

Launching, Managing and Sustaining an Outdoor School Program

*A Guide Prepared by
The Oregon Community Foundation*





*Whatever landscape a child is
exposed to early on, that will be the
sort of gauze through which he or she
will see all the world afterwards.*

— Wallace Stegner

February, 2012

Published by The Oregon Community Foundation with generous support from the Gray Family Fund of OCF.

The Oregon Community Foundation
1221 SW Yamhill St. Suite 100 Portland, OR 97205
503.227.6846

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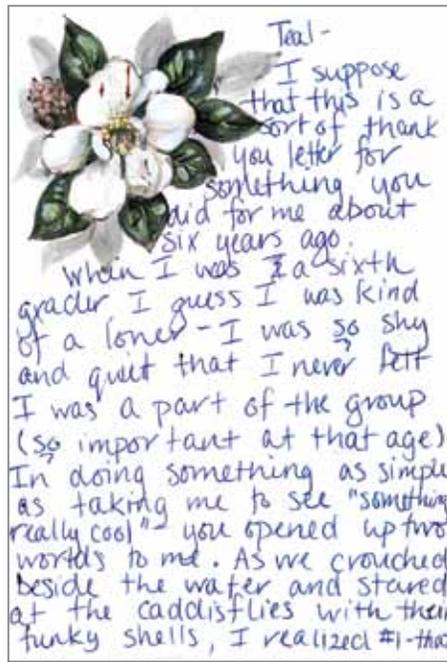
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Outdoor School Shapes a Young Girl's Life

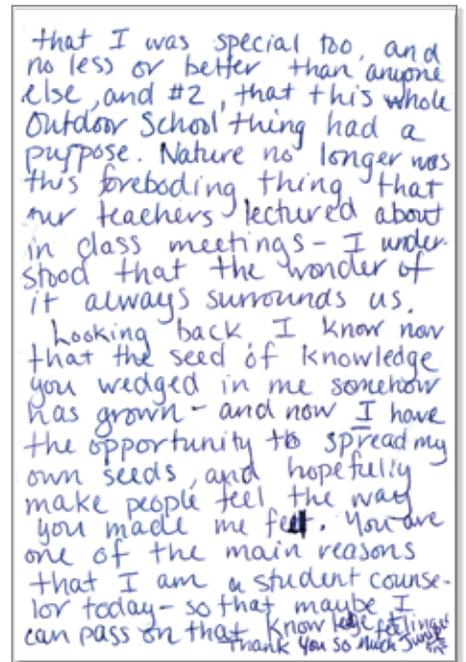
In 1989, I was helping a group at the Collins Outdoor School site, along the Sandy River, do a "critter catch." We were at a series of little ponds looking for aquatic life. Most kids wanted crawdads, fish or frogs.

I remember seeing one girl standing off to the side, holding her little aquarium net and looking at the pond while the other students in her class were excitedly collecting critters. I asked her if she would like to see "something really cool." She nodded, so I showed her another little pond that I knew contained a bunch of caddisflies. She stooped down and started collecting them, watching them crawl around in a white dish tub of water.

In 1995, I returned to the Collins site as an instructor. I used to journal with my high school student leaders about their day - what went well, what could I help them with, and so on. "Juniper," a senior, gave me this:



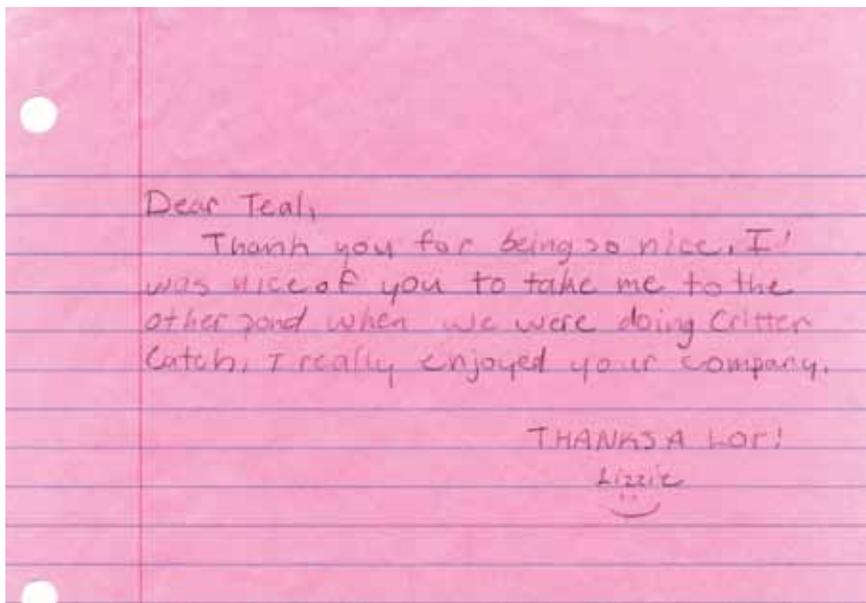
Teal -
I suppose that this is a sort of thank you letter for something you did for me about six years ago. When I was in a sixth grade I guess I was kind of a loner - I was so shy and quiet that I never felt I was a part of the group (so important at that age). In doing something as simple as taking me to see "something really cool" you opened up two worlds to me. As we crouched beside the water and stared at the caddisflies with their funky shells, I realized #1 - that



that I was special too, and no less or better than anyone else, and #2, that this whole Outdoor School thing had a purpose. Nature no longer was this foreboding thing that our teachers lectured about in class meetings - I understood that the wonder of it always surrounds us. Looking back I know now that the seed of knowledge you wedged in me somehow has grown - and now I have the opportunity to spread my own seeds, and hopefully make people feel the way you made me feel. You are one of the main reasons that I am a student counselor today - so that maybe I can pass on that. Know how I feel? Thank you so much!

I remembered her from sixth grade immediately. I don't remember every student, but she stood out.

A couple of years later, I was looking through old memorabilia from my early outdoor school years and found this:



Dear Teal,
Thank you for being so nice. I was nice of you to take me to the other pond when we were doing Critter Catch. I really enjoyed your company.
THANKS A LOT!
Lizzie

These were, of course, written by the same girl: one note by sixth-grader Lizzie, and one by high school senior "Juniper," her counselor name.

After she graduated from high school and got some experience under her belt, she returned to environmental education as an instructor, working for Multnomah ESD Outdoor School and other environmental education programs in the Portland area. Last year she contacted me to let me know she is still in the field.

I believe outdoor school changes lives every day. It connects kids to nature, teaches them new things about themselves, gives them focus for their lives, and builds positive relationships in a community.

- Dan Prince,
Multnomah ESD Outdoor School



Introduction

Welcome to Oregon's first guide for educators, parents and community members who wish to create, manage and sustain an outdoor school program in their community.

Whether you are a teacher, parent, community member, business, or government partner, the innovative ideas, helpful checklists, case studies, program examples and resources in this guide will help you create an outdoor school program that meets your community's needs.

WHY THE OREGON COMMUNITY FOUNDATION SUPPORTS OUTDOOR SCHOOLS

The Oregon Community Foundation (OCF) invests in community causes that improve the lives of Oregonians. Through its Environmental Education Program, OCF encourages a strong local land ethic, sustainable communities and responsible stewardship of the natural environment.

Outdoor school programs play an important role in fulfilling this vision by helping children develop an appreciation of nature and a sense of personal responsibility toward Oregon. Supporting Oregon's academic benchmarks and standards is also a priority of many outdoor school programs.

For some Oregon schools, participation in outdoor school is a long-standing tradition. Many parents of children attending today's programs have vivid memories of their own outdoor school experiences, which they often describe as "life changing."

And yet, many of Oregon's fifth- and sixth-graders still do not participate in outdoor school programs. According to a 2008 study done for OCF, only 4.4 percent of fifth-graders and 37.6 percent of sixth-graders participate in residential, three- to five-day outdoor school programs each year. Other studies cite a lack of funding as the greatest barrier to participation, followed by concerns that state and federal academic mandates do not support or place a priority on the academic benefits of outdoor school activities. Additional barriers include inadequate transportation and a lack of program providers within a reasonable distance.

OCF created this guide to overcome these obstacles, and to further the technical assistance and outreach work of its Environmental Education Program. Through this effort, OCF seeks to improve access to outdoor school programs for students throughout the state.

HOW THIS GUIDE CAN HELP YOU CREATE AN OUTDOOR SCHOOL PROGRAM

The Oregon Community Foundation and the Advisory Committee that helped shape this guide believe that residential outdoor school programs – in which students experience life in a camp setting for multiple days and nights – provide an ideal environment for learning, personal growth and connecting with nature.



However, creating a weeklong program takes time. Your community may need to start on a smaller scale (e.g., by offering day programs, or just one or two nights), and evolve gradually to a weeklong residential program. In many cases, day programs may be the best fit for the needs of students and the available resources.

There is no “one size fits all” approach. It’s important to tailor your outdoor school program to the needs of your classroom, school district and community. Although this guide spotlights many successful residential programs, it also emphasizes the value of flexibility and choice. We recommend that you use the breadth of information in these pages to create an outdoor school that’s right for your students and your community.

The stories and interviews in this guide provide real-life examples of programs operating in the state. Information about regional and national resources will help you to delve deeper into topics of particular interest. The *Appendices* section includes budgets, letters and other helpful materials.

