

EE Toolbox— Workshop Resource Manua

# Using Community Resources



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This unit is for workshop facilitators who want to help teachers use community resources in environmental education (EE). Community resources are interesting to students of all ages and help teachers meet existing objectives. If your workshop participants are willing to reach beyond the walls of their classrooms for educational experiences, you can use this unit to help them get started. It explores the range of community resource use, from 15-minute guest speakers to half-day field trips to community service projects.

This unit begins with a definition of community resources. This is followed by guidelines for conducting workshops in which you advocate community resource use. Then, after explaining the advantages of this approach and providing specific examples, this unit ends with seven activities that you can use or modify for your workshops. We hope this unit helps you inspire workshop participants to use the resources right in their own communities.

#### Lou Branches Out

- Lou was an environmental educator for the Carroll River Watershed Council. He had been conducting teacher inservice workshops on "Assessing Water Quality," "Our Mighty Carroll River," and "Living Lightly on the Earth" for several years. He ended every workshop by enthusiastically describing local EE resources such as the watershed council, the city utilities and public works departments, the nature center, a biologist from the state fisheries department, and several independent fishermen known for their storytelling abilities. However, even though Lou provided phone numbers and addresses, he knew that only a few of the teachers ever contacted the resource providers.
- In his next few workshops, Lou included discussions about how community resources had already enhanced teachers' existing material; exercises to help teachers recognize their own prior experience in using community resources; brainstorming sessions about real and perceived barriers; and a role-play exercise in which teachers could practice conversations with administrators, students, parents, and resource providers. He distributed handouts on "How to Use Guest Speakers" and "How to Plan Field Trips." But his follow-up phone calls revealed that teachers still weren't biting. Something was still missing.
- An outgoing person who had grown up in the Carroll watershed, Lou wondered why teachers weren't contacting the river-related resources he had described. He called Lindsey, a friend who had attended his latest workshop. He learned that she took her ninth-grade biology students on only one field trip a year. It was always to the same location—the botanical gardens—because (1) it met Lindsey's objectives and district field trip guidelines, (2) it already had a logical place in her green plant unit, (3) she didn't have to develop new follow-up activities, and (4) she could copy the previous year's forms for bus requests and parental permission slips. "Sorry Lou," said Lindsey, "but I don't have time to research other destinations and plan other field trips. Besides, I already know the head docent at the botanical gardens—it's easiest to just keep going back to her."
- Lou thanked Lindsey for her time and hung up the phone. Dejected, he turned to his nearest co-worker for advice. "What did I do wrong, Jessie?" he asked the woman at the next desk. "They didn't follow through, so I modified my workshops to focus more on community resources . . . and most of them still aren't following through!"
- "Well, maybe you did as well as can be expected," replied Jessie, a former teacher who had helped found the watershed council. "The people who did respond are probably more experienced and enthusiastic—it's hard for newer teachers to jump into a new program in the middle of the school year. But let's see if there's a better approach."

- During the next several evenings, Lou and Jessie telephoned teachers on the participant list. They found a few who were willing to answer their prying questions about why they hadn't taken up Lou's challenge to use community resources. Some indicated they didn't have access to a telephone during the day. Several said they barely had time to meet their district objectives, let alone organize "outside activities." But all expressed hesitation about putting precious time into unknown, untried projects.
- "I think what we need to do," said Jessie, "is bring the resource providers directly to the teachers, so they can all meet one another and learn what they can offer each other. And we need to add activities that will help teachers meet existing learning objectives."
- "I don't have time to develop an entire new workshop!" exclaimed Lou.
- "You don't have to," replied Jessie, "but you might start inviting some knowledgeable, accessible resource people to speak at your workshops. Later, you could work in a few short field trips." Together, they brainstormed about which community resources would complement Lou's existing workshop on the Carroll and how he could tie those resources into the school district's learning objectives.
- At the workshop, Lou reminded the elementary teachers there about the district's new objective to include storytelling at least once a month. Then he introduced Hank, an independent fisherman who had agreed to speak at the workshop and to make presentations at several elementary school assemblies. Hank spun a few tall tales that had the teachers roaring with laughter. He then spoke seriously about the river damage he saw done by irresponsible boaters and industrial polluters, pointing out that whatever affected the fish also affected his livelihood. During Hank's talk, Lou distributed a short handout that explained the connections between pollution and water quality. After Hank finished speaking, many teachers surged forward to demand his phone number.
- Later that semester, Lou telephoned Hank and learned that he had already been "booked" for three elementary school assemblies. Lou happily reported to Jessie that her advice would result in a special environmental experience for many children. "What will you do next?" asked Jessie with a smile.
- "Well," said Lou, "our district has middle-school objectives about recycling. I want to work a field trip into my 'Living Lightly on the Earth' workshop. We can carpool to the recycling processing center for a tour, and then go next door to the county landfill. The company that operates the landfill has free recycling activities and handouts for kids. They said that it's cheaper to process our trash if all the recyclables are separated first, and they know that kids teach their parents how to recycle, so they want to host as many field trips as possible . . ."

## Introduction

his unit offers you a framework for helping teachers draw on free or low-cost resources "right in their own backyards." These community resources can extend or even replace some of what students learn from lectures, lab experiments, computers, and textbooks written for national audiences. In their own communities, teachers can find:

- teaching materials
- guest speakers
- short-term community projects

- in-class projects
- field trips
- longer-term "service learning" projects (see box on page 14)

As an inservice workshop facilitator, you may already have a good idea of the resources available to teachers in your region. If you do, this unit can help you encourage teachers to use them. If you are not as familiar with types of resources, you may be able to learn from the examples in this unit.

Community resources can be **people** who provide information for teachers or visit their classrooms. Community resources can be **places** to visit. And community resources can be **things** to borrow or even have donated for classroom use.

"Every community, no matter what its location or size, is a learning laboratory. Its people; its animals and plant life; its places, processes, and products are all resources for learning."

C.M. Williams
The Community as Textbook

#### People

- staff from resource agencies and non-profit organizations
- city employees
- business owners
- scientists
- activists
- parents

#### **Places**

- nature centers
- public works facilities
- businesses
- resource agencies
- factories
- state and national parks
- laboratories

#### **Things**

- simulation games
- posters and activities
- scientific models
- informational videos
- environmental
  - monitoring
  - instruments
- used computer
  - equipment

"Real-world environmental issues are inherently more complex than in-class experiments or simulations, encouraging students to explore all sides of an argument as well as engage in higher levels of analysis and problem-solving."<sup>2</sup>

Rich Cairn, service-learning consultant Why don't more teachers use community resources? Sometimes, the barriers are a teacher's own apprehension or lack of information; in other cases, there might be bureaucratic or financial obstacles. In some communities, teachers just need help choosing the most appropriate resource. And time—for researching, planning, and implementing projects that involve community resources—is always an issue (see pp. 10–12 for more on barriers). However, you can help them understand that making time for these resources can actually save time elsewhere in the curriculum while giving students a superior educational experience. By getting students involved in their communities, teachers help them gain the knowledge, skills, and commitment to be effective decision-makers and action-takers as adults.

# Guidelines for Covering Community Resource Use in Your Workshops

HIS SECTION LISTS A SAMPLE OUTLINE for planning inservice workshops that introduce teachers to community resource use. That is followed by general guidelines appropriate for any workshop involving community resource use. (For general workshop guidelines, see the *Workshop Resource Manual* unit on "Designing Effective Workshops.")

#### Sample Workshop Planning Outline

You can modify this outline for different audiences. With newer teachers, you might decide to publicize certain resources and lead classroom-ready activities that meet specific objectives; with more experienced teachers, you can concentrate more on the processes of contacting and working with community resources of their choosing.

1

Conduct a needs assessment of your audience members. Ask about their teaching objectives as well as their experience in community resource use.

2

Design a workshop that meets their stated needs for content or process objectives and is appropriate for their levels of expertise.

If they want workshop experiences that easily transfer to the classroom, plan a simple activity (guest speaker, field trip, etc.) that they can repeat with their students. Make all arrangements with speakers or tour guides ahead of time, and give participants a chance to sign their own classes up for future presentations. (If you are working with junior or senior high school teachers, make sure the speakers or tour guides will be available for several classes.) List the curricular objectives that will be met by the activity, and give the teachers comprehensive plans, including student readings, worksheets or other handouts, pre-activity instructions, and follow-up activities.

- If the teachers express willingness to create their own connections between content and activities but are unfamiliar with available resources, use the activities in Section A (see page 18 for an overview). Small-group activities work well for this audience.
- If the teachers seem ready to plan their own community-resource activities, use the activities in Section B (see page 19 for an overview). Role-plays and brainstorming sessions are particularly helpful.

3

Take care of the million and one other details involved in planning a workshop—again, see the "Designing Effective Workshops" unit for specifics.

4

After the workshop, call teachers (or send a follow-up postcard) to find out how they felt about implementing the program and how their students responded to it.

#### **General Tips**

#### Be Kind to Ignorance

Understand that many teachers are not yet knowledgeable about their communities and the resources therein. Also, keep in mind that some teachers don't live in the communities in which they teach.

#### Match Expectations to Kids' Abilities

Help your teachers recognize that their students might not feel totally comfortable

"Teachers can join students as learners and actually model life-long learning. In today's information age, it is more valuable [for the teacher] to demonstrate how to access information than [to follow] the unrealistic notion of being an expert on most issues." 3

Lisa Bryce Lewis, Northwest Watershed Education Alliance

with *their* first attempts at community interaction, because the traditional education system distances students from their communities. Help teachers assess kids' problem-solving skills; remind them to be patient with their students and give them specific directions.

