
- Who has final sign-off on products (everything from reports to web copy and press releases)
- How project costs will be shared
- Partner rights to use products developed by the project (copyrights)
- How partners will be identified and credited
- Important deadlines
- How you will communicate
- How you will measure success

## DID YOU KNOW?

### Coalition Building

A coalition is a temporary alliance or partnering of groups in order to achieve a common purpose or to engage in joint activity. Coalition building is the process by which parties (individuals, organizations, or nations) come together to form a coalition.

Coalition Building | Beyond Intractability  
[www.beyondintractability.org/essay/coalition-building](http://www.beyondintractability.org/essay/coalition-building)

#### 4) Treat Others the Way They Want to Be Treated

You may have heard of the Golden Rule: “Do unto others as you would have them do unto you.” But consider the Platinum Rule: Treat others the way they want to be treated.<sup>35</sup> The Platinum Rule reminds us that people bring different norms and expectations to collaboration. Whether you’re talking about a marriage or an environmental education partnership, taking care of the relationship is an important part of accomplishing joint goals.

Partnership may look different to different people. Discuss with your potential partners what it means to them. You may agree on some “bottom lines” such as being honest, fair, and respectful of differences. Building trust can be a slow process, but well worth the investment.



Photo credit: Boston Nature Center

<sup>35</sup> Bennett, M. J. “Overcoming the Golden Rule: Sympathy and Empathy.” In *Communication Yearbook 3*, edited by D. Nimmo, 407-22. Beverly Hills, CA: Sage, 1978.

## Agree on How to Make Decisions

How to make decisions as a partnership or coalition is one of the most important questions to answer at the start of any partnership. Make a list of the questions to help identify the best process for your partnership. For example, who needs to be at the table when you make decisions? Who has the final say on publications and press releases, budget, and other parts of the project? What do you do if you can't reach agreement? Do you want decision-making authority to rotate to different partners throughout the process? Agree on how decisions will be made and put that in writing.

No matter which approach you choose, consult resources to help guide your decision-making process. Complex discussions with multiple partners benefit from skilled, objective facilitation. You may wish to seek training or hire a process facilitator. Be attuned to individual and cultural differences in communication and decision-making. A trained facilitator can help ensure that the discussion and decision-making format supports diverse traditions, expectations, and needs, and help spot and shift power dynamics that may be working against equitable collaboration.

### Collaborative Approaches to Decision Making

**Consensus:** The consensus process is intended to allow the entire group to be heard and to participate in decision making. The goal of consensus decision making is to find common ground, probing issues until everyone's opinions are voiced and understood by the group. Discussions leading to consensus aim to bring the group to mutual agreement by addressing all concerns. Consensus does not require unanimity. Rather, everyone must agree they can live with the decision. Though it can take longer than other decision-making methods, consensus fosters creativity, cooperation, and commitment to final decisions. Unlike many models, consensus also allows multiple, conflicting solutions to be considered simultaneously (especially valuable in the planning phases of a project). There are no winners and losers in this process, as discussion continues until consensus is achieved. Discussion is closed by restating agreements made and

next steps in implementing decisions. Critics of consensus argue that this method can be slow, bog down if consensus is difficult to achieve, and be manipulated to support the status quo and look inclusive when the process is not authentically so.

**Majority Rule:** Options are discussed fully so that members are informed as to the decision's consequences. The important ground rule here is that the "losing" side agrees to support the decision, even though it was not their choice. Decisions are made by majority vote. Majority rule can reinforce power imbalances, even if there are ways for the minority to make their dissenting views clear, for example through a minority report.

**Straw polling:** Straw polling entails asking for a show of hands to see how the group feels about a particular issue. It is a quick check that can save a great deal of time. Silent hand signals can be an invaluable source of feedback for a facilitator working with a large group.

**Voting:** Voting is a decision-making method that seems best suited to groups, especially when making multiple decisions. To avoid alienating minorities, you might decide a motion will only succeed with a two-thirds (or more) majority. Some partnerships limit voting to people who have come to three or more consecutive meetings to prevent stacked meetings and to encourage familiarity with the issues being decided. Alternatively, voting can be combined with consensus; some groups institute time limits on discussion and move to voting if consensus cannot be reached.

**Delegation:** The partnership may agree to delegate certain decisions to small groups, committees, or an individual. A small group may have the specialized knowledge, skills, or resources required to make certain decisions. When delegating decision making, the group must clarify any constraints on the authority to act, and institute mechanisms for reporting back to the large group.

Adapted from Center for Collaborative Planning, <http://www.connectccp.org/library/title/collaboration>.

## 5) Address Issues Directly and Thoughtfully

Even the best partnerships have bumps along the way. A key to success is not over-reacting to “small stuff.” (Sometimes just letting something go is the right move.) But it’s also important not to ignore the big stuff. And being able to discern the difference is a critical partnership skill.

Address bigger conflicts immediately, rather than letting them build up. If you truly are stuck, you may wish to call in an objective third party facilitator to help partners work through tough issues. Think of a facilitator as a partnership “marriage counselor”—helping you sort through the rocky times and come out the other side with strategies for moving forward.

Be prepared to make mistakes, and know that you will. It’s how you understand and remedy the bumps along the road that matters.

See [Resource #16](#), page 130, for tips on conflict resolution, communication, and other key partnership skills.

## 6) Pay Attention to Power, Equity, and Words

Most partnerships are not equal in a number of different aspects. One organizational partner might be larger, with more staff and more resources. Another might have more connections to the community, or more political connections, or a better known “brand.” And many communities have long-standing issues of race, class, and privilege that affect power dynamics.

Creating a balance of power in any partnership is critical to ensuring that each partner is respected and honored, and that the decision-making processes, communication strategies, and other aspects of the partnership are equitable, fair, and transparent. Although the power balance may vary throughout a partnership, setting up ground rules from the start is critical. Understand that language matters. Investigate the need for training in diversity, inclusion, and equity issues.

Many partnerships stumble because of power and equity issues. If one or more of the partners doesn’t give credit to others, it can create hard feelings that will erode trust. For example, if the partnership holds a press conference but the only logo visible is the one of the bigger organization, or smaller partners were not consulted on the content of a press release a larger partner puts out, it can create negative feelings. Early on, outline the process for how to ensure that all partners get equal visibility and recognition.

Although relationships are often not equal in size and influence, a partnership is not a parent-child relationship, where one group oversees the other. A partnership should be about shared power, shared roles and responsibilities, and shared goals. Making everyone feel valued, respected, and heard will bring the best results.

See [Resource #12](#), page 112, for information on strengthening understanding of cultural differences.

## 7) Communicate

Lack of communication can erode trust, cause misunderstandings, and create problems for a partnership over time. Successful partnerships develop a communication strategy that outlines how everyone will stay informed on how the relationship is working and where issues might need to be resolved.

Questions to consider: How do people prefer to communicate? Calls? Email updates? How often? Weekly or monthly meetings? Keep in mind that email communication can be tricky and people can take things the wrong way. Picking up the phone when there's a question or concern is often the best way to stay connected. Consider the role of intercultural communication, and the norms of communication that may be in play in partnerships that involve diverse groups. As a rule, you can't communicate too much when you're building relationships and addressing complex environmental and social issues.

### Selected References

Braus, J. and Ogden, J, "Developing Effective Partnerships"—presentation developed for the Emerging Wildlife Conservation Leadership and the TogetherGreen Fellowship program.

Center for Collaborative Planning, *Collaborative Concepts to Consider*. Sacramento, CA: Center for Collaborative Planning. <http://www.connectccp.org/library/title/collaboration>

See also *Collaborative Decision-Making*. Sacramento, CA: Center for Collaborative Planning. <http://www.connectccp.org/library/title/collaboration>.

Ferdman, B. and B.R. Dean, eds. *Diversity at Work: The Practice of Inclusion*. San Francisco, CA: Jossey-Bass, 2014, 155-176.

KU Work Group for Community Health and Development. *Creating and Maintaining Partnerships*. Lawrence, KS: University of Kansas, 2016. Accessed September 9, 2016. Community Toolbox: <http://ctb.ku.edu/en/creating-and-maintaining-partnerships>.

Monroe, Martha C., Heidi L. Ballard, Annie Oxarart, Victoria E. Sturtevant, Pamela J. Jakes, and Emily R. Evans. "Agencies, Educators, Communities and Wildfire: Partnerships to Enhance Environmental Education for Youth." *Environmental Education Research* 22, no. 8 (2015): 1098-114. doi:10.1080/13504622.2015.1057555.

O'Neill, B. Former Superintendent, Golden Gate National Parks, *21 Partnership Success Factors*. <https://www.nps.gov/subjects/partnerships/upload/BrianONeillBooklet-Edited-9-27-13-2.pdf>.

## Resource #12

### Engaging with Diverse Partners and Community Members

**Purpose:** Helps you explore diversity, equity, and inclusion in the context of community work, and provides resources to help you expand your cultural competence and your ability to engage with diverse partners and community members.

*Our society is experiencing change at an unprecedented pace, from changes in the demographic make-up of the country to increases in people living in cities to more people, especially young people, living below the poverty line. All of these trends will affect how we build environmental literacy.*

—Environmental Literacy in the United States, NEEF, 2015<sup>36</sup>

*It is the job of the environmental educator, and a mark of cultural competence, to be aware of the environmental resources (or lack thereof) and issues that are pertinent to a particular population of students, to create experiences for the students to explore those issues and raise questions, and to assist students in identifying opportunities and solutions.*

—Barr Foundation<sup>37</sup>

*Cultural competence is having an awareness of one's own cultural identity and views about difference, and the ability to learn and build on the varying cultural and community norms of students and their families. It is the ability to understand the within-group differences that make each student unique, while celebrating the between-group variations that make our country a tapestry.*

—National Education Association<sup>38</sup>

Every community is made up of a variety of people, and is likely to encompass a variety of cultures. Whether you are working in rural Maine, suburban Georgia, or urban Los Angeles, your community includes people from differing backgrounds, with a variety of beliefs, traditions, languages, behaviors, and experiences.

How you relate across these differences will have an impact on your success. Equally, how your environmental education work respects and includes diverse people and organizations—and how it supports greater equity for those who are marginalized and the evolution of a just society— influences its relevance in your community and over time. Community engagement involves a mutual exchange of learning, benefits, and growth.

<sup>36</sup>. NEEF. "Environmental Literacy in the United States: An Agenda for Leadership in the 21st Century." Washington, DC: National Environmental Education Foundation, 2015. <https://drive.google.com/file/d/0B9VvXAtY7qYzTDZQTHk4NUNBS0U/view>.

<sup>37</sup>. Sherman, Laura. "Understanding Culture Competency in Experiential Environmental Education: A Report from the Cultural Competency Assessment Project." Boston, MA: Barr Foundation. 2006.

<sup>38</sup>. National Education Association, "Why Cultural Competence?" <http://www.nea.org/home/39783.htm>.



## Unpacking Diversity, Inclusion, and Equity

Often, “diversity” is used as a shorthand term that bundles related concerns together, obscuring their separate meanings. Being clear about the distinctions can help focus attention on a range of issues and opportunities that go beyond “working with diversity.”

**Diversity**—A diverse group, community or organization is one in which a variety of social and cultural characteristics exist. Diversity includes a wide range of characteristics that make one individual or group different from another. Race, ethnicity, and gender most often come to mind when thinking about “diversity,” but age, national origin, religion, disability, sexual orientation, socioeconomic status, education, marital status, language, and physical appearance are also sources of diversity. So, too, are ideas, perspectives, and values.<sup>39</sup>

**Inclusion**—To benefit from diversity, institutions, initiatives, professionals, and community practices must be—or become—inclusive. Inclusion involves bringing traditionally excluded individuals and/or groups into processes, activities, and decision- and policy-making in a way that shares power.<sup>40</sup>

**Equity**—Social equity involves fair access to livelihood, education, and resources; full participation in the political and cultural life of the community; and self-determination in meeting fundamental needs. Disparities based on race or class, including disproportionate burdens of environmental pollution and other problems, are forms of inequity.<sup>41</sup>

<sup>39</sup>. Adapted from the Racial Equity Tools Glossary. <http://racialequitytools.org/glossary#diversity>.

<sup>40</sup>. Ibid.

<sup>41</sup>. From the Reliable Prosperity “Social Equity,” at Reliable Prosperity, <http://reliable.prosperity.fed.wiki.org/view/reliable-prosperity-index/view/social-equity>.

## Diversity and Inclusion

Working with communities challenges environmental educators to become increasingly proficient at listening to and engaging diverse audiences. This work involves shared learning, mutual agreements, and movement toward informed decision making and action built on valuable contributions from everyone involved.

The insights, skills, and commitments that come from community engagement can also be applied internally to the organizations and agencies in which many environmental educators work. Recent studies demonstrate that many environmental organizations and agencies are not reflective of the growing diversity in American society as a whole and in the communities they serve. According to the 2014 Green 2.0 diversity report, environmental organizations have a “green ceiling” in staffing, training, and outreach that limits the participation of minority, low-income, and LGBTQ populations.

Gender diversity has improved over time, although the increase has been primarily for white women. “People of color are 36 percent of the U.S. population, and comprise 29 percent of the science and engineering workforce but they do not exceed 16 percent of the staff in any of the organizations surveyed,” according to the comprehensive 2014 Green 2.0 diversity report.<sup>42</sup>

Unconscious bias, discrimination, and lackluster efforts to address diversity are reasons cited by the Green 2.0 report to explain the lagging diversity. To build an inclusive movement, we must tend to specific needs of marginalized communities, elevate voices and leaders that have been excluded, build strong allies, and find the courage to work together to create a new paradigm in which all can thrive.

## Environmental Education and Cultural Competence Can Be Mutually Reinforcing

The research is clear: environmental education programs are more successful in raising awareness, appreciation, and concern about the environment when they are run in a culturally inclusive way—or by culturally diverse leaders and community members. At its heart, community engagement in environmental education requires cultural competence: “the ability to interact effectively and appropriately with people of differing cultures and backgrounds within an organization for the benefit of all.”<sup>43</sup>

<sup>42</sup>. Taylor, Dorceta. “The State of Diversity in Environmental Organizations: Mainstream NGOs, Foundations & Government Agencies.” Ann Arbor, Michigan: Green 2.0, 2014. [https://naaee.org/sites/default/files/fullreport\\_green2.0\\_finalreducedsize.pdf](https://naaee.org/sites/default/files/fullreport_green2.0_finalreducedsize.pdf).

<sup>43</sup>. Bonta, Marcelo, Tony DeFalco, and Chandra Taylor Smith. *Diversity and the Conservation Movement*. Edited by John Carey. New York, NY: National Audubon Society, 2015. [https://naaee.org/sites/default/files/eepro/resource/files/diversity\\_module.9.22.15.pdf](https://naaee.org/sites/default/files/eepro/resource/files/diversity_module.9.22.15.pdf).

Because environmental education often begins close to home, with an emphasis on connecting learners with their immediate surroundings, cultural competence has particular resonance. An in-depth study of three experiential EE programs showed that hands-on learning and place-based education supported cultural competence, while cultural competence helped educators do their jobs better. Key practices included:

- **Reaching people where they are.** Recognizing, assessing, and accommodating participants' varying backgrounds, including levels of exposure to nature, allow environmental educators to create more effective programs.
- **Providing multiple points of access.** Acknowledging learners' diverse backgrounds, interests, and learning styles helps educators create multiple forms of activities to meet their needs.
- **Relating to different backgrounds.** Educators who can connect with and build upon their audiences' cultural experience will be better able to make meaningful links to environmental content. In urban environments, for instance, this may mean partnering with community groups focusing on local history, culture, or social issues.
- **Addressing differences in socio-economic backgrounds and resources.** Does everyone in your audience have access to transportation? To the Internet? When are they available to meet or learn? Educators who understand participants' day-to-day reality will be better able to engage them effectively.
- **Acknowledging and addressing issues of social justice.** Especially with older youth, linking social justice to environmental justice, and creating activities that address inequity, can energize and empower participants.<sup>44</sup>

## Getting There: Four Components and Three Places to Start

Cultural competence is not a goal as much as it is a journey. Like many things such as lifelong learning, fitness, and health, it requires an ongoing commitment. Researchers have identified four components of cultural competence:<sup>45</sup>

- 1) Awareness:** Being conscious of your personal cultural worldview and how it shapes your interactions with others
- 2) Attitude:** Considering how your beliefs and values inform those interactions
- 3) Knowledge:** Seeking out and retaining information about different cultures and perceptions
- 4) Skills:** Using the other components, becoming proficient in using appropriate methods of communicating across cultures<sup>46</sup>



<sup>44</sup>. The Barr Foundation. "Understanding Cultural Competency in Experiential Environmental Education Programs: A Report from the Cultural Competency Assessment Project." Boston, MA. Winter, 2006. [https://naaee.org/sites/default/files/understanding\\_cultural\\_competency.pdf](https://naaee.org/sites/default/files/understanding_cultural_competency.pdf).