As you consider what type of program is best for your community, take a look at the four common program models used in Oregon: ESD-based, school-based, provider-based and partnership-based. This guide’s program descriptions, budgets and information on staffing and site logistics will give you an idea of what it takes to create, operate and sustain each of these models.

The guide also offers checklists comprising likely components of any outdoor school program. Some components may not apply to your program, and some checklists may lack components you need. However, you can use these checklists

as a starting point, and adapt them to your program.

In creating this guide, the research and writing team drew heavily on tools and resources developed by outdoor school providers in Oregon and other states. The team also visited Oregon sites to gain firsthand experience of their programs, and conducted dozens of interviews with experts and program providers.

An Advisory Committee comprising outdoor school providers and partners provided invaluable guidance and input. They served as technical experts for this project, and provided sample curricula, budgets, handbooks and other resources.

OUTDOOR SCHOOL PROGRAM GUIDE ADVISORY COMMITTEE

Laurie Aguirre, Teacher, Forest Ridge Elementary

Kim Carson, Mid-Willamette Regional Education Coordinator, The Freshwater Trust

Margaret Eng, Outdoor School Supervisor/Consultant, Multnomah ESD Outdoor School

Rex Ettlin, Education Program Coordinator, Oregon Zoo

Brian Goodwin, Director of Grants and Special Programs, North Wasco County School District

Jack Gray, Gray Family Fund representative

Jennifer Grube, ODS Program Coordinator, Philomath School

John Jackson, Supervisor, Northwest Outdoor Science School

Annie Kilby, Education and Outreach Program Manager, Klamath Bird Observatory

Aaron Morehouse, Executive Director, Columbia Gorge Ecology Institute

Deb O’Dell, Principal, Springfield Environmental Sciences School

Dan Prince, MESD Outdoor School Coordinator

Jan Robbins, Hydrologist, Upper Willamette RA BLM, Eugene District

Kim Silva, Development Director, E² Foundation

Bethany Steiner, Director of Community Partnerships, Sierra Nevada Journeys

Andrew Stone, ODS Program Development Consultant

Virginia Tardaewether, MidCoast Watersheds Council

Kelly Wilson, Oregon Coast Aquarium

Special thanks to the Gray Family Fund of The Oregon Community Foundation. The Gray Family Fund is a major contributor to state outdoor school programs. Every year, the Fund supports environmental education programs developed and implemented by school districts, nonprofits, conservation districts, water and land trusts, 4-H groups and others.

This guide is available online at www.oregoncf/outdoorschoolguide.org. If you have comments or suggestions, please contact OCF at 503.227.6846 or info@oregoncf.org.





Outdoor school is by far the best program that I've witnessed for its ability to take students from all walks of life and immerse them completely in the content they are learning about.

In terms of authentic student engagement and enduring understanding of what they learn, nothing compares to outdoor school.

– David Wierth, Science Teacher



Overview of Outdoor School Programs

BENEFITS OF OUTDOOR SCHOOL

Outdoor school gives students an opportunity to study natural science and conservation collaboratively while applying knowledge about mathematics, social studies, language, history, nutrition, health, art and music. When students investigate and share their discoveries with others, they learn faster, understand better and retain information longer.

Outdoor school offers many other benefits. It reinforces and builds on classroom lessons; fosters a sense of connection with the natural world; teaches cooperation, leadership and acceptance; and creates a foundation for a lifetime of physical fitness.

Outdoor school also helps students explore and grow as social beings. Supported by a structured program led by caring adults and role models, students learn healthy ways of interacting, the value of teamwork, how to be a leader, and fun new ways to express themselves. The residential outdoor school model is particularly valuable in creating these personal development opportunities.

Teachers and school administrators value outdoor school because it gives students an opportunity to apply knowledge gained in the classroom to the real world.

Outdoor School Supports Academic Achievement

Research data illustrate the positive impact of environmental education programs. A State Education and Environment Roundtable (SEER) study entitled “Closing the Achievement Gap” examined 40 schools that used the environment as an integrating context for teaching science, history, social science, language arts and math. Data came from visits to all 40 schools, teacher surveys, and interviews with more than 400 students and 250 teachers and administrators. The findings included:

- Higher scores on standardized measures of academic achievement in reading, writing, math, science and social studies.
- Fewer discipline and classroom management problems.
- Increased student engagement and pride in accomplishments.



The study also found that when compared with peers in traditional programs, students who participated in programs using the environment as an integrating context had:

- Greater proficiency in solving problems and thinking strategically.
- Better application of systems thinking and increased ability to think creatively.
- Enhanced ability to work in group settings.
- Improved communication skills and civility.
- Greater enthusiasm for language arts, math, science and social studies.
- Increased knowledge and understanding of science content, concepts and processes.
- Better ability to apply science and civic processes to real-world situations.
- Improved understanding of mathematical concepts and mastery of math skills.
- Improved language arts skills.
- Better comprehension of social studies content.

Source: G.A. Lieberman and L.L. Hoody, *State Education and Environment Roundtable, 1998* (www.seer.org).

Evaluation is a critical component of any outdoor school program. Pre- and post-camp testing helps you identify the successful components of your program, make necessary improvements, qualify for funding and meet state standards.

Although the emotional and personal aspects of attending outdoor school are harder to quantify, student feedback consistently attests to its developmental benefits. Many fifth- and sixth-graders state that outdoor school was among the best experiences of their school year, and express a desire to return as high school counselors.

Outdoor School Is a Foundation for Lifelong Fitness

Research shows that enjoying outdoor experiences from an early age can affect a person's lifelong health and fitness. "The Next Generation of Outdoor Participants," a 2004 Outdoor Industry Foundation study of 60,000 subjects aged six and older, indicates that children who engaged in outdoor activities – including bicycling, camping, fishing, hiking and trail running – showed greater fitness levels as adults. Even participation in typically "urban" activities such as bouldering and skateboarding correlated with later increases in traditional outdoor activities such as paddling, climbing and backpacking.

The study also indicates that as children become young adults, their overall activity levels fail to meet guidelines promoted by the Centers for Disease Control. As youth pass beyond the childhood years of 6 to 12, there is a noticeable drop-off in outdoor participation, particularly among girls and members of ethnic groups who have lower participation overall. Outdoor school programs that engage 11- and 12-year-olds present a crucial opportunity to

reinforce outdoor participation during these important developmental years. Community planning that incorporates year-round outdoor recreation amenities also helps to create a culture that supports outdoor participation and lifelong fitness.

Outdoor School Supports Oregon's Environmental Literacy Plan

Teachers, parents and outdoor school attendees have a great appreciation for the academic and social benefits these programs provide. This appreciation is now reflected in state legislation, in the form of the Oregon Environmental Literacy Plan.

In June 2009, the Oregon Legislature passed the No Oregon Child Left Inside (NOCLI) Act (House Bill 2544), which establishes an environmental literacy plan for providing K-12 students with a continuum of place-based learning opportunities. This framework will ensure that Oregon students graduate as critical thinkers, ecological problem solvers and engaged citizens.

To support these goals, the Governor appointed an 11-member task force to develop the Oregon Environmental Literacy Plan. The Plan addresses state policy leaders, schools, school districts, teachers, nonformal educators and community partners, and serves as a roadmap for the development and implementation of a statewide environmental literacy program.

The Plan sets forth a vision in which Oregon students are willing and able to exercise the rights and responsibilities of citizenship, and to become lifelong stewards of their environment and communities. Integrating regular outdoor activity into every student's learning and life experience is central to this vision.

The Plan's five "Environmental Literacy Strands" articulate a comprehensive learning framework for K-12 students.

Upon graduation, environmentally literate students will demonstrate the following proficiencies:

1. Understanding our interdependency with the physical and biological world.
2. Understanding and applying systems thinking and related concepts and tools.
3. Understanding the individual's interdependency with local, regional, national and global communities.
4. Planning and creating a sustainable future.
5. Achieving personal and civic responsibility.

The Plan also positions Oregon to receive federal funds through NOCLI legislation, which is included in the Elementary and Secondary Education Act. With the Oregon Environmental Literacy Plan in place, the state will be eligible under this federal initiative for \$1 million to \$2 million in new annual funding to support plan implementation.

To learn more about the Oregon Environmental Literacy Plan, go to www.ode.state.or.us/gradelevel/hs/oregon-environmental-literacy-plan.pdf.

THE BEGINNING OF OUTDOOR SCHOOL PROGRAMS IN OREGON

Oregon's outdoor school programs have a rich history dating to the late 1950s. The beginnings of some programs are documented in books and reports; others have been passed down to us through the oral tradition.

(Note: The *Appendices* section includes histories, mission statements

and program details for a cross section of Oregon's outdoor school programs.)

Outdoor school in Oregon started in the spring of 1957. Under the direction of Dr. Irene Hollenbeck of Southern Oregon College of Education, fifth- and sixth-graders and teachers from the Westside Elementary School of Medford spent a week at Dead Indian Soda Springs Camp, located east of Eagle Point on Little Butte Creek.

Recognizing the need to introduce this program to administrators, teachers, parents and the general public, Margaret Milliken (Oregon State University), Bob Brown (Soil Conservation Service) and Austin Hamer (Oregon State Game Commission) promoted pilot projects in school districts throughout the state. These pioneer educators decided that Oregon's program should take an "ecological plot study" approach that focused on the interrelationship of natural resources. They developed the guidelines that many Oregon school districts used to implement their outdoor school programs.