#### **Planning Tips**

#### Know Your Audience

What content areas and age groups do your workshop participants teach? How rural or urban are their communities? And, perhaps most importantly, what are their curricular constraints? Know state and district objectives so you can give examples of how to meet them using community resources. You should be able to demonstrate the ways that community resource use can be as good as—or better than—traditional methods at teaching specific objectives. Consult published curriculum guidelines from the school district or the state education agency.

#### Provide Readable Readings

If you can choose among different resource materials, pick those that are short and easy to read. Government documents are particularly voluminous and verbose—hunt for pamphlets or other readable formats. Don't just refer to readings: have copies of short publications, and give specific information on how to obtain other documents.

#### Get to Know More Resources

Many state and federal agencies have goals for public education or community involvement. To find these organizations, you might start with the list on Master 1. Pick an agency, find its public information specialist, and ask whether the agency has an education program or a resource professional who speaks to students. (Note: After speaking to a resource person on the phone, follow up with a written invitation to your workshop. Besides being polite, this is helpful for resource people who need to verify extra service with their bosses.) A related strategy is to request a copy of the agency's mission and work plan. If you don't live in the community where the teachers work, enlist a well-connected local person to help. In addition to giving you valuable assistance, this person can improve schoolcommunity communication.

#### **Workshop Tips**

#### Do as Much Legwork as Possible for Your Participants

Don't just hand teachers a list of phone numbers-emphasize the resources with which you or others have had good experiences, and note which resources are best for each grade level. If possible, bring resource people to the workshop. After a talk or panel discussion, give workshop participants a chance to network with the experts, pick up business cards, and find out who'd be willing to work with them. (Remember: people generally like to talk about their jobs.) Also try to work in brief field trips. When teachers visit sites or meet experts, their fear of the unfamiliar diminishes and the credibility of the resource increases. If possible, offer to help teachers make contact with resource providers.

#### Emphasize the Planning Process

You'll already be explaining various processes for using community resources (such as hosting guest speakers and taking field trips), so don't forget to cover all the planning that's involved: deciding which resources to use, scheduling activities, sending or receiving preliminary information, arranging for transportation. These are the very same details you must attend to in planning your own workshops or activities. (Master 8, "Recommendations For Field Trips," includes a helpful checklist for teachers.)

#### Don't Forget the Evaluation Component.

You may try new things in this workshop, and community involvement always has some uncontrolled variables. This means that workshop evaluation is especially important. Let your participants know that they are participating in an evolving process and that you want to tap their expertise. In short, ask for their feedback! Besides helping you improve your workshops, this gives teachers a sense of ownership—they won't expect everything to be perfect, and they'll derive satisfaction from seeing their suggestions implemented.

# Advantages of Using Community Resources

HE USE OF COMMUNITY RESOURCES has enormous potential for enriching and expanding the mandated curriculum. You may wish to introduce the following advantages to your workshop participants, or simply see how many they identify.

#### To Help Teachers Teach

#### Motivating Students

Some students see in-class learning as a chore that is disconnected from the "real" world. However, when they interact with their communities, they are exposed to

"It does not take much first-hand exposure to a human need to get personally involved and begin to care."4

Student at Gig Harbor (WA) High School who worked on a school-sponsored community service project

different people and perspectives; they may see exciting connections between academic exercises and these new voices and issues.

By using community resources or developing community service projects, teachers can provide their students with two motivators: a stimulating learning environment and a greater sense of purpose. People learn best when they are interested, when their fascination for the subject makes "paying attention" effortless. Activities that involve the community are often more relevant to students and thus more interesting. Also, students tend to work harder when they feel they can make a difference. A well-planned community activity can build self-esteem and make students feel more appreciated than they would if they were just doing a textbook assignment.

#### Achieving Learning Objectives

No matter where they teach, or what subject, teachers have lists of learning objectives for their students; these may be mandated by the state or by the individual school district. Activities that involve the community (either as a resource or as a beneficiary of a student project) can help students produce desired learning outcomes, often in a process that is more engaging than traditional textbook assignments.

For instance, a middle-school science curriculum may include these learning objectives: "Develop understanding of the hydrologic cycle," "Distinguish between Celsius and Fahrenheit temperature scales," "Read and construct a bar graph," and "Order physical events." In a carefully constructed field trip to the water treatment plant, students can gain relevant, first-hand knowledge of those concepts and processes.

#### Exposing Students to Role Models

Students often hear about "global responsibility" while seeing waste and apathy in their own cities—and sometimes in their own schools. They often begin to think they are unable to change or improve the world around them. What they need are some positive role models, whether adults or young people, whether from within the classroom or outside the school. By being exposed to people and institutions who do make a difference, students will be more likely to believe that they, too, can make a difference.

#### To Further the Goals of EE

#### Preparing Students for "The Real World"

All environmental problems occur in someone's "community," be it an Alaskan beach threatened by an oil spill, a park lawn sprayed with pesticides, or a school cafeteria full of disposable foam lunch trays. Therefore, a student's own community is a logical resource for a curriculum that Think of the community as an extension of the school. In students' own towns, they can examine local, relevant problems. They get a chance to try out solutions on a manageable scale. If the teacher helps them choose simple initial projects with a high chance of success, they will be more likely to gain experience in problem solving. In turn, this increases the likelihood that these students will continue to show interest and involvement in environmental problems.

## Helping Students Become "World-Class" Citizens

As environmental educators, we want students to gain more than just ecological information. We want them to develop *a sense* of place and *a feeling of stewardship* for the places their projects involve. These personal connections are the basis for the *global responsibility* that we hope to see in our students as they mature.

When students work with their communities, they can see first-hand who is affected by environmental problems. They can also meet caring adults who are working on solutions. If they connect local situations with what they learn in the classroom, they are on their way to becoming stewards of the planet rather than just users.

#### To Help Schools

#### Supplementing the School's Resources

In taking a community-based, environmental approach to learning, teachers shouldn't have to worry about finding money for more equipment or about being "experts" on the issues that might surface. (You may face a challenge in getting this idea across to teachers whose "need to know" is stronger than their "need to facilitate!") Instead, they can draw on community resources for up-to-date knowledge, materials, or support.

When community members are offered "free labor" from student projects, they may be willing to pay for materials or other expenses. On a smaller scale, some people are so eager to talk about their jobs that they will come to the classroom or host a field trip for free. (However, that does not mean that everyone has the time to repeat a presentation five times in one day for the benefit of, say, all five seventh-grade science classes.)

Some organizations have materials or equipment that they are willing to loan or donate to schools. For instance, visiting environmental educators usually bring their own props and models. Water-quality organizations may provide the expensive monitoring instruments needed to participate in their programs. And businesses get tax write-offs for donating older computers (which could be newer than the schools'computers) when they upgrade their systems.

Organizations often hold workshops to inform teachers about financial, curricular or equipment resources they offer. For example, many chemical companies, environmental groups, and federal agencies provide lesson plans. You may wish to point out the bias that is often built into instructional materials produced by industry, advocacy groups, and government agencies.

"The planet does not need more [financially] successful people. But it does desperately need more peacemakers, healers, restorers, storytellers, and lovers of every shape and form. It needs people who live well in their places."

David Orr, Professor of Environmental Studies, Oberlin College

Teachers can use these as an opportunity to educate their students about information biases: how to uncover them, how to gather information from a variety of sources, and how to evaluate the truths of an issue.

## Strengthening Bonds Between School and Community

School-community projects give people with different perspectives a chance to get to know each other. When community members have positive experiences with school staff and students, they are more likely to offer their expertise or surplus equipment to the schools in the future. Relationships with local businesses or organizations can be mutually beneficial, projecting a positive public image for the organization and expanding the resources of the school.



## Common Barriers and How to Get Around Them

OMMUNITY RESOURCES ARE NOT WIDELY USED in U.S. classrooms. Typically, schools function in isolation from the broader community. In fact, the curriculum rarely benefits from resources in the school's own community—for example, students discussing solid waste problems might not visit the school dumpster. There are many reasons why teachers hesitate to use community resources, but you can help them overcome those barriers through discussions and examples in your workshops. Here are suggestions for some commonly cited problems.

# "I don't have time to go outside my classroom."

Time can be limiting when a teacher has a 40-minute class period and no prep time, but community resource use doesn't necessarily increase the class time needed to cover a learning objective.

#### Suggest the Following Strategies:

- Substitute other information sources guest speakers, local newspapers, locally produced or distributed videos for parts of the textbook.
- Choose an environmental project or topic that will cover the concepts of several mandated chapters or concepts.
- Middle- or high-school teachers of complementary subjects can plan joint field trips or joint projects. Together, they'll have twice as much class time for the endeavor. Elementary school teachers may have an easier time planning multidisciplinary projects, because they teach them all!

## "I don't even know where to start."

Many teachers haven't investigated local resources and opportunities. You'll need to find out what topics they want to cover, or what objectives they *must* cover, and link those with your knowledge of what's available in the community.

Initially, these teachers may need fully developed activities that meet their specific objectives.

#### Choose Workshop Exercises Teachers Can Replicate With Their Students.

Include relevant handouts, either from this unit or elsewhere.

## Include the Processes You Go Through to Plan a Workshop.

Describe how you found resource people and how you arranged for them to come to the workshop; explain how you planned the field trip (see Activity 7, "Organizing Field Trips and Speakers").