<sup>45</sup>. Martin, Mercedes and Billy Vaughn, "Cultural Competence: The Nuts & Bolts of Diversity and Inclusion." Strategic Diversity & Inclusion Management. February 12, 2007: 31-36. <http://diversityofficermagazine.com/cultural-competence/cultural-competence-the-nuts-bolts-of-diversity-inclusion-2/>.

<sup>46</sup>. Adapted from Bonta, Marcelo, Tony DeFalco, and Chandra Taylor Smith. *Diversity and the Conservation Movement*. Edited by John Carey. New York, NY: National Audubon Society, 2015. [https://naaee.org/sites/default/files/eepr/resource/files/diversity\\_module.9.22.15.pdf](https://naaee.org/sites/default/files/eepr/resource/files/diversity_module.9.22.15.pdf).

Environmental educators exploring cultural competence can take a look at their work in the context of these components. Try looking in three directions—within, around, and out:

### **1) Looking Within: Cultural Competence and Self-Awareness**

We are creatures of our own cultural backgrounds. Social class, race, ethnicity, language, and other cultural factors can affect how we see the world and how we act. Understanding your own cultural identity and how it influences your attitudes, beliefs, and behaviors is often a good first step towards cultural competence.

Successful multi-cultural environmental education initiatives show that those who are highly culturally competent can even act as “cultural brokers,” facilitating communication with different audiences. Understanding participants’ backgrounds, being responsive to culturally based expectations, and being able to change communication styles can all be valuable forms of brokering.

A number of tools are available to help with this personal exploration and development. Consider completing an individual self-assessment as a way of gauging how these cultural factors play out for you. (See “Implicit Association Test” and other resources, below.)

### **2) Looking Around: Cultural Competence and Your Organization**

How does your organization connect with the various cultures of your community? To be successful, cultural competence requires an organization’s ongoing exploration of interlocking knowledge, behaviors, and attitudes.

You can begin by taking a tour of your offices. What’s on the walls? What cultures do visitors experience when they first walk through your doors? Next, take a “tour” of your typical program. Have you addressed local language preferences, literacy, hearing impairments, and other communication needs in culturally sensitive ways? For example, do you typically provide on-site interpretation and translation services?

Ultimately, your board and staff make-up, strategic plan, organizational policies, procedures, and activities communicate loudly. Ideally, your organization will forge agreement about what cultural competence means in the context of your group’s environmental education mission, and move toward greater diversity in leadership and staff that will guide the organization to become more diverse, inclusive, and equitable.

Consider doing an organizational equity assessment, providing an organization-wide diversity training, working directly with one of the many groups that offer support to develop and implement comprehensive equity strategies, or exploring other tools that might be useful for your group. (Some resources are listed below.)



### 3) Looking Out: Where Does Your Work Fit in the Community?

As every environmental educator knows, systems matter: ecological systems, but also family systems, economic and political systems, education systems, and the many other interlocking ways that our communities interact. Cultural competence requires us to think about the context in which we work. By fully understanding the bigger picture, we are better able to identify the most effective roles we can play in supporting community sustainability.

Knowing how to connect with local cultures pays dividends in environmental education. A stewardship message in youth environmental education programs is significantly reinforced when educators successfully engage parents and community members on the same issues. Similarly, educational efforts are strengthened by drawing on local knowledge, such as parents' or local elders' experience in agriculture or the natural world.

Keep in mind that culturally based attitudes and actions have myriad origins. Race can be significant, as can ethnicity, social background, gender, age, religion, the length of time a person has been connected to the community, and many other less obvious elements. Cultural competence requires that environmental educators listen carefully, and work to understand the cultural systems around us.

## Equity and Justice

*Whether by conscious design or institutional neglect, communities of color in urban ghettos, in rural 'poverty pockets,' or on economically impoverished Native-American reservations face some of the worst environmental devastation in the nation.*

—Dr. Robert Bullard<sup>47</sup>

Marginalized communities—often, but not always, communities of color—suffer disproportionately from negative environmental impacts. From higher exposure rates to pollution and proximity to landfills, to neurological damage from pesticide poisoning with farmworkers, environmental racism continues to plague marginalized communities in addition to significant disparities in income, education, poverty, access to jobs, and health.<sup>48</sup>

Rectifying these disparities is the aim of the environmental justice movement, which grew out of the civil rights movement, and shares the same underlying commitments. The U.S. EPA defines environmental justice as, “the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental, and commercial operations or policies.”<sup>49</sup>

Some environmental justice activists, however, see their goals running deeper than making sure marginalized communities can participate in decisions that affect their environment or health. In this view, the ultimate vision is not simply to redistribute environmental harms, but to abolish them, so sharing the burden of pollution equally would be a limited victory.<sup>50</sup>

In parallel civil rights terms, this is the difference between making sure all groups are discriminated against equally, and eliminating discrimination to support a society in which all can equally thrive.

Although community priorities such as equitable access to transportation or jobs may seem to overshadow environmental concerns, the common threads of equity and justice may offer a way to tap into and support the desires and aspirations of residents who may otherwise seem excluded or disengaged. Many studies have demonstrated the environmental concerns of communities of color (see for example, the listing at the Center for Diversity and the Environment website at <http://cdeinspires.org/resources/>).

Working with diverse communities offers both the opportunity and challenge to learn and listen in order to find common ground and shared concerns. Be willing to engage in difficult conversations about bias, institutional and structural racism, and power and privilege. Do your homework to understand the history of oppression, unequal treatment, and marginalization that many groups have faced, and continue to face. The deeper our understanding, the better able we will be to sustain relationships and partnerships across difference.

<sup>47</sup> Environmental Protection Agency. Learn About Environmental Justice. Accessed October 2, 2016. <https://www.epa.gov/environmentaljustice/learn-about-environmental-justice>.

<sup>48</sup> Curry-Stevens, A., A. Cross-Hemmer, and Coalition of Communities of Color. Communities of Color in Multnomah County: An Unsettling Profile. Portland, OR: Portland State University, 2010. <http://www.coalitioncommunitiescolor.org/research-data-tools/ccunsettlingprofile>.

<sup>49</sup> EPA. Learn About Environmental Justice.

<sup>50</sup> See, for example, EJNet at <http://www.ejnet.org/ej/>.

## Selected Exercises, Tools, and Training Resources

A variety of exercises, inventories, self-assessment tools, and training resources can help individuals and organizations address diversity, inclusion, and equity issues. The following provide a starting place.

### Personal Level

#### Implicit Association Test

<https://implicit.harvard.edu/implicit/takeatest.html>

The Implicit Association Test (IAT) measures attitudes and beliefs that we may or may not know we hold. Tests are available to help people uncover bias regarding age, race, sexuality, weight, and many other categories. For instance, by participating in the Gender-Science IAT, you could discover that while you believe in equal opportunities for men and women, you (like many others) unconsciously associate the field of science more with males than with females. The IAT can be used to discover biases that we may not be conscious of, which can be a valuable first step in explorations of cultural competency.

#### Promoting Cultural Diversity and Cultural Competency—Self-Assessment Checklist for Personnel Providing Services and Supports to Children with Disabilities & Special Health Needs and their Families

<https://naaee.org/sites/default/files/checklistcshn.pdf>

This checklist is intended to heighten the awareness and sensitivity of personnel to the importance of cultural diversity and cultural competence in human service settings. It provides concrete examples of the kinds of values and practices that foster such an environment. There is no answer key with correct responses.

### Organizational Level

#### Cultural Competency Assessment Rubric for Outdoor Education Programs

[https://naaee.org/sites/default/files/cultural\\_competency\\_070313.pdf](https://naaee.org/sites/default/files/cultural_competency_070313.pdf)

This cultural competency self-assessment was created for teachers and non-formal educators to help them examine and measure the extent to which their programs or classes address culture in design, implementation, and evaluation. The self-assessment uses a modified rubric as the format.

#### Cultural Competency Metrics for Experiential Environmental Education Programs

[https://barrfdn-prod.s3.amazonaws.com/documents/38/attachments/Understanding\\_Cultural\\_Competency.pdf](https://barrfdn-prod.s3.amazonaws.com/documents/38/attachments/Understanding_Cultural_Competency.pdf)

This system includes a variety of domains of cultural competency impact, and offers specific indicators to assist with measurement. These metrics help organizations measure progress against their own cultural competency objectives, measured at five levels: (1) individual, (2) interpersonal, (3) program, (4) organization, and (5) organization's relationship to the community. See Appendix A of *Understanding Cultural Competency in Experiential Environmental Education Programs: A Report from the Cultural Competency Assessment Project*.



## Selected References

Bonta, Marcelo, Tony DeFalco, and Chandra Taylor Smith. *Diversity and the Conservation Movement*. Edited by John Carey. New York, NY: National Audubon Society, 2015. [https://naaee.org/sites/default/files/eepro/resource/files/diversity\\_module.9.22.15.pdf](https://naaee.org/sites/default/files/eepro/resource/files/diversity_module.9.22.15.pdf).

Brown, Cherie R., George J. Mazza, and the National Coalition Building Institute. *Leading Diverse Communities: A How-To Guide for Moving from Healing to Action*. San Francisco: Jossey-Bass, 2005.

Bennett, M. "Becoming Interculturally Competent." In *Toward Multiculturalism: A Reader in Multicultural Education*, 2nd edition, edited by J. Wurzel, 62-77. Newton, MA: Intercultural Resource Corporation, 2004. [https://naaee.org/sites/default/files/file\\_documento.pdf](https://naaee.org/sites/default/files/file_documento.pdf).

Holvino, E. *Developing Multicultural Organizations: A Change Model*. Chaos Management, Ltd., 2008. <https://naaee.org/sites/default/files/mcodmodel.pdf>.

NAAEE. eePRO Diversity, Equity and Inclusion Group. <https://naaee.org/eepro/groups/diversity-equity-and-inclusion>.

## Resource #13

### Participatory Design—aka Co-Creation/Co-Design

**Purpose:** Provides an introduction to a participatory approach to project and initiative planning that is collaborative and empowering by design.

*Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has.*

—Margaret Mead

You can get your engagement effort started on the right foot by making the planning process itself collaborative and empowering for all partners. Although there are a number of different approaches, one that may be particularly useful to consider is participatory design, sometimes referred to as co-design or co-creation.

Participatory design is used in a wide range of fields and at various scales, from urban planning and architecture to software design, graphics, and even scientific research. The goal is to include all stakeholders—local residents, employees, clients, even target audiences—in the design process. Co-creation can help you be sure that the social and cultural interests and needs of your stakeholders are incorporated into your environmental education efforts. It can help you design a more useable, relevant process, while also inspiring empowerment and fuller long-term engagement among your collaborators.

According to business researchers, successful co-creation is based on four principles:<sup>51</sup>

- 1) Stakeholders won't wholeheartedly participate in customer co-creation unless it produces value for them, too.
- 2) The best way to co-create value is to focus on the experiences of all stakeholders.
- 3) Stakeholders must be able to interact directly with one another.
- 4) Companies should provide platforms that allow stakeholders to interact and share their experiences.

An effective co-creation process serves the interests of all involved. The formal process typically moves participants through a series of planning steps, including identifying all stakeholders; mapping existing interactions among the stakeholders; and organizing events where stakeholders can come together, tell their stories, and brainstorm ways to improve in the targeted issue area.

<sup>51</sup>. Ramaswamy, V. and F. Gouillart. "Building the Co-Creative Enterprise." *Harvard Business Review*, 2010. <https://hbr.org/2010/10/building-the-co-creative-enterprise>.

It should be noted, however, that participatory design can take different forms that affect the level of engagement, who is engaged, and ownership or power relationships.<sup>52</sup> Consider these four types of co-creation and determine which seems most appropriate given your program:

- 1) **Club of experts:** A very specific challenge needs expertise and breakthrough ideas. Contributors are found through a selection process. Quality of input is what counts.
- 2) **Crowd of people:** Also known as crowdsourcing. For any given challenge, there might be a person out there with an idea that should be given a hearing. It's the rule of big numbers.
- 3) **Coalition of parties:** In complex situations parties team up to share ideas and investments. Technical breakthroughs and standards often happen when multiple parties collaborate.
- 4) **Community of kindred spirits:** When developing something for the greater good, a group of people with similar interests and goals can come together and create.

### Selected References

Burkett, I. So What is Social Design? *Design 4 Social Innovation*, 2016. <http://www.design4socialinnovation.com.au/news/so-what-social-design-ingrid-burkett>.

Holmes, D. "Three Lessons from Ideo for Designing the Best Social Enterprises." *Co.Exist*, 2012. <https://www.fastcompany.com/2679796/3-lessons-from-ideo-for-designing-the-best-social-enterprises>.

Sanders, E.B. and P.J. Stappers. "Co-Creating and the New Landscapes of Design." *CoDesign*. 2008. <https://naaee.org/sites/default/files/preprintdraft.pdf>.

<sup>52</sup>. Pater, Martijn. (2002) Co-Creation's 5 Guiding Principles. Amsterdam: Fronteer Strategy. [https://naaee.org/sites/default/files/fs\\_whitepaper1-co-creation\\_5\\_guiding\\_principles-april2009.pdf](https://naaee.org/sites/default/files/fs_whitepaper1-co-creation_5_guiding_principles-april2009.pdf).

## Resource #14

### Collaborative Leadership

**Purpose:** Outlines qualities of collaborative leadership and offers tips for becoming a more collaborative leader.

*In these troubled, uncertain times, we don't need more command and control; we need better means to engage everyone's intelligence in solving challenges and crises as they arise.*

—Margaret J. Wheatley<sup>53</sup>

A large body of organizational literature describes a variety of leadership styles, each useful in certain situations, and covering the gamut from autocratic and controlling to inclusive, empowering, and transformational. Whatever your natural management style, it will be useful for environmental educators wishing to engage the community to have collaborative leadership tools at the ready.

### Four Qualities of Collaborative Leadership

#### Inspiring engagement

Collaborative leaders help the team develop a common vision, sense of commitment, and plan of action.

#### Solving problems collectively

Collaborative leadership is often equated with facilitative leadership, helping make all voices heard in order to take action together. Collaborative leaders support trust and healthy communication among participants in order to inspire creative solutions.

#### Building inclusion

Collaborative leaders have organizing and communication skills needed to welcome all stakeholders into the process, and to honor all participants' contributions.

#### Sustaining participation

Community change requires a long-term investment. Collaborative leaders rally participation by setting both short- and long-term goals and celebrating interim successes.

Collaborative leaders work to empower the group. They provide the information and group process necessary to achieve sound decision making. With collaborative leadership, decisions are likely to be made through inclusive dialogue and deliberation, and either consensus or some form of majority rule.<sup>54</sup>



See [Resource #12](#), page 112, to learn more about building inclusion.

See [Resource #16](#), page 130, for more information about resolving and addressing conflict.

<sup>53</sup> Wheatley, Margaret J. "How is Your Leadership Changing?" 2005. <http://www.margaretwheatley.com/articles/howisyourleadership.html>.

<sup>54</sup> Adapted from Chrislip, David and Carl E. Larson, *Collaborative Leadership: How Citizens and Civic Leaders Can Make a Difference*. Jossey-Bass, 1994.

## Cautionary Notes About Collaborative Leadership<sup>55</sup>

**Find a balance:** Collaborative leaders need to be careful not to be so focused on building trust and connections that they neglect management duties.

**Keep an eye on efficiency:** Check back with goals and priorities frequently, so that you and the group focus time and energy on the most significant issues and relationships and don't get caught up in small problems.

### Steps Toward Collaborative Leadership

- 1) **Assess your personal style and skills.** It is helpful to recognize whether you have issues with control, trust, patience, or other interpersonal skills that may affect your ability to be a collaborative leader. Consider whether you have the communication, facilitation, outreach, and other skills you deem necessary.
- 2) **Ask for feedback.** Find colleagues or friends you trust, and ask for honest feedback and help in assessing your leadership style and skills.
- 3) **Find a mentor.** Observe leaders you have seen lead collaboratively, and discuss with them what techniques work best. Ask a leader you admire to serve as your mentor, meeting periodically to offer guidance on your leadership challenges.
- 4) **Learn about leadership styles.** An extraordinary amount of research and writing has been done in recent decades on leadership styles. Use the literature to refine your thinking about best leadership practices.
- 5) **Seek training.** It is common for organizational leaders to take time periodically to expand their skills. Investing time now to reflect on your leadership style and learn new techniques (for instance, active listening, facilitation, or group process) will pay dividends in the future.
- 6) **Embrace change.** Consider the suggestions you are reading about and hearing from colleagues and mentors, and set objective measures to help move toward the collaborative leadership qualities you have identified.

### Selected References

Chrislip, David D. *The Collaborative Leadership Field Book: A Guide for Citizens and Civic Leaders*. Jossey-Bass, 2002.

"Collaboration and Collaborative Leadership," Ohio Community Collaboration Model for School Improvement. <https://education.ohio.gov/getattachment/Topics/Other-Resources/Family-and-Community-Engagement/Models-for-Family-and-Community-Engagement/Collaboration-and-Collaborative-Leadership.pdf.aspx>

Wheatley, Margaret. *Leadership and the New Science: Discovering Order in a Chaotic World*. Barrett-Koehler Publishing, 2001.