In the spring of 1958, the pilot project launched in the Crook County School District. Ellen McCormack and 32 sixth-grade pupils from Crooked River Elementary School in Prineville became the first group to participate. They spent five days at Camp Tamarack, a private camp located near Suttle Lake in the Oregon Cascades.

Source: Margaret Milliken, Scott Meier and Gary Winter, Outdoor School. Corvallis, OR: OSU Book Stores, Inc., 1982.

FOUR PROGRAM MODELS

Outdoor school programs usually follow one of four basic models:

1. **ESD-based.** An education service district (ESD) plans, funds and operates the program. Financing may comprise

school district, state and federal funds, as well as tuition from participants.

2. **School-based.** A specific school plans, funds and operates the program. Financing may come from school funds, tuition, local donors, in-kind contributions and other sources.
3. **Provider-based.** An organization separate from the ESD or school provides the program. The provider charges a fee for the program, which typically includes curricula the school can customize to its needs.
4. **Partnership-based.** A coalition collaborates to plan, fund and operate the program, often working with the school district.

The model you choose will depend on your community's resources, culture and needs. It may fall into one of these categories or share elements of several.

Although programs operating under a given model may vary, the following descriptions provide basic details on budgets, staffing and other components.



1. ESD-Based Programs: Multnomah ESD Outdoor School

Outdoor school started in Multnomah County in 1966 as a week-long residential program designed to enhance school instruction and reconnect an increasingly urbanized student population with nature. Today, Multnomah ESD offers outdoor school to every school district in Multnomah County and also contracts with schools outside the county.



When the Multnomah ESD program started, I was a naturalist with The Oregon Museum of Science and Industry (OMSI), and on loan to MESD as the Camp Director at Camp Colton, near Estacada. I believe it was 1965 or thereabouts.

We had a paid staff that consisted of a cook, dishwasher, song leader, soil, water, plant and wildlife instructors – all retired in their respective fields – and a nurse. Sixth-grade classes from four MESD schools came to camp for a week. We all had camp names. Mine was Mr. Owl.

We did everything in camp to Boy Scouts of America trumpet calls. I didn't like that, so I used songs of the day – such as "Good Morning Starshine" – to get the kids up in the morning, and something from Woody Guthrie or Pete Seeger to move them around the various stations during the day. High school girls and boys were counselors in each cabin. Campfire programs

happened every night, and there was much frivolity and singing in the mess hall for meals and announcements.

"George of the Jungle" was big on TV in those days, so I often opened the announcements to that old camp song, "Announcements, announcements, a-nounc-ements!" by swinging into the room on a rope wearing the George of the Jungle get-up.

As the Camp Director, I visited the teachers and children in their classrooms the week before they were scheduled to come to Colton, and gave them particulars on what to expect during their weeklong stay.

In many respects, the experience of that period was more of a social experiment than environmental education studies. We had a mix of social and racial groups, which led to a great deal of interaction and learning about people. My instructors were all good at their business and blended their area of expertise with the social experiences of that period. I think we got a lot done.

– Jim Anderson (Mr. Owl)

In Multnomah County, classes must participate at the district level. Either the entire district participates, or no classes from the district participate. As of 2011, all eight districts participate, with some doing partial-week programs.

Multnomah ESD Outdoor School's mission is as follows:

- Teach field-based science concepts as they relate to natural resources.
- Promote critical thinking and collaboration.
- Extend science instruction beyond the classroom.
- Provide opportunities for participation in cooperative living experiences, performing arts, recreation and structured events.
- Provide for the safety, physical and medical needs of all students.
- Promote self-esteem, leadership and confidence among sixth-grade and high school students.

- Practice gender and ethnic equity, and honor and promote diversity and multicultural awareness.
- Teach interpersonal skills and provide opportunities to apply them in a variety of settings.
- Meet the needs of all learners, regardless of individual learning differences or challenges.
- Treat each student and staff person with dignity and respect.

Facility or Site

Multnomah ESD operates five residential sites located between 15 and 30 miles from Portland. Each site offers access to forests, water and other ecological resources.

Number of Students

In the 2009-2010 school year, 5,946 students attended.

Staffing

Twelve staff members work on-site each week: one site supervisor, six program leaders, four field instructors and a registered nurse. In addition, a kitchen crew comprising one cook and five kitchen staff provides a balanced diet.

Budget / Cost

Total expense in 2009-2010 was \$1,058,056 (a sample budget is available in the *Appendices*).



2. School-Based Program: Crook County

The Crook County Outdoor School Program has operated continuously since 1958. In 2009-2010, all Crook County sixth-graders from three schools attended the five-day program. (See *Appendices* for a short write-up about this program.)

Facility or Site

Suttle Lake Methodist Camp, outside Sisters, Oregon. A lake, creek, fish hatchery and forested areas are all in the immediate vicinity or within a short bus ride.

Number of Students

Approximately 250 students attend per year.

Staffing

Two co-directors (one male, one female) alternate between directing and teaching students each week. There are nine teachers and substitutes, and three cooks. Three counselors run the evening programs and help out in the cabins.

Budget / Cost

\$60,000 to \$65,000 annually. Most of this cost is for personnel, including contract pay for 24/7 duty for teachers and other staff. Each student is asked to pay \$100 toward the cost of the program. Some school lunch money subsidizes meal costs. Staff have applied for and received grants and private donations.



3. Provider-Based Program: Oregon Museum of

Science and Industry (OMSI) Science School

OMSI's skilled instructors lead hands-on investigations in biology, ecology, geology and other sciences, all of which meet Oregon's content standards and benchmarks. OMSI staff can tailor programs to suit the needs of grades 1–12, college students, adults and families (12-person minimum).



Facility or Site

The OMSI program has three sites:

- Hancock Field Station is located in Central Oregon's John Day River Valley, an area renowned for its fossil-rich rock formations. Owned and operated by OMSI for more than 60 years, this is a good location for the study of paleontology, geology, botany, archaeology, astronomy and ornithology. Available in spring and fall.
- Camp Kiwanilong, situated next to Fort Stevens State Park on the northern Oregon coast, offers miles of trails, a freshwater lake, small ponds and a nature center. This is an ideal location for studying marine life, comparing fresh and saltwater ecosystems, and exploring the cultural history of the Northwest coast. Historical and natural field trip destinations are easily accessible. Available in spring and fall.
- Camp Attitude, located in Foster, near Sweet Home, became an OMSI site in fall 2010. It is a non-denominational Christian camp offering summer programs for disabled children, adults and families. It is 100-percent accessible, and features well-maintained cabins with heating, lights and excellent amenities.

Number of Students

Varies. Maximum is 100.

Staffing

One OMSI educator for every 15 students.

Budget / Cost

The two-night/three-day program costs \$135–\$160 per person. The four-night/five-day program costs \$225–\$270 per person.

The cost includes one OMSI educator for every 15 students, plus program coordination, lodging, meals, pre- and post-camp materials, and field equipment. School groups provide transportation and chaperones at a 1:8 ratio, and lunch on the first day.



4. Partnership-Based Program: Forest Camp Outdoor

School (Coast Range Natural Resources Education Organization)

The Coast Range Natural Resources Education Organization is a partnership of schools, businesses, agencies, organizations and individuals dedicated to developing, implementing and promoting nature-based education programs.

Forest Camp Outdoor School provides public environmental education through partnerships with local schools; local, state and federal agencies; businesses; and organizations.

The program's primary focus is to increase knowledge and appreciation of Oregon's natural resources among its sixth-grade target group. The intent is to make students aware of Oregon's

culturally diverse environment, and inspire them to take informed actions that protect natural resources. By fostering individual responsibility to recognize, conserve and preserve natural resources, the partners further their message of caring for the land and serving its peoples. (For more information, see the *Appendices*.)

Facility or Site

Camp Tadmor comprises 200 forested acres near Lebanon, Oregon. The site includes a lake, cabins, meeting space, dining hall and kitchen.

Number of Students

Roughly 170 sixth-graders from six schools.

Staffing

Instructors from 10 agencies and businesses work with the CRN-REO board to produce a quality program annually. Parents provide support through fundraising, transportation and helping in the kitchen and cabins.

Budget / Cost

\$100 per student.

BUDGETING AND PER-STUDENT COSTS

Your budget depends on the type of program you want to develop. How many students can you serve? What will it cost to house and feed them during their stay? How many staff members will you pay, and what are their salaries? What are your transportation costs? Are you budgeting funds for evaluation? What will insurance cost?

Here are some sample per-student costs for residential outdoor school programs:



- Crook County Outdoor School: \$350 (five-day program).
- Lincoln County Outdoor Education Group for Outdoor Schools: \$284 (five-day program).
- Multnomah ESD Outdoor School: \$360 (six-day program).
- Northwest Outdoor Science School: \$238 (five-day program).
- OMSI Science School: \$135–\$160 (three-day program); \$245–\$260 (five-day program).
- Rainier Outdoor School: \$210 (five-day program).

Budgets and cost-per-student estimates are difficult to compare on an “apples-to-apples” basis. For example, some programs receive significant help from volunteers, which reduces costs. Others may receive a lunch subsidy that reduces meal expenses.