#### If you Suggest Governmental Resources, Don't Assume That all Teachers Are Familiar With Government Structure.

You may need to do a specific workshop exercise on this, such as Activity 3, "Construct-a-Community Contest." Barbara Lewis' Kid's Guide to Social Action (see "Resources" at the end of this unit) offers clear, understandable diagrams of our federal government; you can also request diagrams of your state or local government from their public information offices or from your local chapter of the League of Women Voters.

#### Describe Resources in a Clear Context

For instance, "This nature center offers free, hands-on, plant-identification tours," or "Bonny Boulis, a retired homemaker, is wonderful at speaking to young children about human-powered transportation."

Make the distinction between invited guests who can be information sources and invited guests who can describe community service opportunities. Also, only refer resources you know to be age-appropriate and interesting.

#### Encourage Teachers to Share Their Knowledge of Community Resources

Whether they have only the phone number of one guest speaker or a comprehensive resource list (see Activity 4, "Collecting Resource Information"), teachers can be accessible information sources for other teachers. Once they gain more experience, they can post an annotated resource list in their curriculum center or library.

#### "But so much can go wrong!"

For many teachers, the use of community resources is a big unknown. If they haven't chaperoned field trips or brought in guest speakers (let alone coordinated a service-learning project), they may imagine unruly youth, unhelpful guests, unhappy parents and administrators, and a general "lack of control" over the situation. Emphasize that the way to chase away these fears is to get to know the unknown. There are several things you can do to facilitate this.

#### Focus on Teachers' Prior Knowledge

If you ask a group of teachers to describe their classroom activities, you will almost always discover some small-scale examples of community interaction. When teachers hear their colleagues describe successes, they will be encouraged to begin using community resources themselves.

#### Use Imagery

You can relate your own experiences with local resources or use the examples found throughout this unit. At the very least, this gives your workshop participants vicarious experience, which may trigger their own ideas. Introduce your workshop participants to *Getting Started*, another component of the Toolbox. This book for teachers is full of EE "success stories," many of which include student-community interactions.

Give Teachers Opportunity to Practice
Lead them through the processes of finding
resources and planning activities. The work-

shop is a "safe" place to try out new behaviors—teachers can get help from you and from each other. (Activity 7 offers suggestions for using checklists on Masters 6–8.)

#### Introduce Teachers to Community Resources During the Workshop

Take a field trip or bring resource people into your workshops. This gives the teachers a chance to meet the experts in person and see for themselves how knowledgeable they are. The unknown becomes the familiar, making teachers much more likely to contact the resource people themselves.

In some projects, children may be more successful than adults. Students in Custer. South Dakota, conducted a tourism survey and got an astounding 60% response rate. This was probably due to the survey's youthful, personal appeal: Each survey card was accompanied by a letter explaining that it was important to return the survey so the class could get an A! Members of the class signed each letter in ink and hand-addressed each envelope.6

#### Remind Teachers That They Don't Need to Know Everything

Reassure your workshop participants that two of the best things they can do for their students are (1) expose them to useful and interesting experiences, and (2) facilitate their efforts to find information. After all, this is "the information age"!

#### Set Small Initial Goals

Help teachers set up situations in which logistics are simple and chances of success are high.

#### "My administrator won't allow it."

Some administrators are more rigid than others, but most teachers are still able to use community resources in some way.

Get Copies of District Guidelines About Travel, Guests, and Controversial Topics Sometimes, teachers don't know the policies or are afraid to call attention to themselves by asking.

#### Be Familiar With State and District Learning Objectives

Administrators are more likely to approve lesson plans that will meet stated learning objectives. Do whatever you can to help teachers plan community resource activities that enhance their own curricula.

#### Help Teachers Plan Projects That Are Visible and Positive

For instance, beautification of school grounds can attract kudos from government officials. See pages 15 and 16 for examples of other activities that teachers can implement on school property.

#### Help Teachers Plan Inexpensive Activities

Find organizations that provide free visits or educational materials. Connect teachers with volunteers: College students are often looking for experience (a letter of recommendation can be payment enough!), and many parents are knowledgeable about environmental topics.

Note: On the topic of involving administrators in community resource projects, EE facilitators are divided. Some advise you to enlist administrators in planning inservice workshops—by asking them to contribute during the design phase, you may increase their support of the bigger idea. A few suggest inviting supportive administrators to discuss district policy at one of your workshops. However, other facilitators discourage this, recommending instead that teachers develop a complete plan, present it to administrators, and then ask for funding. You'll have to base your advice on your familiarity with each school district.

# Different Ways to Use Community Resources

he sources of community resources vary widely, and there's no single way to use them. Teachers can plan 15-minute classroom discussions, half-day field trips, week-long special units, or year-long community projects. The goal may be to learn information in a single content area, to apply one skill (writing a paragraph, calculating a measurement, identifying a plant), or to involve students in a range of activities. Projects can be as interdisciplinary as district guidelines and teacher creativity allow. Within the wide scope of community resource activities, common elements include guest speakers, field trips, and community service.

#### **Guest Speakers**

Community members can present talks about their roles, expertise, or duties. Environmental professionals from the private, government, or business sectors can talk about their jobs and their organizations' perspectives on specific environmental issues (see Activity 7, "Organizing Field Trips and Speakers"). Guests can serve as valuable resources for student projects (for example, information sources or judges for science fair activities). Also, oral histories can be fascinating ways to learn about community history (see example on page 15 and Activity 6).

Students' families are an often overlooked resource. You can suggest that teachers learn about parents' occupations and relationships to the community, perhaps asking:

- what community organizations parents are involved with
- whether those organizations are serviceoriented or have goals of promoting education in the community
- whether parents are willing to speak to the class, host site visits, or assist the teacher during field trips

Field trips are excellent at providing "teachable moments." If they include hands-on or task-oriented activities, they engage students, inviting them to actively participate in discovery. Which of these other general objectives can your field trip meet?

- arouse interest and curiosity
- provide first-hand observation and new information
- stimulate interest in a topic
- broaden students' background of experience and provide new vistas
- provide a common experience for a group
- build group morale
- provide social experiences for learning social skills
- study a particular issue or topic related to environmental education

List adapted from "The Community as a Laboratory for Learning," by Peter H. Martorella in Middle School Journal, Vol. 22, September 1990.

#### Service Learning

EE is not the only field that encourages a community-based approach to learning. Addressing local issues, introducing students to community members, and matching students with helpful projects could be viewed as environmental education, service-learning, or just good education. The National Youth Leadership Council (NYLC) defines service-learning as "a teaching and learning method that connects meaningful community service experiences with academic learning, personal growth, and civic responsibility." Some of NYLC's examples of service-learning include:

- Fifth-grade students developing and maintaining a community bird sanctuary while studying geography and biology.
- Middle school English and second language students applying their language and natural history skills as they create bilingual signs for a regional park.
- High school students honing geometry and carpentry skills as they construct planters for senior citizens living in a high-rise.
- Elementary students near Seattle learning science and communication skills while helping salmon return to a once-dead creek.
- Students in rural Georgia using personal interviews with older neighbors to produce a magazine in their English class that preserves the folk culture of a passing generation.

Through participation in community service projects, students can develop a sense of concern for the public good and a commitment to volunteerism. They can also learn how to solve problems, develop leadership and group membership skills, accept responsibility for their own decisions and actions, and take an active role in the community. These skills are an important part of a student's education and are reflected in the objectives of EE, including data-gathering, critical thinking, and decision-making. Public service projects often unite students from diverse ethnic, racial, and socioeconomic groups. Involvement in these projects enables students to learn from others and gives them opportunities to offer something of themselves to the school and community. They often develop stronger attachments to the community, along with an increased sense of self-worth.

With the growing interest from President Clinton on service-learning and new support for the National and Community Service Trust Act, service-learning may become the dominant term, with environmental projects such as EE becoming one of its subcategories. For contact information about the NYLC, see the "Resources" section at the end of this unit.

#### **Tours and Site Visits**

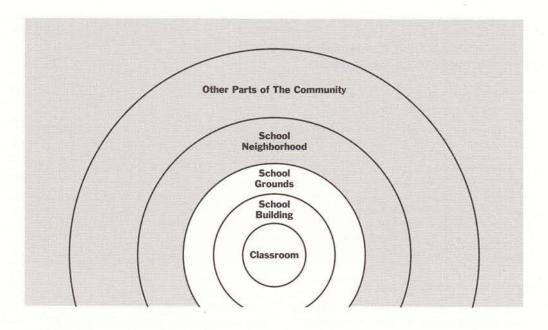
Teachers can plan field trips to facilities such as zoos, factories, utility plants, businesses, and museums. Ideally, students will be able to meet with people who work there. For example, a class might tour a wastewater treatment plant and then talk to an operator or a chemist, or visit a state or national park and have a ranger for a tour guide. (See Masters 1, "Potential Community Resources for Teachers," and 8, "Recommendations for Field Trips").

#### **Community Service Projects**

These can activities range from spending an hour picking up litter in the park to "adopting" a local watershed and implementing complex strategies to protect it. (See the box above for more information.)

# Paid Employment and Internships

Businesses and schools can work together to form cooperative programs. For instance, environmental organizations and utility companies are often willing to give students field experience for pay or academic credit. (For best results, these businesses should create job descriptions and hold "interviews"; students should begin to develop their résumés.) Employment and internships may last for several months or a year; a shorter-term option is for students to "shadow" employees during their daily routines to learn about their occupations and responsibilities.