KU Work Group for Community Health and Development. Chapter 13: Section 3, "Styles of Leadership." Lawrence, KS: University of Kansas, 2016. Accessed September 9, 2016. Community Tool Box: <http://ctb.ku.edu/en/table-of-contents/leadership/leadership-ideas/leadership-styles/main>.

<sup>55</sup>. Adapted from KU Work Group for Community Health and Development. Chapter 13, Section #11: "Collaborative Leadership." Lawrence, KS: University of Kansas, 2016. Accessed September 9, 2016. Community Toolbox: <http://ctb.ku.edu/en/table-of-contents/leadership/leadership-ideas/collaborative-leadership/main>.

## Resource #15

### Stakeholder Engagement

**Purpose:** Offers tools and tips for identifying and determining priorities for engaging individuals and groups with an interest in a project, program, or initiative.

Stakeholders are individuals or groups of individuals who have an interest, or stake, in the outcome of a project, program, or initiative. Their interest may be positively or negatively impacted by the project or activity being developed. Some may be partners, some may be advisors to the effort, some may lend support along the way, and some may be potential audiences. Stakeholders are likely to be a large group of people whose interests may be affected by the effort—and who may be, in turn, interested in the undertaking.

### Why engage stakeholders?

Although there is no universally effective way to incorporate stakeholders, researchers and practitioners generally agree that stakeholder participation is a critical part of the planning process for community-based efforts. Specifically, involving stakeholders can:

- Produce better outcomes or decisions
- Develop public support for organizations and agencies, as well as their decisions and programs
- Uncover important local knowledge
- Highlight social, cultural, and environmental issues and context that will influence the success of your effort
- Increase public understanding of the issues
- Reduce or resolve conflicts
- Help successfully implement new programs or efforts
- Help organizations and agencies identify problems with existing strategies and how to resolve them
- Create new relationships

## The Power of Service to Solve Community Problems

Birmingham, Alabama, like many cities across the United States, faces social, economic, and environmental challenges, ranging from a highly profiled, racially segregated history to a current lack of investment in education and workforce development. Government leaders in Birmingham are finding that collaboration at the neighborhood level can be a key to positive change.

“When we set about the task of putting together the city’s master plan, we went back to the neighborhoods because we felt that it was important for them to feel like they had input into these plans and it was not being dictated by city hall,” said Birmingham’s Mayor Bell. To further enhance community involvement, Mayor Bell signed Birmingham up for the Love Your Block initiative in 2013, a nationwide program that supports cities in providing small grants to local volunteer groups for neighborhood improvement projects.

Before grants can be awarded, the program requires cities to conduct extensive outreach to hear community concerns and discuss potential solutions on which residents and city agencies could collaborate. Community groups then develop and submit proposals, and the city makes a series of grants ranging from \$500 to \$2,000. Throughout this process, community volunteers engage directly with local officials in setting priorities for civic improvement. At the crux of this model of citizen engagement are three elements. First, people in a community deliberate on public issues. Second, they collaborate on solving local problems. And third, they connect with others to form long-term civic relationships.

As of January 2015, Love Your Block volunteers in 16 Birmingham neighborhoods had removed more than 26,000 square feet of graffiti, disposed of more than 167,000 pounds of trash and debris, planted more than 500 trees, and revitalized 117 blocks. Crime in those neighborhoods also fell by 11 percent during the first year of the initiative in addition to a 13 percent reduction in property theft and a 16 percent reduction in auto theft.

“Love Your Block has become an essential piece in the puzzle for a brighter future for Birmingham and I look forward to continuing to find out what it really means for residents to love their blocks by deepening our impact across the city,” said Bell.

For more information:

<http://citiesofservice.org/content/love-your-block-love-your-city>.

## How to involve stakeholders?

### 1) Identify Stakeholders

There is an old joke: A stakeholder is anyone who wants to be. But it usually makes more sense to identify stakeholders a little more strategically! Working with your partners, think about all the groups that should have a voice in the planning process. Consider who would have an interest in the issue and outcome and who might have ideas that would help you reach your goals. Consider the following as guiding questions to begin the brainstorming process:

- Who will be the beneficiaries of your efforts?
- Who might be negatively affected?
- What groups/agencies/organizations/individuals are most interested in the effort? Why?
- Who has power? Who has influence?

The following table provides an alternate way of thinking about possible stakeholders:

Stakeholder Category	Description	Categories
People who live, work, play, or worship at or near a resource	Those whose everyday lives and well-being are directly connected to a resource or issue. This group is made up of the “neighbors” of the issue, and they should be invited to participate because their everyday lives may be impacted.	Residents, resource users, businesses, community/ civic organizations, interest groups and nongovernmental organizations (NGOs), government, Native American tribes, and the media
People interested in the resource, its users, its use, or its non-use	Those who assign values to a resource and are concerned about the way that resources are used. This group includes those who extract value from resources, as well as those more interested in conserving or protecting resources. This group should be invited to participate because of the sheer interest in the resource or issue.	Businesses, resource users, interest groups and NGOs, community and civic organizations, government, and Native American tribes
People interested in the processes used to make decisions	Those deeply interested in the legal and procedural aspects of an issue. This group includes those who want to ensure that all relevant policies and procedures are observed in reaching a decision. They should be involved because of their attention to procedural detail and their ability to derail a process or litigate final decisions.	Interest groups and NGOs, government, the media, residents, and Native American tribes
People who pay the bills	Those whose money is directly or indirectly used to fund resource management through taxes, fees, and other means. This group wants to ensure that money is spent wisely and should be invited to participate because the government is accountable for how it spends public dollars.	Residents, resource users, businesses, and government
People who represent citizens or are legally responsible for public resources	Those who have the legal authority and obligation to manage natural resources. Members of this group want to ensure the best final decision is reached and should be invited to participate because it is their duty.	Government

## 2) Conduct a Stakeholder Analysis

Identifying potential stakeholders is an important first step. Stakeholder analysis or stakeholder mapping provides insight into what motivates individuals and organizations to participate in an effort, what expertise they might bring, and, importantly, who may be most affected. Stakeholder analysis will also help to determine how much influence (positive or negative) differing individuals and organizations might have on the effort.

One important way of identifying and beginning the process of analyzing stakeholders is to go to the community. Initiating dialogue with community members provides a sense of the individuals or groups currently working in the area. Open conversations also help to identify the interests and concerns of stakeholders. These conversations may also provide important information about when, where, and how to engage different stakeholders throughout the process. Use the following questions to gain insight.

- What are the basic characteristics of the stakeholder (name, contact information, affiliation, position, scope of influence, likely degree of involvement)?
- Is the stakeholder representing any organized groups? If so, what are the characteristics of those groups (mission, membership, key contacts, history, authority, scope of influence, likely degree of involvement)?
- What is the stakeholder's position on the issue?
- What are the stakeholder's interests in the issue?<sup>57</sup>

Research results can be used to help determine which stakeholders are most important to, and may have the most influence on, the outcome of the effort. In its simplest form, stakeholders are divided into one of four groups.<sup>58</sup>

- **Promoters—High influence/High interest.** These stakeholders are invested. Their involvement is important and they are committed. Their contributions are potentially significant.
- **Defenders—Low influence/High interest.** These stakeholders consider the effort a high priority, but they typically wield little power. Because of their high interest, though, they are often productive volunteers.
- **Latents—High influence/Low interest.** These stakeholders can exercise power or authority. However, the effort may not be on their radar screen or they may assign a low priority to it.
- **Apathetics—Low influence/Low interest.** Stakeholders in this category typically attach a low priority to the effort and possess little power over the situation.

<sup>57</sup>. NOAA Coastal Services Center. Introduction to Stakeholder Participation. NOAA: Charleston, SC, 2015. <https://naaee.org/sites/default/files/stakeholder-participation.pdf>.

<sup>58</sup>. KU Work Group for Community Health and Development. Chapter 7, Section 8: "Identifying and Analyzing Stakeholders and their Interests." Lawrence, KS: University of Kansas, 2016. Accessed September 9, 2016. Community Tool Box: <http://ctb.ku.edu/en/table-of-contents/participation/encouraging-involvement/identify-stakeholders/main>

### 3) Apply What Was Learned

In the end, the stakeholder analysis will point out who are likely supporters and active participants, and who, with some attention, can be brought into the process effectively. The next step is to consider how people and organizations that start off as Apathetics, Defenders, or Latents can be encouraged to become Promoters. According to the University of Kansas,<sup>59</sup> the key is keeping stakeholders informed and involved by:

- Treating them with respect
- Providing whatever information, training, mentoring, and/or other support they need to stay involved
- Finding tasks or jobs for them to do that catch their interest and use their talents
- Maintaining their enthusiasm with praise, celebrations, small tokens of appreciation, and continual reminders of the effort's accomplishments
- Engaging them in decision making
- Employing them in the conception, planning, implementation, and evaluation of the effort from its beginning
- In the case of those who start with little power or influence, helping them learn how to gain and exercise influence by working together and developing their personal, critical thinking, and political skills

### Selected References

Braus, J. *Tools of Engagement: A Toolkit for Engaging People in Conservation*. Washington, DC: National Audubon Society, 2011. <https://naaee.org/eepro/resources/tools-engagement-toolkit-engaging-people-conservation>.

KU Work Group for Community Health and Development. Chapter 7, Section 8: "Identifying and Analyzing Stakeholders and Their Interests." Lawrence, KS: University of Kansas, 2016. Accessed September 9, 2016. Community Tool Box: <http://ctb.ku.edu/en/table-of-contents/participation/encouraging-involvement/identify-stakeholders/main>.

Meffe, Gary K., Larry A. Nielsen, Richard L. Knight, and Dennis A. Schenborn. *Ecosystem Management: Adaptive, Community-Based Conservation*. Washington, DC: Island Press, 2002.

NOAA Coastal Services Center. Introduction to Stakeholder Participation. Charleston, SC: NOAA, 2015. <https://coast.noaa.gov/data/digitalcoast/pdf/stakeholder-participation.pdf>.

World Bank Group. Stakeholder Analysis. <http://www1.worldbank.org/publicsector/anticorrupt/PoliticalEconomy/stakeholderanalysis.htm>.

<sup>59</sup> KU Work Group for Community Health and Development. Chapter 7, Section 8: "Identifying and Analyzing Stakeholders and Their Interests." Lawrence, KS: University of Kansas, 2016. Accessed September 9, 2016. Community Tool Box: <http://ctb.ku.edu/en/table-of-contents/participation/encouraging-involvement/identify-stakeholders/main>.

## Resource #16

### Addressing Conflict

**Purpose:** Offers a set of principles and tips for strengthening relationships, programs, and community initiatives by addressing conflict well.

*Conflict resolution is a way for two or more parties to find a peaceful solution to a disagreement among them. The disagreement may be personal, financial, political, or emotional.*

—Community Tool Box<sup>60</sup>

Even under the best of circumstances, conflict arises. It's part of the process of working together, especially when individuals and organizations are coming to a partnership—or a community—with very different experiences and perspectives.

Conflict is a part of our daily lives and we have all, to one degree or another, developed some conflict resolution skills. In many cases, however, we can hone those skills with a bit of advanced thinking. How you approach conflicts will influence your program and its success.

### Why is Conflict Resolution Important?

From our personal experiences, we know that conflict can arise from any number of circumstances: personality clashes, lack of trust, misunderstandings, lack of information, power differentials, and divergent values. And, we know that unaddressed conflicts can fester, leading to wasted time and resources, hurt feelings, and possibly the disintegration of a partnership.

By addressing conflicts appropriately, we have the potential of not only avoiding dysfunction and defusing tensions, but also reaping benefits that can strengthen our relationships and programs. With work and sufficient attention, conflict resolution strategies can be used to:

- Strengthen communication within the group
- Gain increased understanding of others' perspectives and values
- Explore alternatives and generate positive solutions
- Identify and address fears and concerns
- Find common ground and generate mutually agreed upon solutions
- Create a safe, honest working relationship
- Channel the groups' energy into more productive activities
- Reduce stress and decrease defensiveness
- Acknowledge and address power differences within a group

<sup>60</sup>. KU Work Group for Community Health and Development. Chapter 20, Section 6. "Training for Conflict Resolution." Lawrence, KS: University of Kansas, 2016. Accessed September 9, 2016. <http://ctb.ku.edu/en/table-of-contents/implement/provide-information-enhance-skills/conflict-resolution/main>.

## Facilitating Conflict Resolution

### 1) Everyone needs to be heard

Conflict often arises from miscommunication. Misunderstandings need to be addressed. But it goes deeper than that: People want to know that what they are saying has been heard and understood. Listen carefully and make sure you understand what others have said before you enter the conversation.

At times people feel they just can't get a word in edgeways. Make sure everyone has an opportunity to speak. If the group is not naturally regulating, you may want to bring in a facilitator or ask a neutral party to facilitate some contentious discussions. Have you set up meeting or discussion ground rules? (See page 130 for Meeting Ground Rules.) Group agreements such as ground rules help create an inclusive space for expression and listening.

### 2) Seek common ground

Conflict often results in people taking sides. Addressing conflict may well require finding a neutral time and a neutral place for meetings. Rather than looking to win an argument, exploring common ground or shareable ground may be far more productive. Be aware of power dynamics here. Depending on the conflict, it might be useful to bring in a third party to help negotiate or mediate a solution.

### 3) Resolve the conflict, don't avoid it

Whether spoken about openly or not, unresolved conflict is the elephant in the room, and it can be debilitating. It will reveal itself in subtext and actions. However, you can't begin to resolve a conflict until it is understood fully. Those involved need to understand the root causes of the conflict and what each wants. Agree to disagree if need be.

### 4) Honor emotional responses

Conflict often generates hurt feeling and anger. Emotions are there whether they are spoken about or not. They should be acknowledged and not swept under the rug. Creating a safe and welcoming environment where people feel comfortable sharing deeply held beliefs is paramount.

### 5) Don't be afraid to seek help

Sometimes the right move is to seek outside help from a professional facilitator who can help your group talk through difficult issues. A trained process facilitator can bring helpful objectivity to strained situations. In the case of advanced conflict, you may wish to seek help from a mediator or conflict resolution consultant.

## DID YOU KNOW?

### Some Tips for Conflict Resolution

Managing and resolving conflict requires the ability to quickly reduce stress and bring your emotions into balance. You can ensure that the process is as positive as possible by sticking to the following guidelines:

- **Listen for what is felt as well as said.** When we listen we connect more deeply to our own needs and emotions, and to those of other people. Listening also strengthens us, informs us, and makes it easier for others to hear us when it's our turn to speak.
- **Make conflict resolution the priority rather than winning or "being right."** Maintaining and strengthening the relationship, rather than "winning" the argument, should always be your first priority. Be respectful of the other person and his or her viewpoint.
- **Focus on the present.** If you're holding on to grudges based on past resentments, your ability to see the reality of the current situation will be impaired. Rather than looking to the past and assigning blame, focus on what you can do in the here-and-now to solve the problem.
- **Pick your battles.** Conflicts can be draining, so it's important to consider whether the issue is really worthy of your time and energy. Maybe you don't want to surrender a parking space if you've been circling for 15 minutes, but if there are dozens of empty spots, arguing over a single space isn't worth it.
- **Be willing to forgive.** Resolving conflict is impossible if you're unwilling or unable to forgive. Resolution lies in releasing the urge to punish, which can never compensate for our losses and only adds to our injury by further depleting and draining our lives.
- **Know when to let something go.** If you can't come to an agreement, agree to disagree. It takes two people to keep an argument going. If a conflict is going nowhere, you can choose to disengage and move on.

Excerpted from Conflict Resolution Skills: Building the Skills That Can Turn Conflict into Opportunities, <http://www.helpguide.org/articles/relationships/conflict-resolution-skills.htm>.

## DID YOU KNOW?

### Meeting Ground Rules

When meeting with a group for the first time, or when an issue is likely to be controversial, it is especially helpful to begin discussion by having participants agree on "ground rules" for participation. Many facilitators start by suggesting a couple of key rules, and then ask the group to suggest additions or changes to the list. Commonly used ground rules include:

- Everyone is encouraged to participate.
- Listen carefully to others.
- Only one person talks at a time.
- Avoid personal attacks on people—focus on the issue.
- It's okay to disagree, but do so respectfully.

Once the group has agreed on the rules, you may wish to post the rules in the room, review the ground rules at the beginning of each meeting, and refer to them as needed if discussions go off-course.

The National Coalition for Dialogue and Deliberation (NCDD) has compiled sets of ground rules used in different settings that you may find useful as a starting point: <http://ncdd.org/rc/item/1505>.

## TreePeople: Developing Skills for Interdependence

From trees, to birds and mammals, to the fungal activity in the soil, every life form in a forest relies on the others. Understanding the ecosystem is not only key to understanding nature, according to a leading Los Angeles environmental group; it's a way to understand human interaction.