The *Appendices* section contains additional information (histories, mission statements, sample budgets and other details) on Oregon’s residential outdoor school programs.

The *Appendices* section also discusses programs that don’t fol-

low the traditional outdoor school model, but may include elements that would be appropriate for your own program.

READY TO GET STARTED?

In the next chapter, you’ll learn about four of Oregon’s most successful program models. You’ll be presented with a checklist comprising typical steps for creating a program that’s right for your community, and you’ll learn about proven approaches for engaging teachers, administrators, parents, friends, businesses, civic leaders, government partners, and funders in the exciting and challenging work of creating an outdoor school program.



Outdoor school has been and continues to be the most influential thing in my life. The skills I have learned, the knowledge I have gained and the amazing people I have met through outdoor school have molded me into the person I am. It has given me direction in my life and made me aware of everything this world and this life have to offer.

– Multnomah ESD Outdoor School participant

Launching an Outdoor School Program

Whenever you undertake a new venture, it's a good idea to learn from people who have done it before. Countless hours of organizing and problem-solving have gone into planning outdoor school programs; you can use this work as your starting point.

Here are some words of wisdom from the members of the Advisory Committee, who have already been through the planning process:

- Define the community needs your program will address. This will lead to a clear framework and community buy-in.
- Keep the program small at first. You may need to start with a day camp and evolve to an overnight program over several years.
- Secure a mix of funds from a variety of sources.
- Build trust with teachers, parents, donors and business partners.
- Look for existing information and tools. Copy and adapt what someone else has created.
- Under-promise and over-deliver.
- Find natural partners who can deliver elements of your program (e.g., natural resource agencies, environmental organizations, educators, and state and regional agencies).
- Do whatever you can to make things easy for teachers (e.g., provide permission forms, fundraising ideas, and curricula that help them meet state standards).
- Develop a fundraising timeline. You may need to start raising money 12 to 18 months before your first outdoor school session.
- Build a succession plan to cultivate staff, volunteers and advocates who will champion the program if you leave.
- Include an evaluation component. Schools and funders want to see the effects of their investments.
- Ensure access for all students, including ESL students and children with disabilities.
- Identify skills in your volunteer base and take advantage of them.
- Make sure every element of your program supports your goals, from breakfast duties to campfire activities.

TEN ESSENTIALS FOR LAUNCHING YOUR PROGRAM

Launching an outdoor school program is a bit like planning a trip into the wilderness. You must take steps to ensure that your trip will be successful and fun, while preparing for the unexpected.



The Ten Essentials

1. Find out what your school district and community need.
2. Build evaluation criteria and methods into your program.
3. Select a provider, facility or site.
4. Raise funds and build community partnerships.
5. Develop curricula and relevant activities.
6. Develop a staffing structure and job descriptions.
7. Recruit and train staff and volunteers.
8. Figure out logistics, from food to transportation to trash handling.
9. Create a safe, secure and inclusive environment.
10. Publicize your program to teachers, parents, sponsors, volunteers and funders.



ESSENTIAL 1: Find Out What Your School District and Community Need

Your program must reflect the academic and social goals of your school district and community. Once you've identified these goals, you can design program elements – including curricula, site location, daily activities, and staffing – to support them.

Among other things, this requires you to make a frank assessment of available resources, and the capacity of your community to build and sustain an outdoor school program.

Start by approaching teachers, parents, community members and anyone else who might be willing to help launch an outdoor school program. Adults who attended outdoor school as children are usually enthusiastic about getting a program started.

You should also identify people who can help to raise funds, involve businesses and government partners, and publicize your efforts.

Once you have gathered a team, invite members to contribute to the vision of an ideal outdoor school program for your community or school district. Are people interested in a program with a strong focus on environmental education, a program that stresses other types of learning and experience, or both? Knowing what your community wants is the first step toward creating a mission statement and goals for your program.

Assessing Community Needs: Lincoln County Outdoor Education Group

The MidCoast Watersheds Council is the nexus for Lincoln County

Outdoor Education Group, which formed informally in 2005. Virginia Tardaewether from the MidCoast Watersheds Council, Parker Ogburn from the Oregon State University Extension Service, and Jan Robbins from the Siuslaw National Forest interacted frequently while producing educational activities for groups of students. They formed a relationship and began to seek ways to create an outdoor school program for Lincoln County students.

Although Lincoln County public schools comprise a single school district, the group found that individual schools had different needs and expectations. Similarly, existing and prospective partners had a variety of messages to impart to local youth. Therefore, Virginia, Parker and Jan worked with individual schools to tailor programs to their needs, or supplement existing programs, and then identified and engaged partners whose messages meshed with school needs.

In fall 2006, Crestview Heights School in Waldport became the first school to participate in outdoor school, which took place at Drift Creek Organizational Camp near Lincoln City. Over the next four years, additional schools agreed to participate. During the 2010-2011 academic year, all sixth-grade students in Lincoln County had the opportunity to participate in outdoor school, including homeschooled students and students from private and charter schools.

Identifying formal and informal partners became a team effort, with schools and existing partners bringing in others. This team-based approach to identifying prospective partners was critical to the program's success. Much of this effort was an informal matter of chatting

with community members during meeting breaks or social events.

Some partnerships never developed, despite frequent interaction and verbal support. Others were surprisingly quick and effective. For example, the local food bank has been a faithful partner, but some local agencies have been unable to provide even one day of staff support. Some partners get involved through pure serendipity: Oregon State Parks now works closely with the program, but this connection originally developed because a parent attended outdoor school with his son.

Maintaining positive relationships with prospective partners – including those who are currently unable to participate – has helped to create a resilient program, where new partners fill in when others lose the ability to help.

Schools and partners work together to meet specific objectives. The process of connecting partners and school needs has served to increase the pool of activities available to participating schools, and resulted in a program that meets everyone's needs.



ESSENTIAL 2: Build Evaluation Criteria and Methods Into Your Program

As you design your program, think about the criteria and methods you'll use to measure progress toward your academic, social and behavioral goals.

In many cases, this evaluation will be a requirement of a grant you've received. But either way, the ability to demonstrate progress toward your goals is a powerful tool for sustaining monetary and community support, and improving your program.

The Gray Family Fund – which provides grant funds to outdoor school programs in Oregon – has created a comprehensive Program Evaluation Framework that you can use to identify and quantify:

- **Objectives.** What do you hope to accomplish by implementing this program?
- **Activities.** What are your primary project activities? How many of them do you expect to complete?
- **Target audience.** Who is your target audience? How many participants do you expect to serve?
- **Data collection tools.** How will you gather necessary information? What records or tools will you use to determine whether you are meeting a given objective?
- **Evaluation design.** When and from whom will you collect evaluation information?
- **Outcomes.** What level of growth do you expect? What test results do you expect? How much energy, water or other resources do you expect to save?

Here are some tips for planning your evaluation methods, based on Gray Family Fund application materials:

- Earmark a portion of your total budget for evaluation. Whether you're conducting statistically valid pre- and post-camp testing and paying someone else to do the data analysis, or simply mailing surveys to teachers, you must allocate funds for evaluation.
- Consider what's involved in collecting and analyzing the type of data you need. Do you have the necessary expertise, or will you need to hire outside experts?
- Use evaluation results to improve your program. Choose objectives, evaluation questions and methods that will let you know what you

have accomplished and provide insights for improvement.

- Evaluations typically require quantitative and qualitative data. Quantitative data allow you to count participants or events (e.g., field trips), determine the cost per participant and perform statistical analyses. Qualitative data allow you to record perceptions and descriptions of experiences – often in the participants' own words – and create narratives that provide a human context for the evaluation.
- Data collection requires a system. Decide which data you want to collect (participants' ability to perform a particular task); the source of the data (teachers and volunteer mentors); the collection method (teaching observation checklist); and when you will collect it (during lessons). Once you've developed a reliable system, stick to it.

Evaluation can take many forms. It can involve conducting surveys, pre- and post-camp testing, collecting anecdotal comments from participants, or a meeting of program staff after each camp to discuss areas for improvement.

Forest Camp, for example, has a relatively simple evaluation process. On the last evening of camp, teachers and program staff meet over dinner for a structured conversation about the successes and challenges of the past week. Each person is welcome to share ideas, which are captured in writing by a participant. To maintain focus, the meeting is usually limited to approximately 90 minutes.

According to Jan Robbins, the most important part of these meetings is brainstorming ideas for the next Forest Camp, which creates a sense of openness to new ideas and ways of functioning. Teachers

and planning staff discuss possible changes at the first board meeting of the following school year. Progress on implementing improvements is reported at subsequent board meetings.

You can read more about the importance of evaluation, and review sample evaluation forms, in the *Appendices* section.

Evaluation Methods at Mt. Pleasant Elementary School

Mt. Pleasant Elementary School in Oregon City uses the Oregon Assessment of Knowledge and Skills (OAKS) test to assess students' mastery of Oregon content standards before and after outdoor school. Newer teachers learn to tailor lessons to improve OAKS scores and support the outdoor school curriculum.