#### Examples of School-Community Interactions

As you know, teachers tend to be classroom-centered. One of your tasks is to help them expand their mental maps of where formal learning takes place. Students can get involved with their communities in a wide range of physical locations: indoors (at a museum, a factory, a classroom desk) or outdoors (at the playground, town square, state park). In your workshops, you might draw a graphic like the one above on the board and then ask participants how far outside the classroom they have already ventured.

Another method is to discuss various scenarios of teachers using community resources. The following examples illustrate school-community interactions that range from those within the classroom to those of community-wide proportions. You may wish to describe them in your workshops.

#### A Third-Grade Classroom

The teacher announces, during social studies time, that the students will study changes in their community. She asks them to raise their hands and describe the landscape of their town. Then she holds up old photographs of farm life. One student recognizes a silo that's still standing, although strip

malls have replaced the other farm buildings. The teacher explains that all of the photos were taken in their town—several decades ago. "How come it looks so different now?" asks another student. "That's a good question," answers the teacher. "I want each of you to write down a question that you'd like to ask of a person who lived here when these photographs were taken."

A few minutes later, an elderly woman comes in and sits before them. The great-grandmother of one of the students, she has lived in this area all her life. The teacher introduces her and issues a gentle reminder to the kids about "using our best manners and putting on our listening ears." Students take turns "interviewing" their guest about the story of their town's changing landscape. Then each writes a "short story" (a paragraph) about the answer to his or her question. When it's the teacher's turn to decorate the display case in the hall, she pins up the old photographs with the students' stories.

#### A Middle-School English Classroom

Students are concerned about the possibility of losing their favorite park: This morning, some of them heard on the radio that the city is considering selling part of it to a developer. To work on their writing and revision skills, they compose letters to their

# Connections Between Rural Schools and Surrounding Communities

As high school economics teacher Dave Versteeg sees it, school-community projects have many reciprocal advantages, especially in rural areas:

"In many rural communities, the school is the largest economic enterprise. It has the largest budget, often the finest facility, and the largest cadre of well-trained personnel. Tax dollars are invested in the community's most precious resource—its young people—but then schools measure their success by how many of their graduates leave to continue their education or find employment elsewhere. . . . If this one-way flow of resources continues long enough, the rural community withers away and dies. But students can make contributions to the community while they're still in school. Moreover . . . their attitudes may change concerning the desirability of remaining or returning to rural communities where they might create their own jobs rather than needing to find employment elsewhere." 7

city council representative about how they use and appreciate the park; the teacher helps them edit their letters. They place the finished letters in re-used envelopes (labeled "Re-used to reduce waste!") and take them home to get stamped and mailed.

#### A High-School Chemistry Classroom

Students perch on lab stools and pass around newspaper clippings about their county landfill, which has been leaking. The local paper's science reporter has loaned her scrapbook of articles about the landfill and community groundwater reservoirs to the teacher. While each student has a turn to read aloud from an article, the others take notes. Then the class generates a list of chemicals found in landfill leachate and discusses how household trash can turn into such a toxic soup. The teacher keeps the list on the board for several days so students can continue to revise it. Their assignment is to list products they discard at home that contribute to each element found in leachate: they will then learn about non-toxic alternatives.

#### Using the School Building as a Resource

"Where does the roof runoff go, after it goes down the gutter?" "Can we put construction paper in the recycle box?" "How hot do you keep the hot water heater?" The eighth-graders are asking questions faster than the head custodian can answer them. Shaking his head, he smiles at the teacher and says, "In all my years of working at this school, I've never come across any kids who are so interested in what I do!"

The students are conducting an environmental audit of their building. Their teacher, who has read about the growing popularity of such activities at schools and colleges across the nation, has set up the interview with the custodian. Besides exploring the chemistry labs and cafeteria, his students are learning about electricity and water consumption, pesticide use, and the heating and air conditioning systems. Their next step is to set class goals for conservation and devise plans for attaining those goals. (E2, a middle-school curriculum, provides suggestions to teachers and students for exploring the school site. See "Resources," page 42, for contact information.)

#### Moving From the Classroom to the Community

The following excerpt from *Educational Leadership* shows how far an excited and dedicated school can go with community involvement activities. One guest speaker sparked several in-school projects, which eventually led to community service work. When teachers created a school-wide goal of social responsibility and got parents' support, their students made some positive, visible changes in their community.

#### **Raising Students' Social Consciousness**

The Mosier Elementary School in South Hadley, Mass., has moved from scattered efforts toward a consistent and still-evolving series of programs to raise students' awareness of their responsibility toward the environment and humanity. It all began . . . when we invited a young man working in a New York City shelter for the homeless to speak to our fifth-graders. Afterward, when students asked what they could do, they were surprised to learn there are homeless shelters and soup kitchens in nearby Holyoke. By spring, our six fifth-grade classes had begun to make sandwiches with food donated from home every Friday at a center called Kate's Kitchen. And by the fall of 1989, all classes were participating. It's been over a year now—no parents have complained their children missed lunch in the cafeteria or time in class—and we haven't missed a Friday lunch yet.

**More Than a Slogan.** This student-initiated program gave the faculty cabinet some ideas when we met to select our annual school-wide theme. We felt the students needed a coherent philosophy—not just a slogan—to focus our efforts. Feeling strongly that environmental issues must become a part of daily life, we developed this statement, sent it to all the parents, and posted it throughout the building:

The Mosier School students and staff value the Earth and understand the need to protect its environment.

Our aim is to live in harmony with the Earth and its many kinds of human, plant, and animal inhabitants.

Statements of philosophy are, of course, not enough. We needed knowledge for our students and for the staff as well. . . .

In mid-year, one teacher (a former Greenpeace worker) helped her students make daily informational announcements over the public address system about energy use and waste, the effects of the Amazon forests on our climate, and the like. About the same time, we included home audit forms in our newsletter for parents, and each class completed an audit of its use of resources. Recycling receptacles appeared in all the classrooms, in offices, and in the cafeteria. And, as part of its fundraising efforts, the PTO conducted several successful bottle drives. . . .

**More Work to Do.** Now we realize that some of our efforts can't be accomplished at the building level alone: we need district-wide commitment. From kindergarten on, students must begin the process of internalizing good environmental practices. To get the ball rolling, our cabinet members have met with their counterparts from other schools to establish a district committee.

We have taken the first steps, and our awareness levels are high. Now students are beginning to ask uncomfortable questions: Why are the cafeteria hamburgers wrapped in aluminum foil? Why do we need plastic bags in every wastebasket? Why are there unoccupied expensive condominiums when families of fellow students must move out of town for lack of low-cost housing? They are beginning to realize their generation has a major responsibility ahead. However, changing habits of waste will be difficult in a society that encourages that waste. Now we need to confront our bad habits, sharpen our critical thinking, and resolve the conflicts between human needs and shrinking resources.

Excerpted from "Raising Students' Social Consciousness in South Hadley, Massachusetts," by Anita Page in Educational Leadership, November 1990 (vol. 48, no. 3), pp. 93–94.



# Workshop Activities and Masters: Community Resources

OME OF THE BEST ACTIVITIES to conduct in your inservice workshops involve field trips and guest speakers. These give teachers first-hand experience with community resources and help them visualize similar activities with their students. Other important workshop goals are to assess participants' experience, learn their existing mindsets about community resource use, and get them thinking about new connections between these resources and their content area objectives. Overall, the activities in this section demonstrate how to use community resources to enhance EE. They may accompany a workshop on almost anything; in some cases, your focus on community resource use may be only a small portion of the workshop.

#### **Section A**

If your participants do not know what resources are available to them, use the activities in this section to help them identify people, organizations, institutions, and places that can be sources of content-area information, field trip destinations, or partners in community service projects.

# 1 Identifying Potential Community Resources

Expands teachers' perceptions of the many people and places in their communities that can aid their students' learning. Includes several lists in Master 1, "Potential Community Resources for Teachers."

# 2 Identifying Resources for Curricular Objectives

Helps teachers generate ideas for using community resources and explore creative ways of meeting set objectives. Use with teachers of different subjects, or during a workshop on interdisciplinary approaches. Includes Master 2, a blank form, and Master 3, a completed community resource matrix.

#### 3 Construct-a-Community Contest

Helps teachers explore and expand their own knowledge of local decision-making while developing ideas for activities. Use with teachers who want to develop their students' action-taking skills. Teachers can adapt this activity for their students.

# 4 Helping Teachers Collect Resource Information

Produces a guide to EE resources avail able to educators in a particular region. Use with staff from a school district or environmental organization. Form is included in Master 4, "The Community Resource Bank." *Teachers may be able to conduct this activity with advanced students.* 

#### Section B

For participants who are ready to use community resources, the activities in this section cover the nuts and bolts of planning, implementation, and follow-up.

- Shows how everyday surroundings can be used in environmental study; models activities teachers can do with their students and includes more suggestions for student assignments. Use with a content-oriented workshop or as a stand-alone workshop on field trip planning.
- Gollecting Oral Histories
  Models all aspects of an oral-history
  activity. Includes Master 5, "Procedures
  for Collecting Oral Histories." Use with
  language arts teachers, social studies
  teachers, or anyone who is looking for

an interesting method of teaching the history of home energy use, solid waste management, water delivery, or other community-level environmental topics. *Teachers can repeat this activity with their students*.

Organizing Field Trips and Speakers

A flexible activity with specific stra tegies to help teachers plan activities that involve community resources. Includes Master 6, "How to Select a Community Resource," Master 7, "Preparing Your Class to Use a Speaker More Effectively," and Master 8, "Recommendations for Field Trips."