"When it comes to social interdependence, we look to the forest for inspiration," said Torin Dunnivant, Director of Engagement and Partnerships for the organization TreePeople. "We believe communities become better if they adopt the principles of a forest."

Founded in 1973 by a teenager who planted trees in local mountains to replace those damaged by air pollution, TreePeople has evolved into one of the largest environmental education and advocacy organizations in the U.S. Over the years, the group has involved more than two million people in planting and taking care of more than two million trees—trees that are key to cleaner air, water, and livability in LA.

It's so hard for young trees to thrive in LA that only 5 percent of the trees there are self-planted (as compared to 66 percent in most cities). The remaining 95 percent need to be planted and carefully tended—hence TreePeople's Citizen Forestry program.

True to the interdependence model of a forest, TreePeople's Citizen Forestry program appears not only to have bridged the gap between people and nature, but also the gap between people and people. Tending trees brings neighbors together and fosters new relationships. Dunnivant noted, "Citizen Forestry begins with trees, but once people come together, they decide to do graffiti abatement and litter pick-up. They've founded Neighborhood Watch groups and created community celebrations."

TreePeople emphasizes collaboration both internally and with community partners. Staff members have been trained in the "Council" practice, a facilitation model emphasizing compassionate listening and open communication.

"Environmental issues are tied to economic disparity" noted Dunnivant, "and we've realized as we've grown that it's essential to address equity." With its emphasis on story-sharing and skilled facilitation, the Council practice enfranchises all participants equally, helping bypass perceived differences that people may bring to meetings, whether they are based on race, socioeconomic, or other things that can divide us. As Dunnivant noted, "It takes the dominant paradigm out of the conversation." Training in communication and facilitation has helped support TreePeople's focus on interdependence, as inspired by the forest.

For more information about TreePeople and the Center for Council visit: <https://www.treepeople.org> and <http://www.centerforcouncil.org>.





## Selected References

Change Matrix. Building Common Ground. [https://naaee.org/sites/default/files/building\\_common\\_ground\\_tool.pdf](https://naaee.org/sites/default/files/building_common_ground_tool.pdf).

Conflict Resolution Network. Conflict Resolution Trainers' Manual—12 Skills. <http://www.crnhq.org/12-Skills-Summary.aspx?rw=c>.

Conflict Resolution Network. Conflict Resolution Trainers' Manual—12 Skills Handout Masters. 2nd edition. [https://naaee.org/sites/default/files/t\\_handout\\_masters\\_2nd\\_ed\\_web\\_625kb.pdf](https://naaee.org/sites/default/files/t_handout_masters_2nd_ed_web_625kb.pdf).

KU Work Group for Community Health and Development. Chapter 20, Section 6: "Training for Conflict Resolution." Lawrence, KS: University of Kansas, 2016. Accessed September 9, 2016. Community Tool Box: <http://ctb.ku.edu/en/table-of-contents/implement/provide-information-enhance-skills/conflict-resolution/main>.

Mercadal-Sabbagh, T. and Purdy, M. Listening: The "Lost" Communication Skill. [http://www.academia.edu/5612011/Listening\\_The\\_lost\\_communication\\_skill](http://www.academia.edu/5612011/Listening_The_lost_communication_skill).

Segal, J. and Smith, M. Conflict Resolution Skills: Building the Skills that can Turn Conflict into Opportunities, 2015. <http://www.helpguide.org/articles/relationships/conflict-resolution-skills.htm>.

## Resource #17

### Connecting Environmental Education with Other Social Change Strategies<sup>61</sup>

**Purpose:** Provides a brief overview of some social change strategies such as social marketing, strategic communication, capacity building, and advocacy.

Environmental education offers a multitude of strategies that will support your community engagement efforts. *A Framework for Environmental Education Strategies* provides guidance on how to decide which environmental education strategy is best matched with your identified purposes (see Resource #8, page 89). However, it's useful to consider what other social change strategies might enhance your community engagement.

There are a number of strategies to consider in your planning, and each emphasizes certain characteristics and outcomes. These characteristics and outcomes differentiate education strategies from communication, advocacy, outreach, capacity building, or social marketing strategies. The best way to accomplish your community engagement goals may be to employ a combination of social change strategies.

#### Social Marketing

Social marketing is defined as a communication and education strategy that focuses on the process of influencing human behavior on a large scale, using marketing principles for the purposes of societal benefit rather than commercial profit.

The typical goal of social marketing is to influence a behavior, such as recycling, carpooling, or improving energy efficiency in the home. In addition to the environmental realm, social marketing has most often been used by public health practitioners, who aim to improve people's habits related to health and well-being.

Social marketing almost always focuses on a specific audience and a specific behavior, and projects are implemented over a limited time period. This focus is what makes social marketing effective, but it also limits its applications. Social marketing is less effective for longer-term projects, issues that are best addressed through large-scale policy changes, and situations in which specific behavioral targets are not or cannot be identified. However, social marketing and other strategies, such as advocacy and education, can be combined to create changes that have both immediate impact and long term staying power.

For more information about how to implement a social marketing strategy, see "Tool #23 Cheat Sheet—Social Marketing" in *Tools of Engagement: A Toolkit for Engaging People in Conservation*.

<sup>61</sup>. Most of the information for Resource #17 was reprinted, with permission, from Braus, J. *Tools of Engagement: A Toolkit for Engaging People in Conservation*. Chapter 7, Exploring the Social Strategies. Washington, DC: National Audubon Society, 2011. <https://naaee.org/eepro/resources/tools-engagement-toolkit-engaging-people-conservation>.

## Strategic Communication

Strategic communications activities apply the tools of communication, education, and public outreach with the intention of disseminating the right messages—through the right media, to the right audience, at the right time. Strategic communications include two-way communication and dialogue, messaging and positioning, campaigns, media relationships, writing and materials development, and other strategies to achieve social change objectives.

## Capacity Building

Capacity building is a process that focuses on how to strengthen organizations and the staff capacity of organizations and partners, including infrastructure, operational effectiveness, individual skill building, and leadership development. For example, Diversity Matters ([www.diversity-matters.net](http://www.diversity-matters.net)) works to diversify the racial and ethnic composition of the U.S. environmental movement by developing leaders, diversifying institutions, and building community. Although conservation is the ultimate goal, their efforts focus on diversifying the movement and linking a healthy environment with social equity and community building.

As part of their work, Diversity Matters conducts institutional assessments and helps provide strategic direction for diversifying an environmental organization. By building the capacity of organizations to become more diverse and inclusive, they are strengthening the movement, which will ultimately create more environmentally literate community members, who are more likely to take action to protect the environment.

## Advocacy

Advocacy efforts encourage people to speak out on issues of concern or to support a cause or proposal. An organization may have advocacy as all or part of its mission with the goal of increasing public awareness of a particular issue or set of issues. They may also strive to encourage political action.

Unlike most other social strategies, which can be more broadly applied, the aim of environmental advocacy is razor sharp: get people to support a specific view or course of action. Often the focus is political action, but advocacy can also aim to change corporate policies or activities, community members' actions, or other targets. Advocacy involves engaging people in civic life whether at the local, state, national, or international level.

For more information on common advocacy tactics, see "Tool #25 Cheat Sheet—Advocacy" in *Tools of Engagement: A Toolkit for Engaging People in Conservation*.<sup>62</sup>

<sup>62</sup>. Braus, J. *Tools of Engagement: A Toolkit for Engaging People in Conservation*. Washington, DC: National Audubon Society, 2011. <https://naaee.org/eeopro/resources/tools-engagement-toolkit-engaging-people-conservation>.



## Selected References

Constant Contact. Thirty-Five Things You Should Know About Social Media Networks. Constant Contact, Inc., 2009. <https://naaee.org/sites/default/files/35-things-you-should-know-about-social-networking.pdf>.

Corbett, Julia B. *Communicating Nature: How We Create and Understand Environmental Messages*, 2nd edition. Washington, DC: Island Press, 2006.

Jacobson, Susan K. *Communication Skills for Conservation Professionals*. Washington, DC: Island Press, 2009.

Jacobson, Susan, Mallory McDuff, and Martha Monroe. *Conservation Education and Outreach Techniques*, 2nd edition. Oxford University Press, 2015.

McKenzie-Mohr, Doug. *Fostering Sustainable Behavior: An Introduction to Community-Based Social Marketing*, 3rd edition. Gabriola Island, BC: New Society Publishers, 2011.

## Resource #18

### Appreciative Inquiry

**Purpose:** Introduces an asset-based, community-enhancing process that can be used in the design, evaluation, and improvement of programs, initiatives, partnerships, and even buildings.

*When groups query human problems and conflicts, they often inadvertently magnify the very problems they had hoped to resolve. Conversely, when groups study exalted human values and achievements, like peak experiences, best practices, and worthy accomplishments, these phenomena tend to flourish.*

—Bliss Brown, *Imagine Chicago*

Every environmental educator working in community engagement probably wonders at some point: What is the best way to help make positive change?

Most of us are familiar with the traditional problem-solving approach that asks, “What are the problems here?” This approach focuses on what isn’t working—deficits, problems, needs—and then, after analysis, searches for “fixes” to the problems.

An alternative to this deficit-based analysis is an asset-based approach, which begins by asking, “What works well here?” An asset-based approach then works to build on existing strengths toward a common vision of success.

Appreciative Inquiry (AI) is among the best known asset-based approaches. While AI does not advocate ignoring problems, its principles maintain that the questions we choose to study and the attitude we bring to exploration have an impact on the outcomes. AI focuses on positive perspectives, high points, and life-enriching forces, and helps participants identify innovative improvements based on these attributes.

The appreciative approach may especially resonate for environmental educators because it is based on an appreciation of living systems. Before appreciative methods were developed, traditional organizational development theory was based on Industrial Revolution-era thinking, viewing organizations (including communities) as “machines” that develop problems and need repair. AI originators maintain that instead, organizations and communities should be viewed as living systems, vibrant with human strengths to be understood and encouraged. Also relevant to educators is AI’s focus on the power of collective inquiry as a doorway to discovery, growth, and transformation.

### Appreciative Inquiry Fundamentals

There is no single cookbook for Appreciative Inquiry, since AI creators have long encouraged innovation and many methods have flourished. AI has been used on both a small scale (for instance, a department of an organization) and a large scale (community-wide). Approaches include having a small representative group work on behalf of a larger body, but most published studies describe processes that include the “whole system”—all stakeholders affected by the issue.

To begin an Appreciative Inquiry process, the organizing group identifies stakeholders and chooses the affirmative topic that will be the focus of inquiry. (These opening elements are sometimes referred to as the “Define” stage; see chart.) An example of an affirmative topic for a community might be “Improved water quality in the Blue River.” Because the AI model encourages practitioners to use the most vibrant, inspirational language possible, the actual topic might become “Sparkling, swimmable, fishable Blue River.”

Appreciative Inquiry then typically moves through four phases:

**Discover:** In this stage, participants explore “the best of what is,” often using interviews and storytelling to reflect on the affirmative topic. Everyone joins in, with the participants acting as both interviewer and interviewee. Talking and hearing about significant personal experiences are important ways AI strengthens engagement and builds relationships. AI theory asserts that if we are going to carry forward parts of the past, we should carry forward the best elements. In our river example, stakeholders might craft questions like, “What do you love most about the Blue River?” and “What is the most fun you’ve had in a clean river or lake? What were the qualities that made it wonderful?”

**Dream:** At this stage, participants imagine their group or community in its ideal state, as it relates to the affirmative topic. Questions are posed to evoke creativity, such as “When we win an International Clean River award in ten years, what will our top three achievements be?” At this phase, groups may choose to express their dream using creative arts or graphics rather than words.

**Design:** Now, participants develop “provocative propositions” or proposals for achieving the dream they have identified. Looking for themes in the group’s dreams, AI organizers may identify categories around which participants can come together. The resulting proposals are often called “design statements” or “possibility statements.”

**Deliver:** (This stage is sometimes called “Destiny.”) Since every application of AI is different, this stage is always unique to the initiative. Generally, groups seek consensus on design statements, and often there is an event where stakeholders commit to a variety of actions based on their common visions. Rather than orchestrate the initiatives or create an action plan, the role of the AI leader/organizer is to support the self-organizing transformations and innovations that emerge.

## AI: Where It Came From, Where It’s Used

AI originated with social scientist David Cooperrider and colleagues in the mid-1980s and was largely developed by faculty and students at Case Western Reserve University’s Department of Organizational Behavior. Scholars have documented the application of AI in facilitating change around the world in sectors ranging from business and government to NGOs and communities. Notable examples over its decades of use include the creation of the United Nations Global Compact; and Imagine Chicago (a model community development process—see example box, below).

AI is not the appropriate tool in all circumstances, and some research indicates that AI is less effective if used repeatedly in the same organization over time. In all cases, AI is most effective if conducted by skilled leaders with adequate resources.

### Selected References

The Appreciative Inquiry Commons, Case Western Reserve University. <https://appreciativeinquiry.case.edu/>.

Imagine Chicago, Appreciative Inquiry (AI) in Community Development. <http://www.imaginechicago.org/inquiry.html>.

Kessler, E.H., ed. “The Appreciative Inquiry Model,” *Encyclopedia of Management Theory*. Sage Publications, 2013.

Bushe, G.R. “Appreciative Inquiry: Theory and Critique.” In *The Routledge Companion to Organizational Change*, edited by D. Boje, B. Burnes, and J. Hassard, 87103. Oxford, UK: Routledge, 2011.

## Model AI Interview Materials for Designing a New Environmental Education Center

Note: The following appreciative inquiry interview materials were designed by the civic engagement and training organization, Imagine Chicago. They were used in a community interview process in designing a new environmental education center in Pierce County, Washington.

In every community there is work to be done.

In every heart there is the power to do it.

People will support what they help to create.

The Chambers Creek Foundation and Pierce County are dedicated to the realization of a future that honors the living connections between the natural world and human beings. We are partnering to design and create a pioneering environmental reclamation, education, and stewardship center on a beautiful public site. We want to do so in a way that inspires local leadership and community-building and expands the imagination, dynamism, and sense of place in Pierce County. This interview is an opportunity for you to reflect on your living connections here and share your thoughts about what will make the new Environmental Education Center (EEC) a great community asset.

### DISCOVER: Living Connections

What stands out for you as a time when you felt alive and powerfully connected to the natural environment, an inspiring time when you sensed yourself as part of a living, dynamic whole?

- Where were you? Who was with you?
- What contributed to making it such a powerful experience?
- What were the greatest lessons or gifts from this experience?
- What values of yours did this experience bring into focus?

### Vital signs

An environmental footprint is one way of measuring our impact. The new EEC can help everyone understand better their connection to the environment and to each other.

- What has most contributed to your understanding of “how nature works” and of your place in it?
- What are some of the practices in your daily life that best reflect your good stewardship of the environment?
- What do you consider signs of a healthier environment?

### DREAM: Transforming Place

Imagine it is the year 2020 and the EEC at Chambers Creek is being featured in a national documentary entitled “Learning at the Edge of Wonder: A Living Laboratory.” It features Pierce County as a national leader in igniting a movement toward community sustainability and bringing living connections alive in a way which shows how much place matters. Stand in that future—imagine watching this documentary film and that you are living in 2020 as part of this transformed future.

- What does environmental education in Pierce County look like now?
- How are Pierce County residents thinking about “place” differently in 2020?
- What has most strengthened a sense of community?
- What has generated inspiring intergenerational communication about the environment?
- How has the EEC best contributed to fostering a sense of Pierce County as “home”?
- What were some of the most important ways the community engaged actively in creating something truly exceptional? How were schools involved?



### **DESIGN: Empowering Intergenerational Learning and Commitment**

Young people visibly represent the promise of the future. Sharing stories and images of creative community change across generations can raise accountability to work on behalf of that promise over multiple generations.

- What environmental topics would you love to learn more about?
- What local ecological connections would you like to understand better?
- What sort of learning opportunities at the Center would make you keen to go there and bring others (of multiple generations) with you?
- Why does working together across generations on raising environmental awareness make sense?
- What sorts of activities at the Center could strengthen community and communication across generations and make the EEC the preferred education and recreation destination in Pierce County for all age groups?

### **DESTINY: Co-Creating A Movement**

Chambers Creek Foundation and Pierce County have the potential to not only provide outstanding environmental education but to help catalyze a local social movement—of deepening vision and ecologically sound practices that value and protect local natural and cultural resources.

- Name three things that the EEC could bring into focus that might inspire you toward greater sustainability in your own ecological practice.
- What is one step you know you can take now to demonstrate your commitment?
- How would you like to be involved in the design and planning of the new EEC?
- Whom else would you recommend that we speak with about this and why?

### **Thank you for your thoughts and time!**

Browne, Bliss. "Crafting Appreciative Questions: An Appreciative Inquiry designed by Imagine Chicago to Get Community Input into the Design of a New Environmental Education Center in Pierce County, WA," Imagine Chicago. <http://www.imaginechicago.org/inquiry.html>.