Mt. Pleasant Elementary students also participate in the following evaluation activities:

- **Journal writing.** Students make recycled paper covers and use the journals to complete camp activities.
- **Surveys.** Students and counselors fill out surveys on the last day of outdoor school.
- **Thank-you letters.** Students write thank-you letters to the Gray family, and teachers review them for writing improvements and evidence of concrete learning.

Principal Carol Kemhus says that she used the Oregon Department of Education's standards guide to plan the evaluation component of her school's program. She used this evaluation on her grant application to the Gray Family Fund. She notes that it's difficult for evaluation tools to capture the actual emotional intensity and life-changing impact on students' outlook and behavior. Of the sixth-graders who attended in fifth grade, 90 percent say it was the

best experience in their school year and hope to return as counselors.



ESSENTIAL 3: Select a Provider, Facility or Site

As noted earlier, there are four basic approaches to creating and offering an outdoor school program. The approach you choose depends on a number of factors, including your program goals; the curriculum and field study activities you want to offer; the availability of programs offered by nearby providers; the cost and available funding; and the availability and capacity of an appropriate nearby facility.

Providers can sometimes customize their outdoor school programs. For example, OMSI can tailor a program that supports your interests and goals. For each day of your students' visit, you can choose from a variety of field study topics, including cultural history and ecological mapping techniques. You can also select from a long list of "interest groups," which are short classes that meet after field study. Topics include paleontology field techniques, spiders and insects, and aquatic study. Evening programs occur between dinner and campfire, and run the gamut from a slide show about bats to a game of "Eco-Jeopardy."

Using an existing facility or site is the most practical approach, unless your community intends to develop a brand new site. A good first step is to research facilities that other outdoor school programs are already using; one of them may be ideal for your program. Alternatively, look at sites and facilities owned by prospective partners in your area and think creatively about how those sites could work for your program.

The following information focuses on using existing facilities or sites. If you'd like advice on finding and developing a new site – including ideas for incorporating green building practices and sustainable operations – consult the *Appendices* section.

What to Look For

The ideal type, size and location of your site will depend on the program goals your school and community identifies in the "needs assessment" phase of your work.

Whether you will be renting an existing facility or using temporary facilities, look for these basic necessities:

- Proximity to schools.
- Roads suitable for buses.
- A setting that supports the curriculum.
- Accessible cabins or tent sites and bathroom facilities.
- Accessible dining hall, lodge and nurse's station.
- Meeting space for staff.
- Access to forests and trails, and a river, lake, pond or wetland.
- Access to conservation areas or easements.
- Outbuildings or covered meeting areas.
- Facility staff that understands outdoor school needs.
- Security (this includes monitoring site visitors, and keeping your group separated from any other groups who are using the site).

Temporary Sites

A temporary site can be feasible for numerous purposes, including capacity building and fundraising. Such facilities might include a farmer's field (used with permission, of course), a fish hatchery or similar properties.



Federal, state, county and municipal regulations and taxes

Regulations and taxes that apply to the camp industry vary according to state and local governmental bodies.

Oregon guidelines for organizational camp facilities are set forth in the Oregon Administrative Rules, Division 30, 333-030-005 through 333-030-0130 (available online at arcweb.sos.state.or.us/pages/rules/oars_300/oar_333/333_030.html).

A lawyer can help you meet legal requirements. State health officials are also valuable resources.

Here are some important questions to consider:

- Which permits and licenses do you need? Which offices issue them?
- Which salary laws affect staff salaries?
- What are the health and sanitation laws concerning sewage disposal and food service (including food storage, food handlers' permits, dishwashing, garbage disposal inspections and water purity tests)?
- Are background screening checks required for staff?
- If you plan to provide transportation, do you need special licenses or insurance? Do school bus laws apply to camp vehicles?
- Is a health center required? What kind of certification or licenses do health care personnel need?
- Which of the following state and federal taxes apply?
 - Federal income tax
 - Federal unemployment tax
 - State income tax
 - State unemployment tax
 - County and state bed/tourist tax
 - Social security
 - Workers' compensation
 - Sales and property

Using "leave no trace" ideas from the U.S. Forest Service firefighting camps, a temporary camp could ideally have accessible shower unit rentals and kitchen units in trailers. However, these features usually cost thousands of dollars.

The site's acreage can be small, provided it has a central location for facilities, and water amenities relatively close to flat or mildly sloped land. Consistent road access is also important. Land next to public natural reserves, or with conservation easements, is optimal. It is also helpful to have a habitat inventory and site description.

American Camp Association (ACA) on Starting a Camp

The ACA (www.acacamps.org/startacamp) is an excellent source of information on starting or selecting a camp. The following tips offer valuable information and guidance not presented elsewhere in this guide, including information on regulations and insurance.

What kind of camp do you need?

- Determine your mission statement, or the purpose of your camp.

- Who are the clientele you plan to serve? Are they a new market niche, or an existing group that you serve or that needs service?
- What kind of environment will help you accomplish your mission and serve your clientele?
- Do you want to start a day camp, residential camp or travel camp?
- How many weeks do you plan to operate? Summer only, or year-round?
- Do you plan to incorporate? Will you operate as a for-profit or nonprofit organization?

Business plan

Your business plan must accommodate or fulfill the essential decisions outlined above. The Small Business Administration, or a business center at your local college, can help you with your business plan, which should explain the following details:

- Where will you get funding for capital and operations?
- Do you have an ongoing funding source or pricing strategy?
- What is your existing competition?
- How will you market your program?

Insurance

Most camps buy insurance to cover their operations. A few camps are self-insured. Most insurance companies will want to do a safety audit before insuring you.

You will probably need the following coverage:

- Property (percentage of actual or replacement value).
- Comprehensive general liability.
- Workers' compensation (including owner/officer options).
- Health insurance for the owner, staff and campers.
- Personal property.
- Vehicle liability.
- Certificate of insurance from the site owner (if you plan to rent or lease).

Site, facilities, food service, and transportation

You must decide where you want to operate your camp:

- Do you own suitable property? Or do you plan to buy, rent or lease an existing camp?
- How far will your camp be from your client base? What are the transportation issues?
- Does the prospective property require any special accommodations to serve your program or clientele?
- Will you operate your own kitchen, or use a food service management company?



ESSENTIAL 4: Raise Funds and Build Community Partnerships

Funding for your outdoor school program should comprise a mix of sustainable strategies and activities.



Much like building a personal investment portfolio, you want to aim for diversity, so that if one source of funds shrinks or dries up, you will still have a healthy fund to sustain your program. Diversification also helps to avoid “fundraising fatigue” among supporters and community members.

A core value for many outdoor school providers is to ensure that a student's inability to pay is not a barrier to attendance. Some schools cover the entire cost for all of their fifth- and sixth-grade attendees, or offer a sliding scale. Others offer scholarships or a payment plan that allows parents to pay a small amount for several years leading up to outdoor school.

Most schools have annual fundraising events, and many have ongoing events and activities to raise money for outdoor school.

Approaching Businesses and Organizations

(The following tips for approaching businesses and organizations come from Kim Silva of Friends of Outdoor School.)

Your community will be a primary source of funds, supplies, volunteers and goodwill. Think about your own circle of friends and contacts. Undoubtedly, you know people

who are good at asking for money, work at a company that can donate money or supplies, or are employed at agencies that would make good partners.

Here are some guidelines for approaching businesses and organizations that are likely to support an outdoor school program in your community.

Make a list before you make the call

- What businesses and organizations are located near your organization?
- What are their interests? What interests do you have in common?
- What is their mission statement?
- What products or services do they provide?
- What resources do you think they might have?
- Describe your project fully. Write down exactly what you want to do.
- Describe how you view the role of your prospective partner. Write down exactly what you would like them to do.
- What products or services can you provide in return?
- Write out a list of points to discuss in your initial meeting.
- Is a tour of your facility appropriate? Can you host this meeting?

Make your meetings effective

Do....

- Identify allies within the organization and talk with the appropriate people.
- Make your proposal to the decision maker(s).
- Start from the beginning. Assume they have very little knowledge about you, your program and environmental education.

- Be concise and stick to the point.
- Present a vision of what success will look like and how you will achieve it.
- Show that you understand what matters to them.
- Provide clear, detailed information (e.g., a one-page executive summary followed by a more detailed proposal).
- Describe how their participation will contribute to a comprehensive plan or strategy (e.g., your mission, or state standards).
- Explain how you will measure the impact of their investment.
- Offer something in return.
- Be flexible. Have alternative proposals prepared.
- Recognize their past involvement and support, if applicable.

Don't....

- Approach the wrong person.
- Make contact before you have identified your needs.
- Make your presentation lengthy and verbose.
- Overwhelm them with logistical details.
- Appear to be disorganized and ill prepared.
- Have an entitlement mindset.
- Use confusing acronyms or jargon (e.g., DENR, OEE, EEAC, EE, EELE, PLT, WILD).

Fundraising Ideas

If you've made a good case to your community about the benefits of outdoor school, people will want to help you make it happen. Give them that opportunity by creating fundraising activities for people who want to be active supporters, and allowing others to support you through grants or sales events.