#### Other Suggestions for Using These Activities.

If you are conducting a topic-specific workshop (e.g., Project WILD) and your teachers need an introduction to what they can get from various resources, consider adapting Activities 2, 3, or 5. For teachers who need first-hand experience with resources in order to use them with students, you can lead a field trip, bring in guest speakers, and conduct Activities 1, 2, and 7. For teachers who are interested in planning their own projects in their communities, you can build a full workshop from Activities 2, 4, 5, 6, and 7.

Mini-assessment of participants; interactive group brainstorming session about different types of community resources.

#### Objective

To increase awareness of available community resources and choose several to investigate further.

#### Time

15–60 minutes, depending on audience size and participants' level of experience with community resource use.

#### Materials

Copies of Master 1, "Potential Community Resources for Teachers"; blank overhead transparency sheets and markers; overhead projector. May also want copies of Master 6, "How to Select a Community Resource," for Step 1

#### Outline

1

Start by asking participants to describe the characteristics of a "good" community resource (such as "easy to contact or visit"; "receptive to student questions"; "experienced with presenting information to children, hosting field trips, or providing information"). Help them consider both guest speakers and sites; prompt them only if necessary. List these on a blank transparency or newsprint.

2

Then ask participants what community resources they have used and list these on the left side of the overhead or newsprint. Ask what other community resources they think would be appropriate, listing them on the right side of the overhead.

3

Distribute handouts of Master 1. Go through each of the eight sections as a group, having participants place check marks next to resources they have already been in contact with (either as teachers or citizens) and then add more ideas in the blank spaces.

4

Ask participants if they have friends, relatives, or acquaintances connected with any of the resources listed. Then, on another transparency, brainstorm the methods that teachers can use to contact community resource people (for instance, request brochures, call the public information department, or visit the Chamber of Commerce). Other discussion questions:

- How would you find out about field trips to a place listed under B?
- Does anyone know an individual with a specialty listed under H?
- Does the public library provide anything helpful about finding local resources?
- Could social studies teachers use this list? Science teachers? Others?

5

On the handouts of Master 1, have each participant circle resources that s/he would like to contact.

## **Potential Community Resources** for Teachers

As you look through these lists, think about which people and organizations can potentially provide you with specific information or skill-building opportunities related to your curriculum. You can easily find people and organizations by looking in the telephone book "blue pages" (government) and "yellow pages" (business) or by contacting your Chamber of Commerce.

#### A. Nearby Areas for Nature Education

aquarium beach bird sanctuary desert fish hatchery game preserve greenhouse lake land trust mountain nature center recreation area

state park state forest stream or drain or river wildlife refuge wetland zoo

#### **B. Small Businesses**

architecture firm
asbestos abatement firm
auto salvage yard
bakery
carpentry shop
construction firm
dairy
doctor's office
dry cleaner
environmental engineers

environmental testing lab fabric store factory farm food cooperative gas station gravel pit grocery store landscaper law office mill
orchard
pest management business
pharmacy
photography studio
printing plant
radon abatement firm
restaurant
solar energy firm
waste hauler

#### C. Industries

automobile maker chemical manufacturer computer makers fertilizer manufacturer lumber company meat packing plant mine oil refinery power plant pulp and paper mill quarry steel mill

#### D. Clubs and Non-Governmental Organizations

Ecological/Activist
Audubon Society
gardening clubs
League of Women Voters
local ecology centers
Nature Conservancy
organic farming groups
Sierra Club
watershed councils

Youth
4-H
Boy Scouts
Campfire Girls
Girl Scouts
YMCA/YWCA
Young Democrats and
Young Republicans Clubs

Other
animal shelters
churches
educational foundations
senior citizens center
service clubs (e.g, Elks,
Jaycees, Junior League,
Kiwanis, Masons, Moose,
Optimists, Shriners, VFW)
synagogues
unions

# E. Local Offices and Facilities of State and Federal Government Agencies

State
county cooperative
extension offices
education agency
environmental protection
agency
fish and game agencies
forests
natural resources agency

pollution prevention office

parks

Federal
battlefields
Bureau of Indian Affairs
Bureau of Land Management
defense installations
Environmental Protection Agency
Fish and Wildlife Service
Forest Service
National Laboratories
National Park Service
Soil Conservation Service/Districts

#### F. Local Infrastructure

airport
bus depot
cemetery
city council
city hall
composting site
county board
county health department
courthouse
dam
drain commission
drinking water plant

fire station
hazardous waste landfill
historic registry
hospital
landfill
library
mayor
museum
police station
port
public works department
recycling center

regional planning agency road commission school board septic system installation stormwater detention pond township board train station urban planning commission urban transit authority, utility company wastewater treatment plant zoning board

#### G. Nearby Educational Organizations

community or four-year college environmental education center experimental farm home school land grant institution private school school board secondary school state education agency university

#### H. Individuals with Interesting Hobbies or Jobs

artist astronomer beekeeper bird watcher building contractor carpenter

city planner environmental activist gardener

health care specialist

lawyer meteorologist printer taxidermist TV/radio personality wood carver writer zoo worker

## Activity 2

## Identifying Resources for Curricular Objectives

Interactive smallgroup exercise for upper-elementary or secondary teachers of different subject areas. Also useful for assessing workshop participants' knowledge and attitudes about community resource use.

#### **Objectives**

To connect curricular objectives with community resources and develop student activities; to develop rationale for community activities based on curricular objectives.

#### Materials

Handouts from Masters 2 and 3; overhead projector and transparencies of Masters 2 and 3; flip chart; one copy of a story or example of community resource use from pages 15–17 or from *Getting Started* (optional).

Time 45-90 minutes

#### Outline

1

Divide the participants into small groups by subject area.

2

Distribute handouts from Master 2 and ask teachers to complete the curricular "Objectives" column, listing two or three primary objectives that they would like to address in a unit with an environmental theme. You might write some objectives on newsprint before the workshop. These can be taken from state or district guidelines or developed with help from a teacher. Leave space for objectives that teachers bring up during the workshop.

#### VARIATION

Have all teachers first read or listen to an example of community resource use, then fill in the matrix for that example together (while you write their ideas on a matrix on the overhead projector), and then get in small groups to fill out their own matrices.

3

Point out that students may be more motivated to address issues than study pure information. In completing the "Local Issues" column, ask teachers to generate as many different concerns as they can think of, focusing on those that their students talk about. Groups can fill out the "Class Activities" and "People to Contact" columns concurrently as they get ideas. Use Master 3 as a model for yourself in leading this activity, or as a handout. Examples may help keep ideas flowing.

Ask each participant to identify the connections (rows) that they think are most and least feasible and explain why. This is the basis for identifying their internal and external barriers to community resource use in the next step.

5

When all groups are finished, ask a representative from each to report to the whole group. Discuss the similarities between each group's ideas, new ideas that arose, what made the exercise difficult, and what additional resources might have assisted them with this task. Then ask participants what they think would prevent them from using community resources. Use the suggestions on pages 10–12 to respond to the barriers, and encourage other teachers to make suggestions. Throughout the discussion, list barriers and solutions on the flip chart.

6

Optional: If participants want to develop their ideas into a unit, you can continue with Activity 7, "Organizing Field Trips and Speakers." Alternatively, you might follow with "Building a Lesson," from the Workshop Resource Manual unit "Integrating Environmental Education Into the Curriculum," or with any of the activities in the unit "Approaching Environmental Issues in the Classroom."

**Subject Area** 

Curricular Objectives

**Local Issues** 

**Class Activities** 

**People to Contact** 

1.

2.

3.

# **Community Resource Matrix**

Subject Areas: Social studies, history, biology, etc.

Curricular Objectives	Local Issues	Class Activities	People to Contact
"Explain how a bill becomes law."	Skateboarding on sidewalks.	Follow local news; attend meeting and then re- enact it from the transcript.	Local businesses, Chamber of Commerce, skateboarders, parents, police officers
<ol> <li>"Describe how an event in history can help us understand society today."</li> </ol>	Land development issues.	Talk to older citizens who played a role in town planning in the 1950s.	City or township planners identified from old news articles.
"Explain the water cycle and how it affects society."	Bond issue for water treatment plant.	Water cycle lecture; field trip to treatment and sewage plants.	Plant officials.
"Critically develop alternative strategies for solving problems."	Traffic congestion.	Investigate mass transit with surveys and interviews.	Drivers, business owners (for carpool initiatives), city planners.

### Activity 3

## **Construct-a-Community Contest**

Small-group game of mapping out who's who and what's what in local, state, or federal government.

Because it suggests a competition among participants, this activity may add a different twist to your workshop.

#### **Objectives**

To develop an understanding of government committees and agencies; to gain knowledge about this activity in preparation for repeating it with students.

#### Materials

Markers and large sheets of newsprint; copies of local telephone books (with the "blue pages"); two large bags of M&M's; recent editions of the local newspaper (optional).

Time: one hour

#### Outline

1

Explain that, in order to tap local resources, you first need to know that they are there. Demonstrate the confusion that might arise, for example, if someone who wants to know more about a park looks in the phone book and sees listings for City Parks, City Forester, County Parks, County Nature Center, Regional Planner, Drain Commissioner, and the County Extension Officer! Where do you start? For what are these offices responsible?

2

Divide participants into small groups of 4–5 people each and distribute the large paper and markers. Challenge each group to name as many municipal offices, committees, and agencies as they can and then correctly show how they are connected in an "organizational chart." Give them 15 minutes to get as far as they can, adding that the group with the most correct items will receive a fantastic prize.