## Resource #19

### Asset-Based Community Development<sup>63</sup>

**Purpose:** Offers an overview of asset-based approaches to community change and capacity-building.

*Most communities address social and economic problems with only a small amount of their total capacity. Much of the community capacity is not used and is needed! This is the challenge and opportunity of community engagement. Everyone in a community has something to offer. There is no one we don't need.*

—Collaborative for Neighborhood Transformation<sup>64</sup>

Asset-Based Community Development (ABCD) is a strategy for sustainable development driven and done by the community, rather than done to the community by external agencies. ABCD mobilizes communities to identify and use existing, but often unrecognized, assets to respond to situations that often seem outside their control, and to create their own economic and other opportunities.

Many development processes are focused on needs or deficits—the problems a community faces. By contrast, ABCD focuses on the assets that live in the community, and seeks to bring individuals, associations, and institutions together to build on those resources.

ABCD is an approach and a set of practices that aim to reinvigorate the sense that neighbors can work together to help themselves. It focuses first on the assets inherent in social relationships that are reflected in existing associations and formal and informal networks as the source of constructive energy in the community.

Understanding ABCD can help you anchor your community engagement efforts in a positive approach that is buoyed by capacity-supporting practices. If you need help connecting ABCD and the community work you want to do, reach out to a community development professional for help or look for partners who can bring this background to your team. Many Extension professionals, for example, are versed in the ABCs of ABCD.

<sup>63</sup>. Adapted from “Collaborative for Neighborhood Transformation. What is Asset-Based Community Development?” Accessed September 24, 2016. <https://naaee.org/sites/default/files/whatisassetbasedcommunitydevelopment.pdf>.

<sup>64</sup>. Ibid.

## Five Types of Assets

ABCD begins by stepping back to take stock of the assets in each unique community and situation. These assets can be thought of in five groups:

- **Individuals:** The gifts and assets of community residents are the “micro-assets” on which community resources rest. In community development you cannot do anything with people’s needs, only their assets.
- **Associations:** These are small informal groups of people, such as clubs, working with a common interest as volunteers. They are critical to mobilizing the community.
- **Institutions:** Government agencies, private businesses, and schools are examples of institutions—structured groups generally comprised of paid professionals. These institutions help the community capture valuable resources and establish a sense of civic responsibility.
- **Physical Assets:** Land, buildings, space, and funds are examples of physical assets.
- **Connections:** These are the people who build and support relationships and exchange in a community.

### DID YOU KNOW?

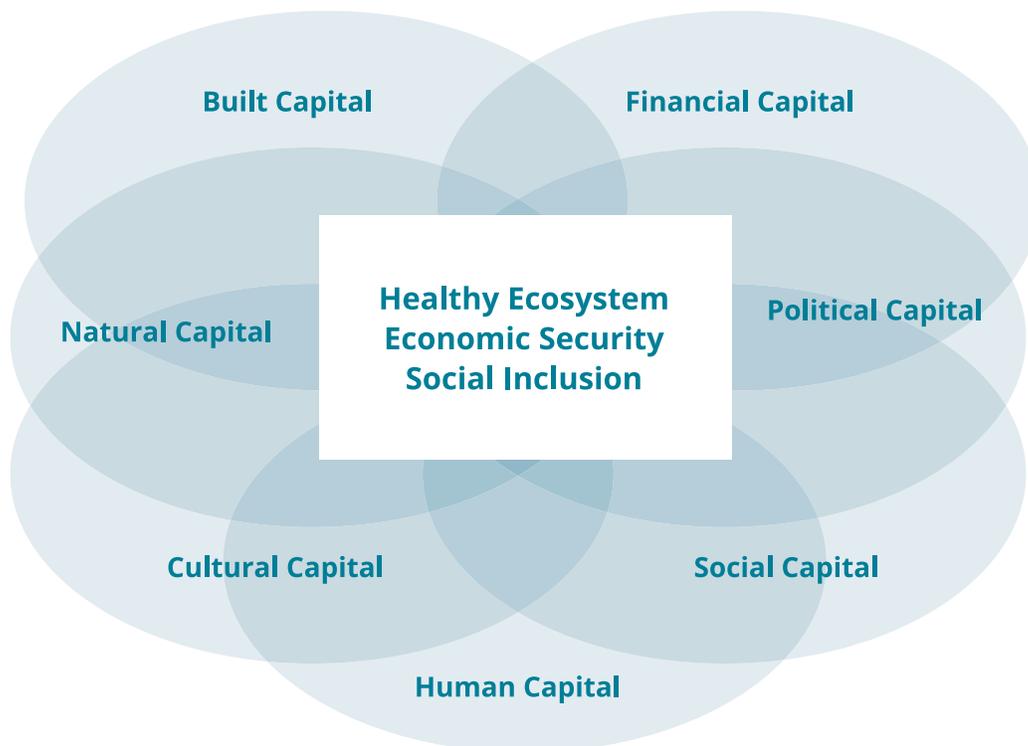
## Principles of Asset-Based Community Development

- Everyone has gifts
- Relationships build a community
- Community members at the center (engage people as powerful participants, not clients)
- Leaders involve others as active members of the community
- People care about something
- Motivation to act must be identified
- Listening conversation is essential
- Ask, Ask, Ask: Asking and inviting are key community-building actions
- Asking questions rather than giving answers invites stronger participation
- A community-centered “inside-out” organization is the key to community engagement, giving local people control of the organization and setting the organization’s agenda
- Institutions have reached their limits in problem-solving (and need the rest of the community to make progress)
- Institutions are servants

## Community Capital: A Framework for Understanding Community Assets

“Community capital” is another lens through which to understand local assets and connect them in pursuit of healthy, strong, sustainable communities. Community capital can include natural capital (natural resources, ecosystem services, and beauty), human capital (investments in health and education), social capital (neighborly connections and trust), and built capital (physical infrastructure such as buildings and roads).

Researchers—notably Cornelia and Jan Flora at Iowa State University<sup>65</sup>—have identified other categories of community capital that reflect an even broader range of assets, including financial resources, cultural norms, and political influence. The various “community capitals” classification schemes are built on a similar structure of core capitals and can be used as tools in assessment, community change, and evaluation.



## Selected References

Asset-Based Community Development Institute, <http://www.abcdinstitute.org>.

Cornelia and Jan Flora. Community Capitals. Iowa State University Department of Sociology. <http://www.soc.iastate.edu/staff/cflora/ncrcrd/capitals.html>.

Flora, C. et al. Community Capitals: A Tool for Evaluating Strategic Interventions and Projects. Iowa State University North Central Regional Center for Rural Development. <https://naaee.org/sites/default/files/204.2-handout-community-capitals.pdf>.

Kretzmann, J. P. and J.L. McKnight. *Building Communities from the Inside Out: A Path Toward Finding and Mobilizing a Community's Assets*. Evanston, IL: Institute for Policy Research, Northwestern University, 1993.

Kretzmann, J. P. and J.L. McKnight. *Discovering Community Power: A Guide to Mobilizing Local Assets and Your Organization's Capacity*. Evanston, IL: ABCD Institute, 2005. [https://naaee.org/sites/default/files/tool-abcd-capacity\\_bldg.pdf](https://naaee.org/sites/default/files/tool-abcd-capacity_bldg.pdf).

<sup>65</sup> Cornelia and Jan Flora, Community Capitals. Iowa State University Department of Sociology. Reprinted with permission of the authors. <http://www.soc.iastate.edu/staff/cflora/ncrcrd/capitals.html>.

## Resource #20

### Collective Impact

**Purpose:** To learn more about “collective impact” and how you can put this strategic collaboration method to work to help build a partnership that achieves its shared goals.

*Large-scale social change comes from better cross-sector coordination rather than from the isolated intervention of individual organizations. ... Collaboration is nothing new. [But] unlike most collaborations, collective impact initiatives involve a centralized infrastructure, a dedicated staff, and a structured process that leads to a common agenda, shared measurement, continuous communication, and mutually reinforcing activities among all participants.<sup>66</sup>*

—John Kania & Mark Kramer, *Stanford Social Innovation Review*

Collective Impact, or CI, is a strategic collaboration method designed to help organizations reach goals more effectively. The theory behind Collective Impact is that by bringing together key stakeholders from multiple sectors—residents, nonprofits, corporations, government, universities, funders—and systematically addressing large-scale social issues, such as protecting a city's water supply, preventing childhood obesity, or improving education—we can have more impact. CI initiatives are large scale (city-wide, region-wide, or larger) and unusual in their inclusion of diverse, previously unconnected or even competing stakeholders.

The six key elements of Collective Impact work are described below, along with some examples of environmental and education-related CI initiatives.

#### 1) Common Agenda

A Collective Impact initiative requires that participants come together to create a shared vision. This includes actively working to create a common understanding of the issues to be addressed, and a common agreement on how to address it. CI advocates argue that too often, funders and nonprofits believe they already have this common agenda, but closer examination reveals that every organization has its own definition of the issue and goals. While it is easy to gloss over these differences, ultimately they can divide and weaken the effort. CI requires participants to discuss and resolve differences, at least to the point of agreeing on primary goals. Often with guidance from funders, CI initiatives have had success aligning diverse participants including community members, government entities, corporations, nonprofits, and even business competitors.

<sup>66</sup> Kania, John and Mark Kramer. “Collective Impact.” *Stanford Social Innovation Review* 9, no. 1:36-41, 2011. [http://ssir.org/articles/entry/collective\\_impact](http://ssir.org/articles/entry/collective_impact).

## 2) Shared Measurement Systems

Sharing a common agenda is only useful if participants also agree on the system by which they will measure their progress. For example, “Strive” is a CI program in Cincinnati and northern Kentucky that involved 300 leaders from many sectors in improving student performance. All of the Strive preschool programs agreed to report on the same key measurements. This allowed participants to spot patterns and implement improvements. Strive data pinpointed the need for what became an innovative “summer bridge” program to ensure that preschoolers did not regress over summer vacation before kindergarten. Implemented system-wide, the innovation improved kindergarten readiness scores by an average of 10 percent in just one year.

## 3) Mutually Reinforcing Activities

The idea here is that every participating CI organization will do its work using the common vision and plan. The goal is not uniformity of action; naturally, each participating group has its own niche and areas of expertise. Instead, stakeholders agree to apply their talents toward the common vision, while also supporting the others toward the collective goal.

The Elizabeth River Project, a CI environmental clean-up effort in southeastern Virginia, coordinated more than 100 stakeholders, including city, state, and federal government, and local environmental groups, businesses, and universities. Each of these participants had its own focus, from grassroots engagement to scientific research to coordinating with industry. Importantly, however, all used the common 18-point restoration plan. In nearly two decades of work, the project has succeeded in measurably reducing pollution and carcinogens, conserving or restoring over 1,000 acres, and dramatically improving water quality.

## 4) Continuous Communication

Trust is critical to Collective Impact. CI projects have found that it can take several years of facilitated meetings (meeting monthly or even more frequently) to develop trust among such disparate players as government institutions, corporations, and NGOs. Participants in successful CI projects are organizational leaders (CEO-level) and participate fully, attending meetings face-to-face and communicating between meetings using various online methods. The ongoing communication effort includes developing a common vocabulary, building an understanding of shared motivation and commitment, and sharing enough experience to know that all participants' interests will be treated fairly in view of their common agenda.

## 5) Backbone Support Organizations

In their founding article describing CI, scholars Kania and Kramer note, “The expectation that collaboration can occur without a supporting infrastructure is one of the most frequent reasons why it fails.”<sup>67</sup> Rather than adding CI-support tasks to existing staff members' job descriptions, successful CI initiatives have dedicated staff with key skill sets including management and planning, meeting and interpersonal facilitation, conflict management, data management, and technology and communication support. It is critical that participants commit to a structured decision-making process.

<sup>67</sup> Kania, John and Mark Kramer. “Collective Impact.” *Stanford Social Innovation Review* 9, no. 1:36-41, 2011. [http://ssir.org/articles/entry/collective\\_impact](http://ssir.org/articles/entry/collective_impact).

## 6) Equity

In a 2015 update to the Collective Impact model, Kania and Kramer write, “The five conditions of collective impact, implemented without attention to equity, are not enough to create lasting change.”<sup>68</sup> They point to a pervasive context of structural inequity that prevents equitable outcomes and lasting change, especially for already disadvantaged groups. Lasting change, Kania and Kramer note, will come only with “explicit attention to policies, practices, and culture that are reinforcing patterns of inequity in the community,”<sup>69</sup> and the development of specific strategies that account for advantages and disadvantages that are built into these patterns. Lastly, those who are affected by a collective impact process must be at the table for every part of the process.

Clearly, CI requires a large-scale, cross-sector commitment, and a significant investment of time and resources. But with the necessary support, CI is a recognized method to help funders leverage contributions, and to support communities in identifying and meeting their goals more effectively.

### GUIDELINES IN PRACTICE

## Collective Impact and ChangeScale

In the San Francisco and Monterey Bay Area of California, a diverse group has come together to ask a big, dashboard-level question: “How can we move the needle on environmental education?”

Outdoor educators, classroom teachers and administrators, museums and aquariums, university researchers, funders, and many others have a stake in the coastal region’s EE efforts. The ChangeScale organization got its start in 2011 when an environmental education provider, a university researcher, and a funder put their heads together to ask how these diverse EE professionals could develop common goals.

Applying collective impact principles, ChangeScale partners realized that it was critical to create a common understanding of the issues facing the field. They conducted detailed listening sessions with diverse participants and collaboratively developed four strategic goals to expand the relevance of EE in the region: To make EE efforts better informed by research; to ensure that EE is available to, and influenced by, diverse communities; to engage a wider range of stakeholders in designing and delivering EE; and to improve collaboration, which will support a common message, vision, and standards.

By supporting a regional web of EE efforts, ChangeScale partners aim to increase EE access to 150,000 K–12 Bay Area students. More than 40 EE leaders have formed a community of practice to design specific learning pathways for area learners. In addition, ChangeScale partners are collaborating with school districts to ensure that the implementation of new national science standards aligns with EE content and pedagogy.

Supported by staff, ChangeScale hosts quarterly gatherings where a growing group of partners can experience professional development, share ideas, and build plans to advance their common goals.

To learn more, go to <http://changescale.org>.

<sup>68</sup>. Kania, John and Mark Kramer. “The Equity Imperative in Collective Impact.” *Stanford Social Innovation Review*, October 6, 2015. [http://ssir.org/articles/entry/the\\_equity\\_imperative\\_in\\_collective\\_impact](http://ssir.org/articles/entry/the_equity_imperative_in_collective_impact).

<sup>69</sup>. Ibid.



## Selected References

Kania, John and Mark Kramer. "Collective Impact." *Stanford Social Innovation Review* 9, no. 1:36-41, 2011. [http://ssir.org/articles/entry/collective\\_impact](http://ssir.org/articles/entry/collective_impact).

Kania, John and Mark Kramer. "The Equity Imperative in Collective Impact." *Stanford Social Innovation Review*, October 6, 2015. [http://ssir.org/articles/entry/the\\_equity\\_imperative\\_in\\_collective\\_impact](http://ssir.org/articles/entry/the_equity_imperative_in_collective_impact).

The Collective Impact Initiative website provides an introduction to the CI approach and a variety of CI-related resources including videos and case studies. <http://www.collaborationforimpact.com/collective-impact/>.

The Collective Impact Forum website is maintained by FSG, the nonprofit consulting firm founded by Collective Impact co-creators. It includes links to videos, presentations and stories about CI programs. <http://collectiveimpactforum.org>.

Forum for Youth Investment's "Ready by 21" <http://www.readyby21.org>.

## Resource #21

### Program Planning and Process Design

**Purpose:** Introduces several processes for planning collaborative community projects.

When you're working alone, especially on small projects, it can be appropriate simply to dive in. However, on collaborative community projects, it makes sense not only to plan, but to select a planning process.