Here's a list – including links – to get the ideas flowing, courtesy of Friends of Outdoor School:

Sales ideas

- Nancy J. Smith calendars (www.focusonpd.com/).
- Chinook Book (pdx.chinookbook.net/fundraise).
- Energy Trust of Oregon lightbulbs (www.energytrust.org/CLCW).
- Portland Roasting coffee (www.portlandroasting.com/company/sponsorships).
- CafePress merchandise (www.cafepress.com/).
- Scrip (www.glscrip.com/).
- Candy, cookie dough and other food products (www.actionfr.com or www.wfcnw.com).
- Other merchandise (www.easy-fundraising-ideas.com).
- Points for Profit (pointsforprofit.org).

Grant sources

- Diack Ecology Education Program (diack-ecology.org/).
- Nickelodeon Big Green Help Grants (www.biggreenhelp.com/grants/index.jhtml).
- Target Field Trip Grants (sites.target.com/site/en/company/page.jsp?contentId=WCMP04-031880).
- Target Take Charge of Education Program (sites.target.com/site/en/corporate/page.jsp?contentId=PRD03-005171).
- ING Unsung Heroes (ing.us/about-ing/citizenship/childrens-education/ing-unsung-heroes).
- Richard C. Bartlett Environmental Education Award (www.neefusa.org/bartlettaward.htm).
- Toyota TAPESTRY Grants for Science Teachers (tapestry.nsta.org/).

- Melinda Gray Ardia Environmental Foundation (www.mgaef.org).
- Gray Family Fund of The Oregon Community Foundation (www.oregoncf.org/connect/educational-opportunities/enviro-ed/enviro-ed-default).
- Toshiba America Foundation (www.toshiba.com/tafpub/jsp/home/default.jsp).
- Classroom Earth (www.classroomearth.org/grants).
- EELinked Networks: Grants and Opportunities (eelinked.naaee.net/n/eelinked/topics/Grants-amp-Opportunities).

Other easy fundraising ideas

- Boxtops for Education (www.boxtops4education.com/).
- Register your classroom at OneCause (www.onecause.com).
- Register your classroom at DonorsChoose.org (www.donorschoose.org).
- Register your outdoor school trips at YourCause (www.yourcause.com).
- Register credit cards and frequent buyer cards at eScrip (www.escrip.com).
- Books 4 Giving (www.books4giving.com/fundraisers/).
- McMenamin's Friends and Family Night (www.mcmenamins.com/1592-donation-program-friends-family-nights).
- Register your trip at FirstGiving and promote it to everyone you know (www.firstgiving.com).
- Sign up for CommonKindness coupon service (www.commonkindness.com/).
- Register your school at Innovative School Funding (www.innovative-schoolfunding.com).
- Sign up with CafeGive (www.cafe-give.com).



erated by the Coast Range Natural Resources Education Organization – or they can be one very important part of a program’s funding and operational foundation.

The key to building partnerships is to establish as many touch points as possible between administrators, teachers, community partners and students. Transforming interested individuals into committed partners will prevent your program from dying out when the only inspired teacher retires.

Examples of strategic partnerships include:

- Secure donation and volunteer-hour matching gifts from your employer. Contact your manager or HR department.
- Have students write persuasive letters to everyone they know asking for donations to their trip. (A copy of North Marion’s persuasive letter is available on request.)
- Make a tax-deductible donation to Friends of Outdoor School (www.FriendsOfOutdoorSchool.org).

For more information, or to discuss ideas, contact:

Kim Silva
 Friends of Outdoor School
kim@FriendsOfOutdoorSchool.org
 503.257.1774
www.FriendsOfOutdoorSchool.org

Building Community Partnerships

Partnerships are vital to launching and sustaining an outdoor school program. Building local, regional and global partnerships can attract funds and staff; provide access to facilities, curricula and volunteers; eliminate duplication of effort; and create synergy for environmental education.

Partnerships can be the very essence of a program – as with Forest Camp Outdoor School, which is op-

- **Peer-to-peer.** Engaging high school counselors as mentors for their younger peers is a great example.
- **Teacher-to-teacher.** Mentoring opportunities include Teachers On Special Assignment (TOSA) and Together on Oregon’s Legacy (TOOL).
- **Administrator-to-administrator.** Avenues for mentoring include the Oregon School Boards Association (OSBA) and Confederation of Oregon School Administrators (COSA).
- **Cohorts within schools.** Teams of teachers and administrators provide interdisciplinary and logistical support.
- **School-community partnerships.** Mutually beneficial exchanges between schools and community partners may include service learning, resources, internships and jobs, and funding.

Partnership examples

Here are some examples of strong local and regional partnerships that have helped Oregon’s outdoor school programs thrive.

At **Columbia Gorge Ecology Institute (CGEI)**, middle and high

school students are designing intensive field-research projects on conservation as part of the school-based “Science in Action” program, which has 11 partner agencies.

AmeriCorps members coordinate CGEI programs and handle logistics. This includes organizing transportation and teachers; hosting, housing and sponsoring volunteers; and completing evaluations. Members typically overlap or stay a second year. Retention is good, because the program offers a great opportunity to work in a stunning location.

The Gorge Explorers summer program, in which high school mentors work with third- and fourth-grade students on field excursions and day camps, has six partner agencies: The Dalles Discovery Center (which hosts the program); Brian Goodwin’s North Wasco County School District; OSU Extension; the U.S. Forest Service; a local conservation district; and the U.S. Fish and Wildlife Service. CGEI has 20 partners in total. All three elementary schools in The Dalles have an afterschool program, and a Forest Explorers program operates in Skamania County, Washington.

Metro (the elected regional government for the Portland metropolitan area) created a fund to support waste reduction education at outdoor schools. Since spring 2009, Metro has been contracting with outdoor immersion program providers to offer 6.5 hours of waste reduction education for sixth-grade students at outdoor school.

These providers meet educational objectives with curricula and activities selected for outdoor immersion programs by sixth-grade teachers throughout the region, as well as education staff from Metro and outdoor school programs.

Multnomah ESD, Northwest Regional ESD and OMSI camps inte-

grated recycling, composting, worm bins, food waste charting, field study discussions, and mealtime presentations into their camp activities. The reimbursement in the 2009-2010 academic year was \$57 per student.

One unanticipated consequence of the Metro program came from MESD's Camp Adams, where a staff member reached out to Molalla community members to devise waste reduction strategies. The staff member was able to connect with a vermiculturalist, a farmer and a u-pick apple orchard, all of whom were excited to help site staff conserve resources and reduce waste.

Friends of Outdoor School works to preserve the outdoor school experience for middle school students in Multnomah, Washington, Columbia, Clatsop, Tillamook and other counties, regardless of a student's ability, experience, income or background. Outdoor school relies on Multnomah ESD for funding; administrative and staffing costs, for example, are covered by this public agency via school contracts. However, schools do not always have enough money to send their students to outdoor school. Therefore, the E² Foundation launched the Friends of Outdoor School program to help support outdoor school from year to year.

Lincoln County Outdoor School benefits from the ongoing commitment of four entities that entered into a legally binding memo of understanding (MOU). The MOU spells out specific roles and responsibilities, and legally commits the participants to the stated actions and obligations.

Partnerships can fill funding gaps

Outdoor schools often rent space at for-profit or nonprofit camp facilities that may be intended primarily for summer programs. Such

facilities may not be able to provide all of the appropriate amenities.

Creative partnerships between private facilities, government, ESDs and foundations can help to meet these needs, provided the facility has made a long-term commitment to hosting outdoor school programs.

Partnerships can also raise funds for capital needs, including:

- Accessibility requirements like wheelchair ramps, elevated beds, and bathroom access.
- Compost and recycling bins.
- Staff housing (e.g., yurts).
- Covered areas for each major field study/curriculum (e.g., tarps or roofed structures).
- Critter-proof trash cans.
- Improved signage.
- Maintaining group meeting spaces, including accordion partitions.
- Organizing shelves, bins and desks for staff.
- Rain gear and boots.
- Updating roofs.
- Safety equipment, including rope harnesses and boating equipment.
- Staff training, especially safety, sustainability, curriculum and evaluation.
- Trails that are safe, accessible and designed to prevent environmental impacts like erosion.

Some camps produce a regular newsletter for information and publicity purposes. Such newsletters frequently include a "camp needs" list to alert supporters that the camp needs donations of new or second-hand goods.

An interesting assignment for a volunteer would be to monitor sites like Freecycle (www.freecycle.org/) and Craigslist (www.craigslist.org/), and find free or low-cost items that

Each year when the fifth-graders take the state science test in the spring, after returning from a full week of science curriculum in the high desert, their scores reflect their learning.

– Kathy Gould, retired Lewis Elementary School teacher

meet outdoor school needs (e.g., gear storage, lockers, notebooks, rain gear or tarps).



ESSENTIAL 5: Develop Curricula and Relevant Activities

Outdoor school programs use a combination of structured curricula, workbooks, field studies, games, rituals such as campfires and songs, and team-building activities to create a well-rounded experience for students. However, an educational focus that serves community and school needs must be at the core of any outdoor school program.

You can use various educational philosophies and teaching styles as the framework for your outdoor school program and curricula. Note, though, that experiential education is at the heart of every approach, because students are learning and growing by engaging in hands-on, interactive activities that reinforce their relationship with nature.

Here are some common educational philosophies:

- **Inquiry-based education** encourages students to ask questions, and teaches them to use the scientific method to design and carry out investigations.