#### VARIATION

Depending on the mix of participants, you may need to modify the challenge. For example, if people come from a variety of communities, you could ask them create a "generic town chart." On the other hand, you may decide to limit the government offices to state and federal agencies.

3

If people are really stuck, you can use these questions to nudge them along:

- Who manages or supervises the landfill?
- Who is responsible for the open, green, park-like spaces?
- Who maintains the roadsides, railroad right-of-ways, and cemeteries?
- Whom would you call if you had a water line leak?
- Where would you get your drinking water tested? Who tests the river water?
- Who handles emergency spills, discharges, or pollution problems?
- Who can tell you what insect species is munching on your oak tree?
- For any of the agencies and committees already on your chart, who is the supervisor? Who gives them their charges and priorities?

4

When the time is up, take away the markers (to keep them honest) and ask each group to present its community map. Use the collective knowledge to "grade" each chart and count as correct those items on which everyone can agree. Use the phone book government listings to settle disputes, or call the office directly. Present one bag of M&M's to the winning group.

If the participants are really anxious to know who is who and what is what in their community, inform them that you have one more bag of M&M's and would be delighted to offer it to the winner of a modified, "openbook" contest. Allow participants to use the phone book as a guide and give the bag to the group (or groups, if they wish to work together) that identifies the most correct items.

#### VARIATION

You may wish to focus the participants on one set of municipal agencies and committees, particularly if your workshop has a content or issue focus. You could distribute local newspapers to each group and ask them to hunt for the mention of municipal entities and develop a chart from these "newsmakers." You could also present them with an environmental problem and challenge the groups to list the actors who might have a role in solving it.

## Activity 4

## **Collecting Resource Information**

A project for teachers or other school personnel who have experience with community resource providers, or for students who wish to gain publication or computer experience for academic credit.

#### **Objectives**

To create a guide of tried and true community resources available to educators in a particular district or region.

#### Materials

Resource manual cards or forms (on paper or computer disk); access to a telephone; handouts from Master 4, "The Community Resource Bank";

existing community resource guides (from any community). May also want to use questions from Master 6, "How to Select a Community Resource," as criteria.

#### Time

Several meetings over days or weeks; additional independent work.

#### Outline

Participants' strong interest in building a resource guide is an important prerequisite for this activity. A community resource guide can be a handy tool for teachers in a school building or district, but the momentum to finish it is dependent upon the desire to have such a product in the first place. The guide should be in a format that is easily updated, so teachers can add or delete resources as necessary. Consider enlisting curriculum personnel in the school district or regional service center (they may already have some version of a community resource guide) or suggesting that teachers use student assistants.

## OPTION A Short project

Ask workshop participants to complete prepared forms (Master 4) describing the community resources they have used. After collecting forms in several of your workshops, assemble them into a guidebook to distribute at other workshops. Someone on the staff of either the school district or your organization should verify all information on the resource cards (getting permission from the cited people and organizations in the process) before the guides are reproduced and distributed.

## OPTION B Long project

Work with a committee or group of teachers to create a resource guide for their building, district or region. The following directions outline this project.

1

Distribute existing guidebooks for participants to examine and critique. Ask what information they would like to have in their guidebook. Who will be using this resource, and what questions will they try to answer with it? Participants may wish to informally question other teachers about their needs, too. If you can gather teachers with several interests and subject areas, consider a guide that will refer to resources by topic area: energy, water, health, government, etc., as well as EE. Use Master 4 as a guide, but ask everyone to agree on the format of the questions to be used.

2

Determine what resources are available to complete the guidebook. Is your organization responsible for it, or is the school district? If the latter, which department? What equipment (telephones, typewriters, copiers, computers, printers) is available? Divide up the tasks of research, writing, formatting, copying, and distribution; set deadlines.

Note: If the school has a computer class, ask the instructor whether his or her students could be asked to type up information and format the output.

3

As a group, generate lists of potential resources for inclusion in the guide. Distribute them among the teachers and send them out to collect information.

Note: If students have been drafted for this project, you or other adults involved should conduct a brief training session on skills the students will need: telephoning, interviewing, etc. See Barbara Lewis' The Kids' Guide to Social Action, listed in the "Resources" section on page 43, for excellent worksheets.

4

When the materials have been assembled, have each person read over all forms to check for stylistic consistency, new ideas, and different ways of looking at the community. Revise as necessary.

5

Because the information will change, be sure to have the date on each page of the resource guide. Subsequent versions should note when the information was revised.

# Master 4 The Community Resource Bank

## Code explanation CODE 1 / 2 / 3 / 4 / 5 / 6 / 7 / 1. speaker 2. mentor/tutor 3. field trip site Individual 4. loan materials 5. material source 6. community service opportunity Agency 7. other Address E-mail address Phone Fax Best time to call Best time to visit

Best time for a speaker
Limitations
Description of the resource or expertise
Teacher's opinion of this resource's usefulness to learners
Best suited to the following student abilities, interests, and maturity
Dest salted to the following stadent abilities, interests, and maturity
Problems encountered using the resource
Costs

Adapted from "Strategies and Activities for Using Local Communities as Environmental Education Sites," selected and developed by Charles Roth and Linda Lockwood. ERIC Clearinghouse for Science, Math, and Education, Ohio State University, 1979.

# Activity 6 Building Insight On-Site

Hands-on exploration of environmental systems at schools. Teachers can easily modify this activity for use with students of all ages.

#### Objective

To gain insight into the many topics that can be investigated in the school building and on its grounds.

#### Materials

Clipboard and pen for each group. Optional: topographical map of the area, building site plan to show stormwater drainage, etc. This activity is conducted at a school, preferably where the participants teach.

Time 1-11/2 hours

#### **Facilitator Prep**

Meet with school maintenance staff to gain their support in this endeavor and learn specifics about the building and grounds; possibly meet with cafeteria staff about how food waste is handled.

#### Outline

Describe the site where you are meeting as an overlooked but convenient resource, a component of the community that is familiar and easy to reach for students. Encourage the groups to explore this site with new eyes—with the eyes of explorer—and remind them that both natural and built environments operate as *systems*, with resources coming in, products and waste going out. If you have maps or site plans, share them with participants.

#### VARIATION

Use any convenient location—a park, neighborhood, church, recreation center, etc.

2

Divide the participants into teams, perhaps by grade level. Send teams out to comb the workshop site to find answers to specific assignments. Formulate assignments by creating questions or choosing some from the following lists; be sure they are appropriate for the grade levels taught by the participants.

#### GROUP I

Investigate the grounds. What plants are present? Are they indigenous or not? Were they planted by humans, or do they grow there naturally? Do they provide habitat for wildlife? How are they maintained? Who decides what the grounds should look like, and what criteria are used? What alternatives are possible?

#### GROUP 2

Look for water. Where are all the places it can be found? How is used, and by whom? How does it enter and leave the building and grounds? How does it change during its use in the building or on the grounds? How is its use monitored and paid for?

#### GROUP 3

Examine the waste produced here. What does it consist of? Who throws it away? Is any of it recycled? Where does it all go?

#### **GROUP 4**

How does energy such as food, natural gas, fuel oil, and electricity arrive at the site? How does it leave as, for example, converted energy, food scraps, or heat?

#### VARIATION

Have each team focus on creating questions for a different subject area. This will be attractive to teachers who need to think in terms of discipline-specific objectives.

3

When the groups come back together, ask them:

- "What did you learn?"
- "What questions came up?"
- "How can we help students find answers?"
- "What problems or issues were evident?"
- "What alternatives are possible?"
- "What did you discover that could be used for an educational activity?"

4

Ask participants to return to their small groups to translate the experience into possible student-research projects, experiments, surveys, and investigations. (The E2 Project, described in the "Resources" section, page 42, is an excellent guide.) Here are some suggestions to offer the groups:

- Make maps of the school, locating what they found.
- Write short descriptions of what they found.
- List questions and describe possible problems, then brainstorm ways to improve what they found.
- Design a survey and ask school staff for opinions about student concerns.
- Develop "environmental tours" of the school to conduct for other classes or during open house.
- Ask school staff how the school environment could be managed. These people could appear as guest speakers or be interviewed by student teams.
- Organize a poster contest or art campaign to address environmental problems observed.

### Activity 6

### **Collecting Oral Histories**

Demonstrates how to gather historical information about the neighborhood, school, or community; brings information about the community and its history alive.

#### **Objective**

To practice preparing for and conducting oral history sessions for the purpose of teaching students how to collect oral histories.

#### Materials

Interview subject (historian); tape recorder, paper, and writing utensils for each group; handouts from Master 5, "Procedures for Collecting Oral Histories."

Time 45 minutes or longer

#### **Facilitator Prep**

Make arrangements with one or more longterm residents who are willing to be interviewed and have interesting stories to share. The experience will be richer if the session can be set up where the "historians" live, such as at a senior center. Contact the library, historical society, or museum for suggestions of elders, copies of photographs, and examples of previous oral history projects. (Note: If it isn't possible to have a guest historian, participants can still gain skills by interviewing each other.)

#### Outline

1

Explain to participants that senior citizens are often willing and accessible sources of local history. Define oral history as any record of first-hand reminiscence by a narrator. Explain that although oral histories are usually based on the spoken word, they may also include audiotapes, videotapes, and films.

2

Ask participants to list the types of information that these "historians" could provide. If necessary, prompt them with the following examples.