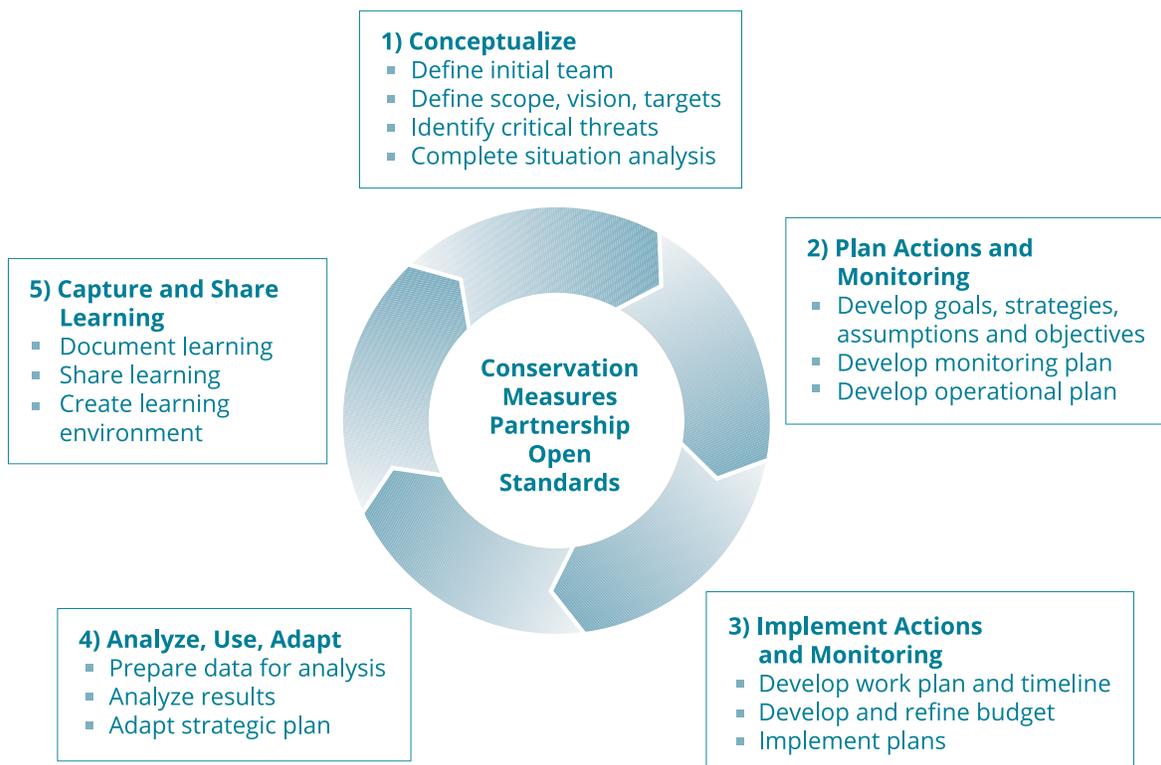
Following a planning process will help you be as efficient and effective as possible. There are many processes to choose from, however, and no single planning strategy will fit all situations. Explore a variety of strategies and select the one that best fits the goals, needs, and resources of your current effort.

Most planning processes assume the need for flexibility, and build in cycles of iterative steps or phases. Planning a program is rarely, if ever, linear. Here, as a place to begin, is a sampling of tools created specifically for conservation and environmental education efforts.

### Adaptive Management

A framework used by numerous conservation organizations for designing and managing initiatives is "Adaptive Management." The Open Standards for the Practice of Conservation, created by a collaboration of conservation groups to improve their effectiveness, offer a series of adaptive management guidelines building on best practices from across the field.

This approach to planning and action includes a cycle with continual monitoring, adapting, and learning.



The cycle begins with conceptualizing the project, and moves through the following cycle of steps, with documentation and evaluation that ultimately help to inform the next iteration of the project.

**1) Conceptualize**

- 1A. Define initial project team
- 1B. Define scope, vision, and targets
- 1C. Identify critical threats
- 1D. Complete situation analysis

**2) Plan your actions and monitoring**

- 2A. Develop a formal action plan: goals, strategies, assumptions, and objectives
- 2B. Develop a formal monitoring plan
- 2C. Develop an operational plan

**3) Implement actions and monitoring**

- 3A. Develop a detailed short-term work plan and timeline
- 3B. Develop and refine your project budget
- 3C. Implement your plans

**4) Analyze, use, adapt**

- 4A. Prepare your data for analysis
- 4B. Analyze results
- 4C. Adapt your strategic plan

**5) Capture and share learning**

- 5A. Document what you learn
- 5B. Share what you learn
- 5C. Create a learning environment

## Participatory Design

Participatory design, sometimes referred to as cooperative design, co-design, or co-creation, is a technique for making planning collaborative and empowering for all partners.

Participatory design is used in a wide range of fields and at various scales, from urban planning and architecture to software design, graphics, and even scientific research. The goal is to include all stakeholders—local residents, employees, clients, even target audiences—in the design process. Co-design can help you be sure that the social and cultural interests and needs of your stakeholders are incorporated into your environmental education efforts. Ultimately, it can help you design a more useable, relevant process, while also inspiring innovation, empowerment, and fuller long-term engagement among your collaborators.

An effective co-design process serves the interests of all involved. The formal process moves participants through planning steps, including: identifying all stakeholders; mapping existing interactions among the stakeholders; and organizing events where stakeholders can come together to tell their stories and brainstorm ways to improve in the targeted issue area.

See [Resource #13](#), page 121, to delve further into participatory design, a collaborative and empowering approach to project and initiative planning.

## Tools of Engagement: A Toolkit for Engaging People in Conservation

Developed by the National Audubon Society with a number of partners, *Tools of Engagement's* twenty-step process for engaging people in conservation work is divided into four major sections: Know Where You Are Going; Understand the Problems and Context; The People Factor; and What Are You Going To Do? Although set out as a series of steps, the authors remind readers that planning is not a linear process, and the keys are flexibility and adaptability.

Case studies and research references help link the conservation-related contents to related fields including social marketing, psychology, and sociology. Available online or in a print version, *Tools of Engagement* also offers links to resources and additional tools.

## Nonformal Environmental Education Programs: Guidelines for Excellence

This set of guidelines delineates ways to think about programmatic structure, goals and objectives, and logistical considerations to help environmental educators develop and implement effective programs that promote environmental literacy.

The process outlines six Key Characteristics or stages in the program development process: (1) Needs assessment, (2) Assessment of organizational needs and capacities, (3) Determination of the program scope and structure, (4) Program delivery resources, (5) Program quality and appropriateness, and (6) Evaluation.

See [Resource #22](#), page 152, for an overview of the field's professional recommendations for developing and delivering high-quality nonformal environmental education programs.

### Selected References

Conservation Measures Partnership. Open Standards for the Practice of Conservation. Version 3.0. 2013. <http://cmp-openstandards.org/download-os>.

Braus, J. *Tools of Engagement: A Toolkit for Engaging People in Conservation*. Washington, DC: National Audubon Society, 2011. <https://naaee.org/eepr/resources/tools-engagement-toolkit-engaging-people-conservation>.

NAAEE. *Nonformal Environmental Education Programs: Guidelines for Excellence*. Washington, DC: North American Association for Environmental Education, 2009. <https://naaee.org/eepr/publication/nonformal-environmental-education-programs-guidelines-excellence>

## Resource #22

### Nonformal Environmental Education Programs: Guidelines for Excellence

**Purpose:** Describes six key characteristics and provides guidelines for developing high quality environmental education programs in nonformal settings.

*Nonformal Environmental Education Programs: Guidelines for Excellence* comprise a set of recommendations for developing and administering high quality nonformal environmental education programs. These recommendations provide a tool that can be used to ensure a firm foundation for new programs or to trigger improvements in existing ones. The overall goal of these guidelines is to facilitate a superior educational process leading to the environmental quality that people desire.

The term “environmental education program” is used in these guidelines to mean an integrated sequence of planned educational experiences and materials intended to reach a particular set of objectives. Programs, taken together, are the methods by which an organization’s education goals are accomplished. Programs can be small or large and can range from short-term, one-time events to long-term, community capacity-building efforts.

Nonformal environmental education programs can be extremely diverse in their settings and in their target audiences. Community-based groups, service organizations, government agencies, boys and girls clubs, parks and reserves, state and national forests, residential centers, nature centers, zoos, museums, 4-H clubs, etc., all may be involved in nonformal environmental education.

Developed as part of the National Project for Excellence in Environmental Education, *Nonformal Environmental Education Programs: Guidelines for Excellence* points out six key characteristics of high quality nonformal environmental education programs. These guidelines can help the educator, administrator, or program developer who is concerned about the quality of nonformal environmental education programs. It provides direction while allowing flexibility in shaping content, technique, and other aspects of program delivery. These guidelines offer a way of judging the relative merit of different programs, a standard to aim for in developing new programs, and a set of ideas about what a well-rounded nonformal environmental program might be like.

## Nonformal Environmental Education Programs: Guidelines for Excellence Summary

**Needs assessment:** Nonformal environmental education programs are designed to address identified environmental, educational, and community needs and to produce responsive, responsible benefits that address those identified needs.

- 1.1 Environmental issue or condition
- 1.2 Inventory of existing programs and materials
- 1.3 Audience needs

**Organizational needs and capacities:** Nonformal environmental education programs support and complement their parent organization's mission, purpose, and goals.

- 2.1 Consistent with organizational priorities
- 2.2 Organization's need for the program identified
- 2.3 Organization's existing resources inventoried

**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
- 3.2 Fit with goals and objectives of environmental education
- 3.3 Program format and delivery
- 3.4 Partnerships and collaboration

**Program delivery resources:** Nonformal environmental education programs require careful planning to ensure that well-trained staff, facilities, and support materials are available to accomplish program goals and objectives.

- 4.1 Assessment of resources needs
- 4.2 Quality instructional staff
- 4.3 Facilities management
- 4.4 Provision of support materials
- 4.5 Emergency planning

**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
- 5.2 Field testing
- 5.3 Promotion, marketing, and dissemination
- 5.4 Sustainability

**Evaluation:** Nonformal environmental education programs define and measure results in order to improve current programs, ensure accountability, and maximize the effects of future efforts.

- 6.1 Determination of evaluation strategies
- 6.2 Effective evaluation techniques and criteria
- 6.3 Use of evaluation results

### Selected References

For more information on the National Project for Excellence in Environmental Education and to download a copy of the guidelines, visit: <https://naaee.org/our-work/programs/guidelines-excellence>.

NAAEE. eePRO Guidelines for Excellence Group <https://naaee.org/eepr/groups/guidelines-excellence>.

## Resource #23

### Evaluation

**Purpose:** Offers background on evaluation and basic guidance for integrating it into programs and initiatives.

Building evaluation into community engagement efforts is key. The following is excerpted, with permission, from MEERA, My Environmental Education Evaluation Resource Assistant.<sup>70</sup> MEERA is an online “evaluation consultant” created to assist you with your evaluation needs. MEERA will point you to resources that will be helpful in evaluating your program.

#### What is evaluation?

Evaluation is a process that critically examines a program. It involves collecting and analyzing information about a program’s activities, characteristics, and outcomes. Its purpose is to make judgments about a program, to improve its effectiveness, and/or to inform programming decisions (Patton, 1987).

#### What type of evaluation should I conduct and when?

Evaluations fall into one of two broad categories: formative and summative. Formative evaluations are conducted during program development and implementation and are useful if you want direction on how to best achieve your goals or improve your program. Summative evaluations should be completed once your programs are well established and will tell you to what extent the program is achieving its goals.



<sup>70</sup> Zint, M. “My Environmental Education Evaluation Resource Assistant.” 2008. Accessed September 19, 2016. <http://www.meera.snre.umich.edu/>.

Within the categories of formative and summative, there are different types of evaluation. Which of these evaluations is most appropriate depends on the stage of your program:

<b>Type of Evaluation</b>	
<b>Formative</b>	
1) Needs Assessment	Determines who needs the program, how great the need is, and what can be done to best meet the need. An EE needs assessment can help determine what audiences are not currently served by programs and provide insight into what characteristics new programs should have to meet these audiences' needs.
2) Process or Implementation Evaluation	Examines the process of implementing the program and determines whether the program is operating as planned. Can be done continuously or as a one-time assessment. Results are used to improve the program. A process evaluation of an EE program may focus on the number and type of participants reached and/or determining how satisfied these individuals are with the program.
<b>Summative</b>	
1) Outcome Evaluation	Investigates to what extent the program is achieving its outcomes. These outcomes are the short-term and medium-term changes in program participants that result directly from the program. For example, EE outcome evaluations may examine improvements in participants' knowledge, skills, attitudes, intentions, or behaviors.
2) Impact Evaluation	Determines any broader, longer-term changes that have occurred as a result of the program. These impacts are the net effects, typically on the entire school, community, organization, society, or environment. EE impact evaluations may focus on the educational, environmental quality, or human health impacts of EE programs.

## What makes a good evaluation?

A well-planned and carefully executed evaluation will reap more benefits for all stakeholders than an evaluation that is thrown together hastily and retrospectively. Though you may feel that you lack the time, resources, and expertise to carry out an evaluation, learning about evaluation early on and planning carefully will help you navigate the process.

As you think about evaluation, remember that good evaluation is:

- Tailored to your program and builds on existing evaluation knowledge and resources
- Inclusive
- Honest
- Replicable and its methods are as rigorous as circumstances allow

Making evaluation an integral part of your program means evaluation is a part of everything you do. You design your program with evaluation in mind, collect data on an ongoing basis, and use these data to continuously improve your program.

Developing and implementing such an evaluation system has many benefits including helping you to:

- Better understand your target audiences' needs and how to meet these needs
- Design objectives that are more achievable and measurable
- Monitor progress toward objectives more effectively and efficiently
- Learn more from evaluation
- Increase your program's productivity and effectiveness

Make evaluation part of your program; don't tack it on at the end!

## Selected References

Ernst, J., Martha Monroe, and Bora Simmons. *Evaluating Your Environmental Education Programs: A Workbook for Practitioners*. Washington, DC: North American Association for Environmental Education, 2009.

Norland, E. "From Education Theory to Conservation Practice." Presented at the Annual Meeting of the International Association for Fish & Wildlife Agencies, Atlantic City, New Jersey, September 2004.

Pancer, S. M., and A. Westhues. "A Developmental Stage Approach To Program Planning and Evaluation." *Evaluation Review* 13, no. 1 (1989): 56-77. doi:10.1177/0193841x8901300105.

Rossi R H., M. W. Lipsey, and H. E. Freeman. *Evaluation: a Systematic Approach*. Thousand Oaks, CA: Sage Publications, 2004.

University of Wisconsin Extension, National Water Outreach Education Extension. Water Outreach Self-Assessment. <http://fyi.uwex.edu/wateroutreach/water-outreach-education/accomplish-what/assess-your-program/>.

Zint, M. "My Environmental Education Evaluation Resource Assistant." 2008. Accessed September 19, 2016. <http://www.meera.snre.umich.edu/>.

## Resource #24

### Ripple Effect Mapping—A Participatory, Capacity-Building Evaluation Tool

**Purpose:** Provides background and basic instructions for “ripple effect mapping,” a participatory and capacity-building evaluation process.

*Ripple effect mapping is not only a powerful technique to document impacts of a project or program—it also engages and re-energizes community members around shared goals in ways that conventional evaluation techniques like surveys and focus groups do not.*

—Scott Chazdon, University of Minnesota Extension Center for Community Vitality<sup>71</sup>

#### Overview

Picture your initiative as a stone that starts an ever-expanding circle of “waves” of effects in the “pond” of a community. Ripple Effect Mapping (REM) is a way to engage program participants and other community stakeholders in identifying, documenting, and creating a way to visualize those waves—whether they are intended impacts or unintended effects.

Ripple Effect Mapping is a simple, inexpensive, participatory evaluation process that is consistent with, and helps further the goals of community engagement and capacity building. It can be used to learn from and improve an ongoing initiative, or alongside other methods to evaluate a completed program. Well suited to complex efforts, REM helps capture effects that are often difficult to track such as trust and connections among people and organizations, and the effect of those relationships.

The moniker, “mapping,” is apt, as one result is a detailed visual schematic that can be used to share program impacts with participants, volunteers, funders, local officials, and others interested in outcomes. Melvin Giles, a community organizer in St. Paul, Minnesota, who has used ripple effect mapping with a local master gardeners program, says, “People keep asking me, ‘When’s the next mapping?’ They’re excited about it.” Giles notes that REM sessions have helped build relationships among people in different neighborhoods, revealing commonalities and connections.<sup>72</sup> REM helps inspire further collective action.

#### Common Uses of Ripple Effect Mapping

- Deepen insight into intended and unintended consequences
- Uncover what works well and not so well
- Assist with community self-reflection
- Identify unmet needs and areas for future activity
- Foster greater connectivity across groups
- Garner funds and other resources
- Support community-oriented research

<sup>71</sup>. Quoted in Vitcenda, Mary. “Ripple Effects Mapping Makes Waves in the World of Evaluation.” Community Features, University of Minnesota Extension, Summer 2014. <http://www.extension.umn.edu/community/news/ripple-effect-mapping-making-waves-in-evaluation/>.

<sup>72</sup>. Ibid.

## Ripple Effect Mapping: Five Steps

REM combines elements of Appreciative Inquiry (see Resource #18, page 136), mind mapping, and qualitative data analysis, and uses both one-to-one and group work. Leading and learning from a Ripple Effects Mapping evaluation requires a blend of facilitation and evaluation skills, which could be contributed by a team. There are five basic steps:

1) **Decide whether REM is the right approach:** REM works best for collaborations or programs intended to go beyond specific outcomes to produce broad or deep changes in a group, organization, or community. For example, REM might be better suited to a community-wide initiative to increase nature recreation or a summer youth environmental investigations program that has been running for a few years in an urban park than to a six-month project that installed interpretive signs along a nature trail.

2) **Schedule the event and invite participants:** Ripple Effect Mapping takes place in a single one-to-three-hour meeting that involves about eight to 20 participants. These may include individuals who are involved in program delivery and/or served by the program as well as non-participant stakeholders such as funders, community leaders, and local journalists. Including interested parties who do not directly participate in the program helps broaden the focus of the evaluation, the types of positive and negative effects that are likely to be identified, and the new action ideas that emerge.