- **Informal education** occurs outside a traditional school setting (e.g., at a community center, museum or farm), and may not follow a strict curriculum. (See the information on Mother Earth School in the *Appendices*.)
- **Place-based education** differs from conventional text- and classroom-based education in that it emphasizes the local community as a primary learning resource. It promotes learning that is rooted in the history, environment, culture, economy, literature and art of a particular place. Partnerships with tribal groups, local watershed organizations, and locally or regionally focused museums are useful when emphasizing this aspect of outdoor school. (Read about Columbia Gorge Ecology Institute in the *Appendices*.)
- **Serve-and-learn education.** Students perform community service and practice skills, while learning what it means to be involved in their community. (See the “Tips for Teachers” provided by the Straub Learning Center in the *Appendices*.)

Aligning With Oregon State Education Standards

Aligning outdoor school activities with Oregon’s state education standards adds to your program’s credibility, and strengthens the connection between the outdoor experience and classroom lessons.

At Multnomah ESD, the Outdoor School Advisory Committee collaborated with outdoor school staff to research and develop companion curricula to help students prepare for, and follow up on, their outdoor school experience. Extensive feedback from teachers provided a framework for these materials, and a core group of educators was enlisted



to develop activities that address Oregon state content standards and employ best practices in instruction.

In September 2010, the Environmental Education Association of Oregon (EEAO) released a free, comprehensive database of environmental education curricula from more than 100 organizations. This customizable database (directory.eeao.org) allows users to search for keywords, wheelchair accessibility, location, grade level and topics, Oregon benchmark areas, and other categories.

Examples of integrating varied educational components and methodologies into outdoor school include:

- Developing relevant mathematics, language arts, literacy and science skills.
- Teaching appreciation of the outdoors through boating, fishing, hiking or following a programmed geocache route via GPS.
- Promoting understanding of the natural environment by teaching about plants, animals, water, weather systems, geography, geology and the natural processes that affect them.

- Building awareness, resilience and self-confidence through team-building activities like scavenger hunts, “Ten Essentials” activities, and challenge and ropes courses that teach environmental lessons while strengthening character.
- Using specific steps like measuring food waste, conserving water and recycling to connect the local ecosystem to regional and international environmental issues, and emphasize the need to become global citizens and environmental stewards.
- Cultivating natural instincts by tracking; harvesting edible or organic plants for meals; orienteering with map and compass; building boats and other nature crafts; making cordage; singing and storytelling; and experiencing age-appropriate rites of passage.

With enhanced training, resource sharing and funding, outdoor school programs can incorporate all of these goals to some degree.

Check the *Resources* section for links to curricula available through outdoor school programs in Oregon and elsewhere.

Tips for creating effective curricula

1. Provide clear learning goals and objectives.
2. Develop a theme for the field day, and limit the number of key supporting ideas to five.
3. Use teaching methods that promote active learning, such as hands-on activities and role-playing games.
4. Support behavior change by demonstrating realistic ways for students to make an impact.
5. Create a program integration strategy that includes preliminary and follow-up activities.
6. Prepare classroom teachers and students for the field trip. Share expectations, learning goals and objectives, and the program theme.
7. Develop and implement regular program evaluations.

Source: Nathan J. Meyer et al., *Best Practices for Field Days: A Program Planning Guidebook and CD for Organizers, Presenters, Teachers and Volunteers*. University of Minnesota, 2010 (www.extension.umn.edu/distribution/naturalresources/DD8208.html).

Play, Learn and Grow

In addition to academic instruction, outdoor school programs offer fun activities that build self-esteem, support creativity and foster teamwork. Many students find that cabin skits, campfire songs and games provide some of the most enduring memories and life lessons.

Therefore, many programs incorporate kinetic learning activities, including nature songs with matching hand motions, and popular games adapted to environmental themes. For example, "Salmon Migration Frisbee Golf," as taught at the coastal Forest Camp, is a fun way to explore animal life cycles.

Camp traditions and the value of storytelling

Camp traditions are a vitally important aspect of outdoor school. Adults who attended outdoor school decades ago still recall the wood cookies inscribed with the camp name of each participant and staff member; the roll call antics that brought everyone together; the "meals and manners" rules that kept mealtime manageable and fun; and the cabin skits that unleashed the campers' creativity and formed lasting personal bonds among them.

Outdoor schools often include storytelling in their campfire programs, especially if they have an experienced or adventurous staff person. Storytelling is a good way to integrate historical, natural, cultural, philosophical and comedic themes into the outdoor experience. Whether staff recite stories from memory or read them aloud, this activity encourages children to share their own stories with family and friends.

Some storytellers have formal training from a local storytellers' guild or toastmasters' organization. As an example, Toastmasters International organizes community and work-based communication focus groups where participants practice informal communication as well as prepared speeches. A person who has prepared and given 10 formal speeches, and received peer evaluation, becomes a "master communicator."

The *Resources and Appendices* sections include tools and resources to support the recreational elements of your outdoor school program.

Technology during outdoor school

Many outdoor school programs do not allow students to bring cell



In Their Words: Sixth-Grade Student Comments

I learned:

- If you work together, the job gets done faster.
- How to be more patient with others.
- What "xylem" means.
- How to tell the difference between trees by their bark and leaves.
- How to measure oxygen in water.
- How to spot constellations.
- How to find animal tracks and how to find the pH of water.
- That science is really fun.

phones, electronic games, MP3 players or any other electronic devices except for cameras and watches.

The idea is to get the students to "unplug" from everyday distractions so that they can focus on educational activities and personal interactions.

Some programs allow high school and college counselors to bring cell phones, but ask them to limit their use to twice a day, during social hour and recreation.



ESSENTIAL 6: Develop Staffing Structure and Job Descriptions

A new or prospective outdoor school program typically relies on staff with other educational or administrative responsibilities. Before

If you like to work an eight-hour day, you're going to love outdoor school. You get to work two of them every day!

– Bob Burgess, a founder of
MESD Outdoor School

hiring program staff, the camp director and office administrator or grants coordinator must – at a minimum – line up funding, board members, supplies, facility rentals and volunteers. If the program grows beyond the capacity of a partnering agency, human resource and payroll professionals may also be necessary. The American Camp Association website lists full job descriptions for typical camp positions (see *Resources*).

Here's how one mature residential outdoor school in Oregon staffs its program, which serves 100 to 120 students per week at each site.

Twelve staff members are on-site each week. Each member has unique qualities and responsibilities.

- **Site supervisor.** The site supervisor is responsible for the day-to-day operation of the site. She/he supervises staff and student leaders, and guides the collaborative effort to build a successful community.
- **Program leaders.** Each site has six program leaders. Three are male, and three are female. They are responsible for making sure that all scheduled activities are carried out, and directly support the high school counselors in working with sixth-grade students. Program leaders also assist with field study, supervise duties, lead recreational activities, and foster community and teamwork. Male program leaders supervise the male living areas, while female program leaders supervise the female living areas.

- **Field instructors.** There are four field instructors, one for each area of scientific study (animals, plants, water and soil). They create curricula for their respective subjects and train staff and student leaders to teach the activities. Field instructors also lead recreational activities, supervise duties and participate in community building.
- **Registered nurse.** The nurse is responsible for the health and welfare of each student and staff member. The nurse dispenses all medications, and attends to any medical issues that arise. The nurse is available 24 hours a day, and is an integral part of the outdoor school community.
- **Kitchen staff.** A cook and five kitchen staff provide an adequate, balanced diet for everyone attending outdoor school.

Multnomah ESD and Northwest Regional ESD both offer online job descriptions for key staff, as well as counselor and student leader handbooks, guidelines for working with students, insurance information and other staffing information. To request a copy of the *MESD Outdoor School Procedures Handbook*, send an email to outdoorschool@mesd.k12.or.us.

The Importance of Medical Staff

A camp facility typically requires a nurse, but an EMT/paramedic may be an acceptable alternative. The nurse keeps track of student medical forms, dispenses medications and vitamins, treats minor illnesses and provides other care as necessary.

The nurse also pays attention to the homesick students. A nurse with a warm manner toward children is especially important at camp.



Nurse Ladybug

For many students at MESD's Camp Angelos, outdoor school is their first overnight experience without their family. Fortunately, "Nurse Ladybug" is there to greet them and give out medications. She also provides invaluable support and advice to counselors.

Nurse Ladybug was instrumental in making improvements to the 75-acre site. The wellness building was originally designed with limited nurse feedback. When Nurse Ladybug came on the scene, she reviewed the plans and suggested some important changes. For instance, she recommended installing a back door to the main building. This allowed students to access the nursing station without having to go through the main building's vestibule, which does not accommodate certain types of wheelchairs.

She also suggested removing an unnecessary pass-through area between the larger multi-purpose space and the nurse's bedroom/suite, which provided more privacy.

Last, Nurse Ladybug advised installing at least one adjustable bed, so that the staff nurse wouldn't have to bend over as far when helping disabled students with their personal needs.

As Nurse Ladybug explains, nurses at outdoor schools don't simply dispense medications. They attend to the "whole person," providing both medical and emotional support and care.

Here are some tips on recruiting a camp nurse:

- Ask the ESD for recommendations.
- Find a nursing school practicum student.
- Share a nurse with another outdoor school.
- Ask a local clinic to donate a nurse.
- Consult the Association of Camp Nurses about their local membership (www.acn.org/).
- Place a classified ad in your local paper.
- Use Craigslist (no cost) or *The Oregonian* (expensive).
- Look for newly graduated or semi-retired nurses.