#### Context-setting questions:

- "How did certain events shape the community (war, changes in transportation, wilderness exploration)?"
- "How did your family deal with these events?"
- "What was life like for you as a child?"
- "What did you eat?" (compare to foods available today)
- "What were interesting debates about? On what did people disagree?"

#### Environmental questions:

- "How did you heat or cool your home?"
- "Where did trash or garbage go?"
- "How was sewage treated?"
- "How was community planning handled?"
- "How has this community's environment changed in your lifetime?"
- "How has the quality of your environment changed?"
- "Is the air/water/land different than when you were young? How?"

3

Pair up teachers and ask them to choose a question they would like to explore. As a team, ask them to prepare follow-up questions they could ask to tease out interesting information. Review some of the standard "probing questions" with the entire group:

- "What do you mean by that?"
- "Can you give me an example?"
- "Did other families react similarly?"
- "Can you remember what it looked/ smelled/sounded like?"
- "How did you feel about that?"

Review their suggestions and distribute the handout from Master 5 for additional ideas.

4

Introduce the "historians" and send groups of participants into other rooms to interview them. (If necessary, demonstrate how to operate tape recorder first.)

5

When the group reassembles, ask participants to report on the most interesting thing that they learned from the interview. Then discuss the value of using this experience with students. (Ideas: Use students' relatives as subjects; do an entire classroom interview with one or two subjects; offer oral histories as a project, with audiotapes or transcripts as student products.

# Master 5 Procedures for Collecting Oral Histories

#### Before the Interview

- 1. Make initial contact with the interviewee to introduce yourself and explain the purpose of the interview. If the person is a willing and able source of information for your students, arrange logistics (date, time, location, transportation or directions). If not, ask if the person to recommend another interviewee.
- 2. Give students basic information about the interviewee and then guide them in performing more research about him or her.
- 3. Help students each develop interview questions.
- 4. Let students "practice" the interview with you, giving them feedback throughout. If time allows, let them then practice with each other. In particular, remind them to:
  - state their questions clearly
  - listen carefully
  - reflect statements back to the speaker for clarity
  - let the speaker know when they don't understand a statement
  - try not to interrupt the speaker
- 5. Contact the interviewee again to confirm logistics and clarify procedures, particularly if you will be audiotaping or videotaping the interview.

#### **During the Interview**

- 6. Introduce the interviewee to the students, briefly describing his or her background.
- 7. Make sure the interviewee is comfortable—check seating, lighting, and room temperature and provide a glass of water. During the interview, keep distractions to a minimum.
- 8. Finish the interviews before the speaker becomes tired.

#### After the Interview

- 9. Have students write out and share the speaker's responses to their questions. If you have a tape, let students review it soon after the interview.
- 10. Send a thank-you note (from yourself or your students) to the speaker.

### Activity 7

## **Organizing Field Trips and Speakers**

Covers strategies and specific tips teachers can use to choose resource people and plan activities involving them.

#### **Objectives**

To gain confidence and competence in organizing field trips and guest speakers; to learn how to plan a customized field trip.

#### Materials

Handouts from Master 6, "How to Select a Community Resource"; Master 7, "Preparing Your Class to Use a Speaker More Effectively"; and Master 8, "Recommendations for Field Trips."

Time: 1-2 hours

#### Outline

Masters 6, 7, and 8 contain a great deal of information for teachers to use as they plan to make greater use of their community resources. The following activity ideas are based on these handouts. The activities can be adapted, reconfigured, and used in any combination. Here are three options.

#### A

Distribute handouts 6 and 7. Ask participants to work in pairs and, using both handouts, identify a speaker who will meet the needs of their curricula. (If a potential speaker is not already known, they may choose an organization and list questions they would ask to identify a potential speaker.) Have them write out what they would tell the speaker ahead of the talk and how they would proceed to create a positive atm osphere in their classroom.

#### VARIATION

Role-play this activity: One person in the pair plays the speaker, the other the teacher. The teacher practices making initial contact with the speaker, asking him or her to make a classroom visit, and informing him or her about the students' knowledge levels and expectations.

В

Start with a defined topic, such as water quality or wildlife habitats. As a group, determine several common learning objectives that these teachers want their students to achieve. Then discuss what types of field trips would complement in-class lessons on the topic. Distribute handouts from Master 8 and ask small groups of teachers to design objectives, pre- and post-activities, and a field trip agenda for a trip of their choosing. Then reconvene in a large group and ask a representative from each group to report out.

#### VARIATION

Assign a different task to each small group. Then reconvene the large group to put it all together.

C

Participants list questions their students might ask that could be answered by making field trips into the community. Brainstorm a list of common constraints (such as time, transportation, or maturity of students) and select a field trip feasible under those constraints.

# Master 6 How to Select a Community Resource

The more positive answers you get to these 20 questions, the more appropriate the resource is likely to be.

#### Is the resource . . .

- 1. familiar enough to you that you can adequately plan and prepare for using it?
- 2. either in a location accessible to your students or able to come to your school?

#### Is the person . . .

- 3. able to communicate with students at the grade level you teach?
- 4. an interesting and effective presenter?
- 5. recommended by other teachers?
- 6. capable of speaking at an assembly of all fifth-graders at your elementary school, or making the same presentation six times in one day to reach all the ninth-grade earth-science classes, or giving a tour to five groups of seventh-grade home arts students in the same week? In short, does this person have the time and energy to interact with all students in a given grade level or content area?

#### Are the activities . . .

- 7. suited to the age group involved?
- 8. planned in relation to students' prior knowledge and skills?
- 9. accommodating of specific learning objectives?
- 10. designed to show specific elements and relationships of human, animal, or plant life in your community?
- 11. likely to lead to other activities and experiences of value to the students, such as oral and written reports, dramatization, expression through art or music, constructive activities, further reading or research, or graphic displays?

#### Will the experience . . .

- 12. add to the students' knowledge base?
- 13. be effective within the time allotted?
- 14. be valuable enough to justify the time, money, and energy spent on it?

#### In making arrangements, did you remember to. . .

- 15. clearly explain the age and learning level of your students as well as the specific learning objectives you need to help them achieve?
- 16. explain specific questions that your students have already asked about this topic?
- 17. suggest that the person have explanatory props or physical samples on hand and plan a short enough lecture to leave time for student questions?
- 18. stress the importance of starting the activity on time (and have a back-up plan in mind in case the resource person is late arriving or starting the tour)?
- 19. get a clear idea of exactly what the resource person is going to do?
- 20. ask for preliminary and follow-up information or activities for your students?

### Master 7

# Preparing Your Class to Use a Speaker More Effectively

Most contacts your students make in the "outside world" are potential classroom resources. In planning for a classroom visit by a community member, remember that careful planning ensures success. Here are some guidelines.

- To help your students have a better understanding of the speaker, request a brief biography and job description ahead of time. Also ask what equipment will be needed, such as slide or overhead projectors, screens, cards, and microphones.
- 2. Send a description of your class and the subject studied to the speaker ahead of time. If possible, include students' questions—this will give the speaker some time to come up with answers and information specifically for your students. Also, if the resource person is to participate in a simulation, role-play, debate, or other activity, send any information that would help clarify his/her role.
- A day or two before the appointment, confirm by phone the date and time the speaker is expected. Make sure the speaker understands directions for getting to your school, where to park, and procedures for checking in at the office.
- 4. If appropriate, ask students to take on these responsibilities:
  - a. Escort the speaker from the office to the classroom.
  - b. Introduce the speaker (using the background sent).
  - c. Have a glass of water for the speaker.
  - d. Take photographs in class (if possible).
  - e. Say "Thank you" and invite the class to applaud when finished.
  - f. Send a written thank-you note after the visit.
     (Role-play the introduction and thank-you before the day of the visit.)
- 5. During the presentation, encourage questions at appropriate times.
- 6. Conduct a follow-up discussion to reinforce what was learned.

#### Don't:

- ... invite other teachers or classes without getting the speaker's prior approval. (A bigger group means more handouts, different room configurations, and modified activities.)
- ... leave the class during the presentation. (The speaker should be able to concentrate on his or her presentation without having to control your class.)
- ... compete with the resource person for your class loyalty.
- ... get upset if your guest is not a skillful teacher—instead, use your facilitation skills to clarify the students' questions and the speakers' responses.
- ... correct speakers. Wait until they leave to discuss the issues with the class.

Adapted from "How to Use Your Community as a Classroom Resource," by Helen Tieger, in Social Studies Review: Journal of the California Council for the Social Studies, 1983. Vol. 22, No. 2, pp. 4–12.

## Master 8 Recommendations For Field Trips

The field trip represents direct exposure to segments of the cultural or natural community in action. Learners can observe and inquire about what they see. A good field trip requires good logistical planning.