3) **Conduct one-to-one interviews using Appreciative Inquiry questions:** An REM event begins by pairing participants who interview each other about the most positive effects of the program or initiative, how it affected their lives, and/or specific achievements or successes they have experienced as a result.

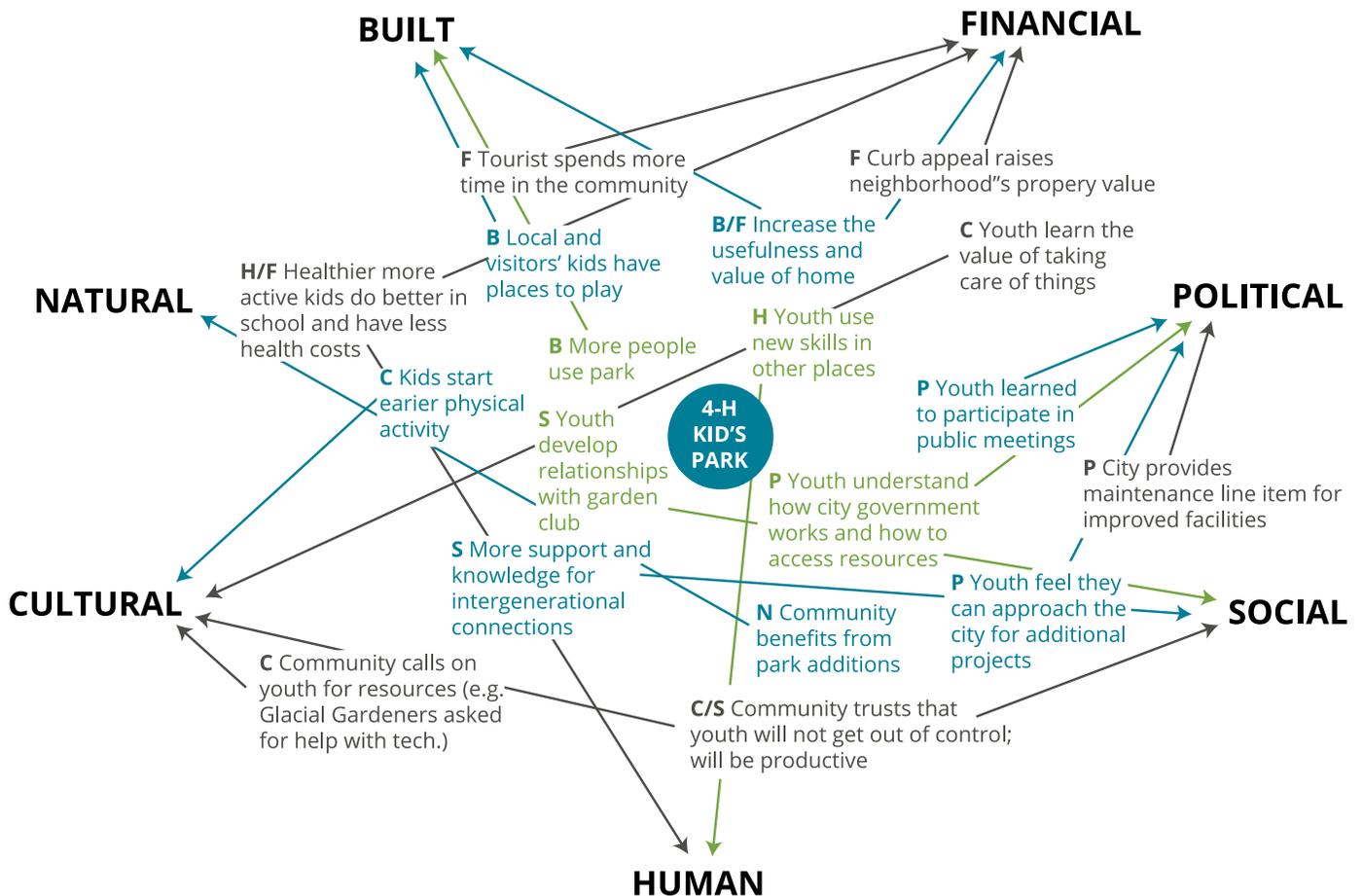
4) **Map effects as a group:** This is the heart of the session, in which the group brainstorms and maps the effects or “ripples” of the initiative, noting relationships and which effects led to others. Mind mapping software or paper taped on a wall capture the results into a visual image of expanding effects. The entire group gets involved in the process, which encourages them to make connections among program effects. A facilitator and a “mapper” work together to lead this one-to-two-hour activity. (See Figure 1 for a sample ripple effects map.)

5) **Clean up, organize, and analyze:** The ripple effects map produced during the session may need to be reorganized for clarity, and additional data can be added based on interviews conducted after the session. Data from the map can be organized in various ways. For example, they could be coded to correspond with different project goals or categories of observed impacts. They could be organized by knowledge, skill, or attitudinal changes, behavior changes, and changes in conditions. Impact could also be sorted by type of community asset using the “community capitals” framework<sup>73</sup> or another organizing scheme. (See Resource #18, page 136, for an explanation of community capital.) (Table 1 shows the data from that map organized into a table.)

<sup>73</sup> Cornelia and Jan Flora. Community Capitals. Iowa State University Department of Sociology. <http://www.soc.iastate.edu/staff/cflora/ncrcrd/capitals.html>.

Figure 1: Ripple effects map of the impacts of a community park developed by a 4-H club in Maine.<sup>74</sup>

This map is coded using the “community capital” framework, which reflects different types of community assets noted on the ripple effects map and in the table below: political (P), social (S), human (H), cultural (C), natural (N), built (B), and financial (F). The colors show the “ripples”—immediate impacts in green, and then circles of effects rippling out in other colors.



<sup>74</sup> Baker, B., M. Calvert, R. Enfield, M. Emery, and B. Williams. "Mapping the Impact of Youth on Community Development, What Are We Learning?" North Central Regional Center for Rural Development Webinar, Representing Multi-state Extension & Research Activity (NCERA215): Contribution of 4 H Participation to the Development of Social Capital. Reprinted with permission from the authors. <http://ncrcrd.msu.edu/uploads/files/Mapping%20Impact%20of%20Youth%20on%20Com%20Dev%2012-3-10.pdf>.

**Table 1. Ripple effects map data organized by type of impact.**<sup>75</sup> In this table, the outcomes noted in the ripple effects map in Figure 1 are organized in three categories: behavior changes, benefits for different groups, and changes in how community groups and institutions work. The initial capital letters before each entry reflect the original map’s coding to the “community capitals” framework mentioned in Figure 1.

Activity's Short-Term Change What are people doing differently?	Who benefits and how?	Systems and Long-Term Change Are there changes in the way community groups and institutions do things?
<b>SAMPLE</b>	<b>SAMPLE</b>	<b>SAMPLE</b>
<b>B</b> More people use the park	<b>B</b> Local and visitors’ kids have places to play <b>C</b> Kids start earlier physical activity	<b>F</b> Tourist spend more time in the community <b>H</b> Healthier more active kids do better in school and have less costs
<b>H</b> Youth use new skills in other places	<b>B/F</b> Increase the usefulness and value of home	<b>C</b> Youth learn the value of taking care of things <b>F</b> Curb appeal raises the neighborhood’s property value
<b>S</b> Youth develop relationships with garden club	<b>S</b> More support and knowledge for intergenerational connections	<b>C</b> Community calls on youth for resources (e.g. Glacial Gardeners asked for help with tech.)
<b>P</b> Youth understand how city government works and how to access resources	<b>N</b> Community benefits from park additions <b>P</b> Youth feel they can approach the city for additional projects <b>P</b> Youth learned to participate in public meetings	<b>C/S</b> Community trusts that youth will not get out of control, will be productive <b>P</b> City provides maintenance line item for improved facilities

### Selected References

Burkhart-Kriesel, Cheryl. “Ripple Effect Mapping: A Tool to Document Change.” *Cornhusker Economics*, June 2015. <http://agecon.unl.edu/cornhusker-economics/2015/ripple-effect-mapping-a-tool-to-document-change>.

Darger, Michael. “Capturing the Ripples from Community-Driven Business Retention and Expansion Programs.” *Journal of Extension* 52, no. 2 (April 2014). <http://www.joe.org/joe/2014april/tt6.php>.

Emery, Mary et al. “Using Ripple Effect Mapping to Evaluate Program Impact: Choosing or Combining the Methods That Work Best for You.” *Journal of Extension* 53, no. 2 (April 2015). <http://www.joe.org/joe/2015april/tt1.php>.

Ripple Effects Mapping for Evaluation. Washington State University Extension. <https://naaee.org/sites/default/files/rem.complete.pdf>.

<sup>75</sup> Baker, B., M. Calvert, R. Enfield, M. Emery, and B. Williams. “Mapping the Impact of Youth on Community Development, What Are We Learning?” North Central Regional Center for Rural Development Webinar, Representing Multi-state Extension & Research Activity (NCERA215): Contribution of 4 H Participation to the Development of Social Capital. Reprinted with permission from the authors. <http://ncrcrd.msu.edu/uploads/files/Mapping%20Impact%20of%20Youth%20on%20Com%20Dev%202012-3-10.pdf>.

## Resource #25

### Leading for Change

**Purpose:** Helps you reflect on your capacity and orientation toward the kind of leadership that supports community change, and skills, qualities, and attitudes you can foster in yourself—or look for in partners.

Almost by definition, education creates change. Rarely do we develop goals, especially educational goals, that focus on maintaining the status quo. Forming new partnerships and reaching out to new audiences produce change. In turn, a community engagement project will generate change—most likely at the individual, group, and hopefully community levels. Change in its most abstract form is appealing and exciting. In reality, it is also disruptive, and not always embraced with open arms. Change often challenges deeply held attitudes and values and asks people to fundamentally alter the ways they think and act. Facilitating positive change, serving as a change agent leader, is an essential job.

It should be noted that, depending on the situation or project, more than one change agent leader will likely be involved. When working in collaborations, it is hard to imagine a project pyramid with the leader at the top. Leadership may well be fluid within the group with different people stepping up and stepping aside throughout the project.

#### Build Relationships

Change does not occur in a vacuum; it requires working with others. Coalitions will be developed. Personal relationships, built on a foundation of trust, credibility, and caring, need to be formed. As you think about the desired change and what it means to be a change agent leader, consider that developing trusting relationships with the people involved in the project requires ongoing attention.

#### Hone Skills

Change is complex, and working as an agent for change requires a complex set of knowledge, skills, and dispositions. Research from the fields of organizational change and business management suggests that in addition to strong interpersonal, communication, and project management skills, successful change agent leaders possess the ability to:

- Articulate a clear vision and way forward
- Exhibit persistence while remaining patient
- Lead by example
- Inspire and motivate others
- Show passion
- Instill passion and confidence in others
- Demonstrate empathy



Skill development is critical, but there is an art to being a change agent leader. Working to further hone an understanding of issues and developing interpersonal and communication skills will help, but watching change agent leaders you admire and considering how the art of leadership plays out is also important.

### **Embrace Risk**

Taking on any leadership role involves taking risks—both personal and professional. You are putting yourself out to others. As different roles within the coalition are taken, personal vulnerabilities may be exposed. To one degree or another, deeply held beliefs and values are often revealed. Tolerance for stress and conflict are also revealed. Each person needs to assess their own comfort level with playing a central role, taking risks, and potentially exposing vulnerabilities.

### **Remain Flexible**

Change is not linear. Even with the best of plans, change is often incremental and takes place at a pace of its own. Circumstances change. Commitments that were “guaranteed” disappear. People with differing perspectives and goals join the project. Setting agendas and timelines is important, but they often need revision. Conflict emerges. In the face of change, when things don’t go as planned, flexibility and perseverance become even more important.

## **Are You a Change Agent Leader?**

Understanding your own capacities as a change agent leader and those of the others you work with will increase your effectiveness. It's important to recognize that the process of becoming a change agent leader cannot be represented as a simple dichotomy, a yes/no or on/off proposition. Becoming a change agent leader is a lifelong pursuit.

Here is a classification system that you can use to assess yourself, based on the work of leadership consultant Jim Canterucci.<sup>76</sup> Where are you in your development as a change agent leader? These levels help you assess your skills and dispositions. Which best describes you?

### **Level I—Accepts Need for Change**

Can you talk about the change needed, and go to bat to advocate for change within the organization? Are you OK with ambiguity? Are you able to create an open and welcoming environment?

At this level, you might do well working with guidance and advice from experienced change leaders. Start small, and get your feet under you.

### **Level II—Defines/Initiates Change**

Can you clearly define a specific change that is needed? Can you see the leverage points for positive change?

At this level, you can set change in motion close to home, locally.

### **Level III—Manages Change**

Are you able to set out a specific vision for change that is tied to organizational values? Can you reach out and engage everyone affected? Can you put in place the structures needed to support change (e.g., communications strategies, changes in processes and organizational structures, staff development)?

At Level III, leaders can bring the message of change to a whole organization, linking a specific change to a broader, shared vision.

### **Level IV—Manages Complex Change**

Do you understand the cultural dynamics and assumptions behind the current situation? Are you able to translate this understanding into a practical course of action? Can you balance the way things are with the need for rapid change?

At this level, leaders advance change in productive ways that build rather than destroy.

### **Level V—Champions Change**

Are you comfortable publicly challenging the status quo and articulating a new vision? Are you comfortable with dramatic action, and even a sense of imbalance that may come from rapid change? Can you spark evolution to something better?

Level V change leaders transform organizations.

<sup>76</sup> Jim Canterucci, Are You a Change Agent Leader? <http://jimcanterucci.com/change-leader/>.

## Leading by Weaving Community

In Colorado, environmental educators noticed a positive pattern—and took the lead on helping it grow.

The Colorado Alliance for Environmental Education (CAEE), a state Affiliate of NAAEE, noticed that a number of area organizations were involved in efforts they dubbed “community weaving”: the practice of creating cross-sector partnerships that meet both environmental needs and community needs.

For instance, Denver’s Mo’ Betta Green Market Place sets up moving farmers markets in “food deserts” (neighborhoods where it is difficult to find affordable fresh food) and educates the public about nutrition, food, and the environment. In the same area, the Dr. Justina Ford STEM program has created a youth-driven approach to STEM education, making science, technology, engineering, and math relevant to girls through service learning. And Groundwork Denver brings together cross-sections of the community on projects including urban gardens and community water quality testing.



With CAEE as convener, these and other like-minded practitioners came together to examine and express their common work, and to build the capacity to expand it. The groups identified four best practices for successful community partnerships.

- **Create organizational value for the partnership.** This includes ensuring that the whole organization understands the time put into the partnership. When the entire organization is invested in the partnership’s success, it allows the partnership to outlast individual relationships.
- **Seek reciprocity.** Here, the groups noted that they all sought to balance different participants’ needs and resources. While partners may have had different resources and so contributed differently, the key was for all involved to contribute in equitable ways, and for all to benefit.
- **Define shared vision.** Getting buy-in to a common vision was the centerpiece to successful partnerships, and partners worked hard to keep their work relevant to the vision.
- **Build consensus.** Tools included active listening, judicious use of compromise, inclusivity, and working continually to re-align the work with goals as projects progressed.

CAEE Executive Director Katie Navin noted, “You might hear these and say, ‘sure, that makes sense,’ but to do it in practice is much harder than it sounds. So that’s where the stories come in.”

The team is telling their stories through a series of webinars to support environmental educators in this type of work. CAEE is sharing the webinars, as well as case studies, FAQs, and other community-based partnership tools through a community weaving toolkit on their website.

Learn more at <http://caee.org/communityweaving>.



Courtesy of Colorado Alliance for Environmental Education (CAEE)

## Selected References

- Anderson, R.J. and W.A. Adams. *Mastering Leadership: An Integrated Framework for Breakthrough Performance and Extraordinary Business Results*. Hoboken, N.S.: John Wiley & Sons, 2015.
- Berger, J.G. and K. Johnston. Stanford, CA: Stanford University Press, 2015.
- Lunenburg, F.C. "Managing Change: The Role of the Change Agent." *International Journal of Management Business, and Administration* 13, No. 1 (2013). [https://naaee.org/sites/default/files/lunenburg\\_fred\\_c.\\_managing\\_change\\_the\\_role\\_of\\_change\\_agent\\_ijmba\\_v13\\_n1\\_2010.pdf](https://naaee.org/sites/default/files/lunenburg_fred_c._managing_change_the_role_of_change_agent_ijmba_v13_n1_2010.pdf).
- Palmer, S. *Seasons of Leadership—A Self Coaching Guide*. 2015. <http://susanpalmerconsulting.com/book.html>.
- Tan, A. and U.H. Kaufmann. *Making Good Change Agents: Attitude, Knowledge, Skills*. <http://www.isixsigma.com/implementation/change-management-implementation/making-good-change-agents-attitude-knowledge-skills/>.