#### A. Planning the Trip

- 1. Know your district's procedures for field trips. (The district office should have copies of guidelines.) For instance:
  - How do you reserve a bus? At what times are buses available?
  - Is it all right for students to miss other classes for a field trip??
  - If there is an admission charge, how do you pay for it?
  - Are all students able to bring their own lunches? If not, do district guidelines cover meals purchased for students?
  - Whose permission (administrative as well as parental) is needed?
     Organize a simple file system for collecting all forms or funds required from students and parents. (On the permission slip, ask parents if they would be willing to chaperone this trip—or future trips.)
- 2. Ask yourself how the field trip can fit into the curriculum and how it meets these goals and objectives. Then establish clear, specific objectives for the field trip and share them with the students and the host before embarking.
- Preview the site to determine its suitability and limitations for group visitation so appropriate preparations can be made. Familiarize yourself with the major site features that will interest students and are connected to your current study topics. Review logistics: bathrooms, parking, rain shelters, food availability, etc.
- 4. Make a list of site features you plan to discuss and emphasize during the trip, and note comments and questions you plan to raise about them. If possible, obtain pictures, written material, slides, and other materials to introduce students to the site they will be visiting.
- 5. Now is the time to lay a foundation for the concepts your students will explore during the trip—use materials from the site (or your regular class-room materials) to prepare them for the experience. Have them prepare questions ahead of time; share those questions with the host before the trip. If appropriate, give students a list of points to consider and a data collection worksheet. If students are to engage in an activity, be sure to indicate what behavior is expected.
- 6. Use the information you gather in Step 1 to develop a checklist of everything you need to do before the trip: Call the host to confirm the date and time, check about restroom facilities, and ask about any safety precautions or special student attire; confirm bus plans; make sure all parental permission slips have been turned in; arrange for meals or snacks, etc.

#### **B.** During the Trip

- 7. Focus students' attention on those features of the trip that are most important, and remind them to record pertinent observations on their data sheets. For your own data sheet, make brief notes on what seems to interest and bore students. Also note the points you would like to highlight during the follow-up discussion.
- 8. When tour guides are speaking or demonstrating, arrange students in an appropriate formation so all can hear and see.
- 9. Take pictures or slides or make a videotape to use when discussing important aspects of the trip during the follow-up.

#### C. Following the Trip

- 10. Ask students to offer their impressions of what they learned from the trip and what they enjoyed most and why.
- 11. Review your own notes and discuss important points, referring to the data the students collected. While the procedural and substantive features are still fresh in your mind, make notes on a file card for future trips to that site.
- 12. Engage students in follow-up activities such as analyzing or expanding on collected data, reading related stories, filling out worksheets provided by the host, or listening to a guest speaker on a related topic.

Adapted from "Strategies and Activities for Using Local Communities as Environmental Education Sites," selected and developed by Charles Roth and Linda Lockwood, ERIC Clearinghouse for Science, Math, and Education, Ohio State University, 1979. ON'T FORGET to contact your state education and natural resources agencies for more information and environmental materials and programs. You may also wish to use some of the resources listed below for help in preparing workshop activities.

# **Publications About Using Community Resources**

Bags, Beakers, and Barrels: An Action Curriculum Toward Resolving Hazardous Materials Issues For Middle and High School Students. Industrial States Policy Center and the University of Michigan School of Natural Resources, 1987. Available for \$20 from:

Industrial States Policy Center 17 E. Brickel Columbus OH 43215

© 614 224-4111 FAX 614 222-4092

This curriculum helps educators address hazardous waste issues. While providing opportunities to explore local concerns and make small steps toward solutions, it also meets Ohio's curricular guidelines.

E2 (formerly "The EarthTime Project") E2 is developing a curriculum that encourages the use of schools as study sites. E2 emphasizes student-directed exploratory learning and communication between students, faculty, and staff. The goal of E2 is to convert schools into exemplary settings of environmentally balanced resource use and to produce student role models. Using the school building and grounds as a research laboratory, the program is designed to change students' consumption habits and reduce the schools' use of various resources. Curriculum modules for secondary students will start being available in fall 1994; interested parties may request E2's free newsletter for the latest information on curriculum availability.881 Alma Real Drive

Suite 118
Pacific Palisades CA 90272

310 573-9608
FAX: 310 573-9688

Education Resource Guide. Chemical Manufacturers Association, 1992. Available free of charge from:

> Patricia Sokoloff Manager of Education Services 2501 M Street, N.W. Washington D.C. 20037

© 202 887-1223 FAX: 202 887-1237

This guide includes surveyed responses of members of the Chemical Manufacturers Association and their current educational activities and programs. Many of the companies listed provide plant tours, internships, scholarships, teacher awards, equipment donations, teacher workshops, and research opportunities.

Getting Started—A Guide to Bringing Environmental Education Into Your Classroom.

National Consortium for Environmental Education and Training (NCEET), 1994.

Available for \$9.95 from:

NCEET University of Michigan School of Natural Resources and Environment 430 East University Ann Arbor MI 48109-1115 313 998-6726

FAX: 313 936-2195

This publication is built around a collection of 35 stories. In them, teachers from around the country describe the environmental education programs in their classrooms; many of them used local resources or developed community-service programs with their students. *Getting Started* also describes organizations through which teachers can obtain materials, curricula, funding, and in-service training opportunities. It also includes EE contacts in each state.

The Kid's Guide to Social Action: How to Solve the Social Problems You Choose—and Turn Creative Thinking into Positive Action.

Barbara Lewis, 1991. Free Spirit Publishing, Minneapolis. Cost: \$14.95.

Available at most bookstores.

This resource guide for young people explains the political action skills that can help them make a difference in solving social problems at the community, state, and national levels. It relates stories about young people who are changing laws, fighting crime, helping people in need, and improving the environment. It presents step-by-step instructions, materials, and a resource guide with names, addresses, and telephone numbers of social action groups and U.S. government offices. Included are tips and worksheets for students to use in making telephone calls; speaking in public; conducting surveys, interviews, and voter registration drives; writing proclamations, proposals, and press releases; raising money; and lobbying. All worksheets may be photocopied.

What's Noteworthy on Rural Schools and Community Development.

Mid-continent Regional Educational Laboratory (McREL), 1989. Aurora, CO. Available for \$5 (includes shipping and handling) from:

McREL Resource Center 2550 South Parker Road Suite 500 Aurora CO 80014

© 303 337-0990 FAX: 303 337-3005

This publication examines ways in which rural schools contribute to community development. It describes information about the community as a focus of study and the roles of schools in the process of community development. It provides information on how students can start a business and how teachers can transform their teaching by using the community as a resource.

#### Publications About Service-Learning

Community Youth Planner's Bookshelf.
Barry Checkoway, Kameshwari Pothukuchi,
and Rogeair Purnell. Available for \$5 (plus \$1
shipping and handling) from:

Youth and Community U-M School of Social Work 1065 Frieze Building Ann Arbor MI 48109-1285

© 313 763-1062

This booklet contains information on publications about community youth programs. It summarizes popular books and articles about a variety of youth issues, including how to get youth involved in community programs.

Growing Hope: A Sourcebook on Integrating Youth Service Into the School Curriculum. Rich Willits Cairn and James C. Kielsmeier, editors, 1991. Available for \$29 from:

> National Youth Leadership Council 1910 West County Road B St. Paul MN 55113-1337

© 612 631-3672 or 800 366-6952 FAX: 612 631-2955

An essential manual for service-learning for teachers, leaders, and program coordinators, this publication covers the background, definitions, and rationale for service-learning; nutsand-bolts implementation ideas; and staff development. It includes case studies, stories, and sample program materials. The resource section lists contact information for additional publications and youth service organizations.

Learning by Giving: K-8 Service-Learning Curriculum Guide. Rich Willits Cairn and Theresa Coble, 1993. Available for \$45 from:

> National Youth Leadership Council 1910 West County Road B St. Paul, MN 55113-1337 612 631-3672 or 800 366-6952 FAX: 612 631-2955

This curriculum guide explains the student-driven framework for developing curriculum-based service-learning activities. It includes "how-to's," a model activity framework, and 15 sample activities by grade level (K–2, 3–5, and 6–8) for integrating service-learning into the curriculum.

Training Materials for Community Youth Programs. Barry Checkoway, Kameshwari Pothukuchi, and Rogeair Purnell. Available for \$5 (plus \$1 shipping and handling) from:

Youth and Community U-M School of Social Work 1065 Frieze Building Ann Arbor MI 48109-1285 313 763-1062

This annotated bibliography is directed toward people who want to take initiative for youth. It includes information on how to organize groups, plan programs, develop resources, and involve youth and adults in the decision-making processes of their communities.

#### **Organizations**

National Community Education Association 3929 Old Lee Highway Suite 91-A Fairfax VA 22030-2401

© 703 359-8973

The National Community Education Association (NCEA) gives teachers, administrators, policy-makers, and interested citizens the information, resources, and support networks they need to promote community involvement in education, interagency partnerships, and lifelong learning for everyone in the community. NCEA provides training at its annual conference, school-community outreach, and audiotapes.

National Youth Leadership Council (NYLC)
1910 West County Road B
St. Paul MN 55113-1337
612 631-3672 or

© 800 366-6952 FAX: 612 631-2955

In addition to publishing *Growing Hope* and *Learning by Giving*, NYLC offers a range of training programs for educators, including one-day or multiple-day workshops, regional conferences, and the Service-Learning Teacher Institute, a week-long summer graduate course taught through the University of Minnesota. NYLC is supported by President Clinton's Corporation on National and Community Service as the National Clearinghouse for K–12 Service Learning. The National Information Center for this Clearinghouse is located at the University of Minnesota (800-808-SERV).

#### ENDNOTES

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- 2. Rich Cairn, personal communication, Jan. 2, 1994.
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- Mary K. Nebgen and Kate McPherson, "Enriching Learning Through Service: A Tale of Three Districts," Educational Leadership, November 1990: p. 92.
- David Orr, "What is Education For?" Clearing, No. 80, September/October 1993, p. 9.
- Dave Versteeg, "The Rural High School as Community Resource," Educational Leadership, April 1993: p. 54.
- 7. Versteeg, p. 54.

#### NCEET

National Consortium for

Environmental Education

and Training