[naaee.org](http://naaee.org)



[naaee.org/eepr](http://naaee.org/eepr)

*Education We Need for the World We Want*

## The National Project for Excellence in Environmental Education

The North American Association for Environmental Education (NAAEE) launched the National Project for Excellence in Environmental Education in 1993 to help educators develop and deliver high-quality education programming. The project works to create a more environmentally literate citizenry with the knowledge, skills, and inclinations to make informed choices and exercise the rights and responsibilities of members of a community.

To date, NAAEE has published five sets of guidelines that promote the use of balanced, scientifically accurate, and comprehensive environmental education materials and programs that advance environmental literacy and civic engagement.

### Publications

Publications created by the National Project for Excellence in Environmental Education include:

- *Environmental Education Materials: Guidelines for Excellence* (4th edition, 2009). A set of recommendations for developing and selecting environmental education materials.
- *Excellence in Environmental Education: Guidelines for Learning (K-12)* (4th edition, 2010). A comprehensive framework for environmental education, demonstrating environmental education's alignment with national academic standards.
- *Excellence in Environmental Education: Guidelines for Learning (K-12) Executive Summary & Self Assessment Tool* (4th edition, 2010). An easy-to-use outline listing the guidelines and a set of checklists for analyzing educational activities.
- *Professional Development of Environmental Educators: Guidelines for Excellence* (4th edition, 2017). A set of competencies for educators preparing to teach environmental education in a variety of job settings.
- *Nonformal Environmental Education Programs: Guidelines for Excellence* (2nd edition, 2009). A set of recommendations to be used in the development of comprehensive environmental education programs or to trigger improvements in existing ones.
- *Early Childhood Environmental Education Programs: Guidelines for Excellence* (2016). A set of recommendations to be used in the development of comprehensive early childhood environmental education programs or to trigger improvements in existing ones.

Hard copies and free downloadable PDFs of the Environmental Education Guidelines publications can be ordered from NAAEE at <https://naaee.org/our-work/programs/guidelines-excellence>.

## Photo credits:

### Cover:

DMHai / Shutterstock.com  
Colorful flowers and tire pots in Tet 2015 festival, on  
NguyenHue Street, HoChiMinh, Vietnam

### Title page:

(Top to bottom, L to R) Children running in park, Monkey  
Business Images/Shutterstock.com; Vintage vector of  
teamwork, art4all/Shutterstock.com; Venetian mosaic as  
a decorative background, A. Lesik/Shutterstock.com; Brick  
building with windows on sky background, Timofeev Vladimir/  
Shutterstock.com; Team of designers working at desks in  
modern office, Monkey Business Images/Shutterstock.com;  
Young hipster man with shoulder bag and fixed gear bike  
crossing crosswalk on street, Syda Productions/Shutterstock.  
com; Colorful butterfly on concrete floor urban street,  
Sergey Edentod/Shutterfly.com

### Page 4 Mosaic:

(Top to bottom, L to R) Diversity teamwork brainstorming  
meeting outdoors, Rawpixel.com/Shutterstock.com; Green  
roof garden in urban setting, Alison Hancock/Shutterstock.  
com; Woman happiness smiling cheerful optimistic concept,  
Rawpixel.com/Shutterstock.com; Bright orange spread  
macro butterfly wings, User 70154/Pixabay.com; Old man  
on wheelchair with tablet in hands sitting in the park, Adam  
Wesilewski/Shutterstock.com; Juvenile male starling perched on  
a wrought iron fence, Jane Rix/Shutterstock.com; Roundabout,  
Malota/Shutterstock.com; Adorable child drinking from  
outdoor water fountain, D. Hammonds/Shutterstock.com;  
Elephant made from plastic bottles, PhotoSrg/Shutterstock.  
com; Woman planting flowers in the flower bed on the  
street, Alexander Zamareav/Shutterstock.com; People buying  
fresh local vegetables from farm at market, Rawpixel.com/  
Shutterstock.com; Boy playing at lake, qimono/Pixabay.com;  
Young boy, Rawpixel.com/Shutterstock.com; Red apples in  
hand and green apples in basket, Rawpixel.com/Shutterstock.  
com; Senior woman smiling, Rawpixel.com/Shutterstock.com;  
People, leisure, communication and friendship, WAYHome  
Studio/Shutterstock.com; Urban city map of Boston,  
USA, Ink Drop/Shutterstock.com; Talking brainstorming  
communication friends concept, Rawpixel.com/Shutterstock.  
com; Recycled colorful plastic flower, Elizaveta Galitckaia/  
Shutterstock.com; Red brick building with blue windows,  
Rawpixel.com/Shutterstock.com; Children playing, Rawpixel.  
com/Shutterstock.com; Old boots as plant pots, dleeming69/  
Shutterstock.com

### Page 6:

An elderly woman smiling, Julia Campbell/Shutterstock.com

### Page 7:

New York City block of old historic apartment buildings in the  
East Village of Manhattan, NYC, Ryan Berardinis/Shutterstock.  
com; Raised garden beds in community garden, Alison  
Hancock/Shutterstock.com; Purple cabbage growing in the  
garden view from above, kosmos111/Shutterstock.com; North  
American robin, Calin Tatu/Shutterstock.com

### Page 9:

Boy at drinking fountain, Brian S/Shutterstock.com;  
Colorful garden fence with green background, Dora Zett/  
Shutterstock.com; Kids holding hands, karelnoppe/  
canstockphoto.com; Downtown City bird eye view, Analyin/  
Shutterstock.com

### Page 10:

Bike path with a symbol of bike, bike on a cycling path,  
gashgeron/Shutterstock.com

### Page 11:

Grandparents with grandchildren walking through countryside,  
Monkey Business Images/Shutterstock.com; Young girl holding  
glass and drinking pure water, Mikkel Bigandt/  
Shutterstock.com

### Page 12:

Tree roots and green forest, Chimas55/Shutterstock.com

### Page 14:

Pile of pebble stones against mysterious background, WVO/  
Shutterstock.com

### Page 15:

Pathway in the forest at autumn, Botond Horvath/  
Shutterstock.com

### Page 16:

Senior adult couple picking vegetables from backyard garden,  
Rawpixel.com/Shutterstock.com

### Page 18:

Ivy circle becomes the circle, sevenke/Shutterstock.com

### Page 19:

Brazilian favela. Bright colored seamless pattern. LanKogal/  
Shutterstock.com

### Page 21:

Sunset over the marsh, Jean Faucett/Shutterstock.com

### Page 23:

St. Vrain Trail at pond, David Goudy/Shutterstock.com

### Page 24:

Drain lid covered with garbage causing flood, wk1003mike/  
Shutterstock.com; Drain, Chayanin Wongpracha/  
Shutterstock.com

### Page 25:

Hiker Lot-Et-Garonne, layrac/pixabay.com

### Page 27:

Professional help for elderly, Barabasa/Shutterstock.com  
Brick wall with open window, Darryl Brooks/Shutterstock.com

### Page 28:

Group of friends, Rawpixel.com/Shutterstock.com

### Page 30:

Autumn trek-woman on mountain hike, gorillaimages/  
Shutterstock.com; Stairs in forest in Andover Massachusetts,  
Heidi Besen/Shutterstock.com

### Page 31:

Guidelines for Excellence cover images designed by Sylvia Weir

### Page 32:

Hiking trails through giant redwoods in Muir forest near San  
Francisco, California, USA, MNStudio/Shutterstock.com

### Page 33:

Danger Drain, Zen Photo-graphic/Shutterstock.com

### Page 34:

Water tap with drop comic book pop art style vector illustration,  
Alexander\_P/Shutterstock.com, Children in field: Agua Pura

### Page 35:

Hands solving problem, aomvector/Shutterstock.com

### Page 37:

A bay on Lake Champlain, BHamms/Shutterstock.com

### Page 39:

Creative public bench at Neal's Yard, a small alley in Covent  
Garden area in London, I Wei Huang/Shutterstock.com

### Page 42:

Mother and daughter blowing bubbles outdoors, Blend Images/  
Shutterstock.com; New York City row of colorful buildings in  
Manhattan, Richard Berardinis/Shutterstock.com

### Page 43:

Hands together, Rawpixel.com/Shutterstock.com

**Page 44:**  
Chipmunks fighting in Jasper National Park-Alberta, Gillis Baechler/Shutterstock.com

**Page 45:**  
Handshake background, file404/Shutterstock.com

**Page 46:**  
Clean beach with trash separation recycling bag, Carlos Caetano/Shutterstock.com

**Page 48:**  
Wild rat, anatolypareev/Shutterstock.com

**Page 49:**  
Nose with blue sky texture, Lightspring/Shutterstock.com;  
Map showing location of Buzzard Point via Google Maps

**Page 50:**  
Drummers, PAUL ATKINSON/Shutterstock.com

**Page 51:**  
Old wheel in dried-up lake, Sergey Sosnitsky/Shutterstock.com

**Page 52:**  
Gardener, Rawpixel.com/Shutterstock.com

**Page 57:**  
Laughing latin guy walking at beach, Daniel M Ernst/Shutterstock.com

**Page 60:**  
Bicycle symbol on city street in the evening, Amy Johansson/Shutterstock.com

**Page 62:**  
Park in the city, Botond Horvath/Shutterstock.com

**Page 64:**  
Group of bicyclists along American river, Folsom, California, rayvee/Shutterstock.com; Displaying Great Egret, Kissimmee, Florida, Matt Elliott/Shutterstock.com; Solar panels on rooftop, Vittavat Apiromsene/Shutterstock.com

**Page 66:**  
Scenic Multnomah Falls in Oregon, Christopher Gardiner/Shutterstock.com; Portland Skyline, Zack Frank/Shutterstock.com

**Page 67:**  
Building with colorful abstract mural and chain link fence in Portland, Oregon, Elizabeth Westman/Shutterstock.com

**Page 70:**  
(Top to bottom, L to R) Fresh fruits and vegetables at farmers market stall, baloncici/Shutterstock.com; Carpenter hands using electric drill on fence wood, BaLL LunLa/Shutterstock.com; Old tires on playground, Anucha sirivisanuwan/Shutterstock.com; Girl volunteer cleans pond, itakdalee/Shutterstock.com

**Page 75**  
Children and parent holding young plant, Pingpao/Shutterstock.com

**Page 76**  
People looking at project plans, Jacob Lund/Shutterstock.com

**Page 77:**  
Abstract city map illustration, tovovan/Shutterstock.com

**Page 78:**  
Aerial view of Chicago lakefront, Margie Hurwich/Shutterstock.com

**Page 79:**  
Woman blogging, WAYHOME studio/Shutterstock.com

**Page 81:**  
Older Asian woman mentoring a young African American teenager, pixelheadphoto digitalskillet/Shutterstock.com

**Page 82:**  
Environmental activists at work, Dragon Images/Shutterstock.com

**Page 87:**  
City navigation map with pins, george studio/Shutterstock.com

**Page 91:**  
Abstract rainbow color paint mosaic pattern, Rainbow-pic/Shutterstock.com

**Page 93:**  
Child holding young seedling plant, TinnaPong/Shutterstock.com; Man on a ladder with a nest box, riopatica/Shutterstock.com; Worker setup equipment for clean spill oil, Phonix\_a Pk.sarote/Shutterstock.com

**Page 96:**  
Team brainstorming, Rawpixel.com/Shutterstock.com

**Page 101:**  
Climate Choices Cover uses edited "The Worm-eaten leaf world map" image by Kazuhiro Tanda/DigitalVision/Getty Images

**Page 106:**  
Haleakalā National Park, Reetom Hazarika/Digital Vision/Getty Images, Ki'i Carving at Pu`uhonua O Honaunau on the Big Island, Hawaii, Robert creccetti/Shutterstock.com

**Page 113:**  
Variety of colorful sea urchins on the beach, dimitrios/Shutterstock.com

**Page 115:**  
Bicyclists in Central Park, New York City, cdrin/Shutterstock.com

**Page 117:**  
Brainstorming session, Rawpixel.com/Shutterstock.com

**Page 120:**  
Group of people plant a tree together outdoors, Rawpixel.com/Shutterstock.com

**Page 123:**  
Pattern of Green brick wall background and textured, Grooved concrete wall background and design, Peangdao/Shutterstock.com

**Page 133:**  
Hand holding and planting new tree, anuphadit/Shutterstock.com

**Page 134:**  
Gardening together, Rawpixel.com/Shutterstock.com

**Page 137:**  
Cyclists ride along bike path in park, Denis Tabler/Shutterstock.com

**Page 141:**  
Group of Children are in a Field Trips, Rawpixel.com/Shutterstock.com

**Page 148:**  
Solar panels, Rudmer Zwerver/Shutterstock.com

**Page 154:**  
Snail looking into water reflection, Alexander Swiridov/Shutterstock.com

**Page 162:**  
People in meeting room, HERONOP/Shutterstock.com

**Page 164:**  
Buying at farmer's market, Rawpixel.com/Shutterstock.com

**Page 169:**  
Geese walking on a pebble stone path, Annette Shaff/Shutterstock.com

**Back cover:**  
Bees on flower, Potapov Alexander/Shutterstock.com



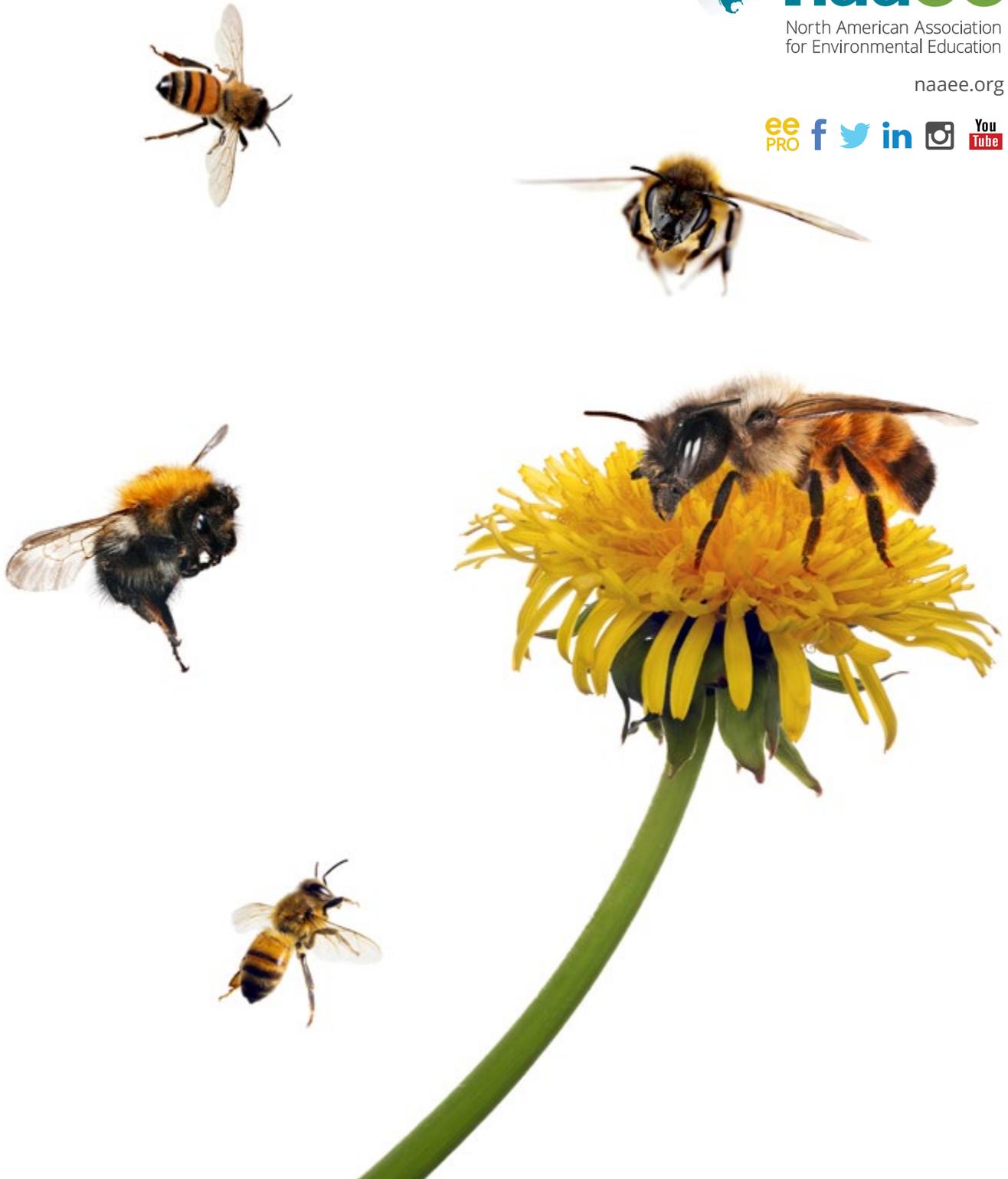
*Leadership and learning are indispensable to each other.*  
—John F. Kennedy



**naaee**

North American Association  
for Environmental Education

[naaee.org](http://naaee.org)



2000 P Street NW, Suite 540, Washington, DC 20036

NAAEE is the professional association  
for environmental educators  
in North America and beyond.

*Education We Need for the World We Want*