Note that school nurses may not have the same current skills or scope of practice as a contract nurse who is specifically hired to assist more medically fragile students. Contract nurses typically charge at least \$50 per hour for one-on-one care. Therefore, it's important to assess individual student needs before school groups arrive at camp. Federal law requires that medical needs not be a barrier to public education.

The *Resources* section includes links to more information about nurses and providing for students with special needs.



ESSENTIAL 7: Recruit and Train Staff and Volunteers

Managing and supporting students in an outdoor school setting requires unique skills and a flexible approach. For example, there are differences in how you organize and motivate students at 8 a.m. versus 8 p.m. Teaching and student management techniques that work in a daytime classroom setting often need to be adjusted to the outdoor school environment.

Also, programs should acknowledge and try to address the professional challenges that new recruits face. Low wages, lack of health benefits and the remote locations of campsites can lead to early burnout even among dedicated staffers.

Recruiting

Outdoor school programs typically post job announcements in well-known online journals like *Journal of Experiential Education* and *Outdoor Ed*, and at nearby college job-placement boards. Recruiters may also visit area high schools to recruit volunteers during lunch-hour tabling events.

It's a good idea to post descriptive information on the program's website, so that applicants will know just how demanding the schedule and duties can be. This will attract appropriate candidates, and screen out people who don't want to stand around in the rain, spend a lot of time with children, or get silly and sing during campfire programs. (See the *Resources* section for a great example from Nature's Classroom in New Hampshire.)

Your program should offer some basic necessities and perks to recruit quality staff and volunteers:

- First-aid training, or subsidized Wilderness First Responder (WFR) training, for qualified applicants.
- Steady housing that does not require counselors to "couch surf" during weekend event rentals.
- Catastrophic health insurance during employment.
- Medical, dental and vision insurance during employment.
- Healthy meal options like fish, vegetarian and vegan choices, and soup and salad bars.
- Internships, college credits or reduced-cost college classes.

I saw outdoor school as my own ticket to personal growth and spiritual wealth, but when I got back I realized that I had gained much more. At the end of the week, I decided to seriously look into teaching as an option for a college focus. I learned so much about myself after I went to outdoor school.

– Student Leader "Kilo"

- Scholarship programs.
- Curriculum training in popular methodologies.
- Career placement assistance, or off-season job board.
- Outreach opportunities, like tabling at environmental or career networking fairs.
- Employment references.

Training

Staff training must cover a wide range of skills, from volunteer cultivation and management, to safety and emergency response, to teaching and behavior management.

The outdoor school experience has a special way of building relationships, as people get to know each other through hands-on activities that break down barriers. However, spending a lot of time together can also create conflicts. Fortunately, many camps already prioritize regular staff and daily volunteer check-ins to discuss issues before they become disruptive. The staff frequently mentors clusters of high school volunteers and stays informed about emerging concerns.

Some schools have a formal process in which staff and counselors fill out forms to evaluate each other's teaching performance, so that camp directors can give very focused feedback during check-in meetings. This

gives the director a more balanced view of each person's skills, and also gives the staff more constructive ideas for improving professionalism, safety and motivation.

Succession Planning

It's important to create a comprehensive program manual, website and online forms that will retain long-term institutional knowledge. (Chapter Four has additional information on staff retention and succession planning.)

High School Student Leaders: A Valuable Resource

Many outdoor school programs rely on a highly valuable human resource: high school students. Often, these students attended outdoor school as fifth- or sixth-graders and pledged to become student leaders one day.

Student leaders help to conduct outdoor school activities and support students. They also maintain an effective "adult/role model-to-student" ratio and keep activities running on schedule. In return, they receive invaluable experience in exercising leadership skills and an opportunity for self-discovery: What are they good at? What do they most enjoy? What did they learn about themselves in the process of helping students learn?

Student leaders should have the following qualities:

- A desire to work with children in a positive, supportive manner.
- The ability to communicate with sixth-grade students, classroom teachers, outdoor school staff, and peers.
- Enthusiasm, maturity, responsibility, flexibility, initiative and leadership.
- A love of the outdoors.



Their responsibilities include:

- The health and welfare of a cabin group.
- Assisting with field study instruction.
- Helping sixth-grade students through all aspects of the outdoor school program, including cabin interactions.
- Maintaining open communication with outdoor school personnel and classroom teachers.
- Seeking assistance when the need arises.

Source: MESD Student Leader Handbook (www.mesd.k12.or.us/os/OutdoorSchool/Resources_for_Student_Leaders/Entries/2011/1/20_Student_Leader_Handbook.html).

Lincoln County Outdoor Education Group has benefited from having a single liaison in the high schools who recruits students, gathers their paperwork and keeps track of the credits they earn.

Recruiting and Training Student Leaders and Other Volunteers

A Conversation with Chad Stewart, NWRESD

Chad Stewart works with the Northwest Regional ESD as a volunteer facilitator. He has an extensive background with regional outdoor schools, and has volunteered with

other advocates to raise funds for these programs in the Portland area.

Chad explains the recruiting process he and Kitty Boryer of Multnomah ESD use to maintain a volunteer program for 18 to 24 students at each week of NWRESD outdoor school.

- **Recruiting at high schools and colleges.** Chad contacts school staff one month before each spring and fall outdoor school season. Along with other recruiters, he staffs a table during the lunch hour to recruit new applicants.
- **Student recruiter system.** Chad asks outdoor school counselors who excel to be recruiters and spread the word. Some simply recruit friends or classmates, while others recruit in the lunchroom and common areas. Some counselors even place announcements in the school newspaper. Peer recruiting is very successful, and Chad notes that it is particularly helpful in encouraging male applicants.
- **Incentive system.** Recruiters receive prizes, including mugs, T-shirts and hoodies, depending on how many counselors they recruit. Volunteers and some alumni also enjoy an annual picnic and a pizza meeting.
- **Training sessions.** Chad arranges three-hour training sessions



Eleven Things Caring Counselors Always Do

1. Make the health and safety of children their number-one priority. Know where the children are at all times, and use a calm tone when redirecting children who are hurting or disrespecting themselves, other people or the environment.
2. Play with the students. Caring counselors are always ready to play and have fun with their group of children.
3. Listen attentively to children and have one-on-one conversations with each child. Caring counselors know that every child needs individual attention, so they make time for each of them every day.
4. Strive to build a strong community by identifying commonalities between seemingly different people.
5. Create enthusiasm. Caring counselors genuinely enjoy being with children and are always willing to sing, chant, laugh, and be cheerful and enthusiastic.
6. Praise and encourage children. Children need praise and reinforcement whenever they make an attempt to overcome a challenge, or do something creative, unselfish or beneficial for the group.
7. Lead children without being bossy. Caring counselors are leaders, not bosses. A boss intimidates; a leader inspires. A boss says "I"; a leader says "we." A boss says "do it!"; a leader says "let's do it together!" A boss makes work drudgery; a leader makes it a game.
8. Check in every day with their students. Caring counselors are always willing to share experiences, discuss problems and make plans. Counselors should also plan for a student-directed time, in which children can have their voices heard by their peers, and learn how to listen.
9. Be aware of children who need special help. Caring counselors must recognize children who feel unhappy or are facing problems. Students who are very aggressive or very quiet also need special attention. Caring counselors never force a child to talk. Instead, they encourage the student by providing a safe, comfortable space for communication.
10. Put the children's needs first. Caring counselors serve the children first at mealtimes, spend the majority of their time during the day interacting with the children, and help them in the middle of the night if needed.
11. Give special attention to each child at bedtime. Caring counselors say a personal goodnight to each child, and will gladly read bedtime stories or sing a quiet song. This can be a difficult time of the day for children who are away from home. Giving personal attention to all of the children helps them get to sleep soundly.

three to four months in advance. Prospective volunteers participate in activities that allow staff and students to get to know each other better. Topics include teaching techniques, leadership, positive role modeling, appropriate behavior, goals, child behavior and discipline, and what to bring to camp.

- **Application process.** Students must fill out a registration card detailing their availability and get it signed by a counselor, parent and teacher. Some applicants will not be able to submit their cards because they were unable to get these signatures. Those who do qualify often go on a waiting list, but have priority over newer applicants for next season. Cancellations are filled from the waiting list. Male applicants are usually in high demand.
- **Data management.** Chad generally uses Excel spreadsheets to manage his recruitment data, mainly because he has been too busy to set up a database. This work is especially intense in the three weeks before sessions begin.
- **Volunteer retention.** This varies from 15 to 50 percent, depending on the program and the demographic from which the camp draws. Chad notes that communities with strong outdoor school programs for sixth-graders tend to have higher recruitment and retention.

The MESD Outdoor School and Northwest Outdoor Science School websites have resources for student leaders, counselors and staff, including handbooks, packing lists and tips.

A Visit to Camp Cedar Ridge

Camp Cedar Ridge in Vernonia puts a lot of effort into recruiting and training staff. These competitive volunteer positions require consistently

good grades and teacher permission. Typically, more girls are interested than boys. A waiting list is kept for additional applicants.

Counselors receive 1 1/2 days of training and a handbook before the campers arrive. After that, they get steady supervision and guidance from adult staff. Daily staff meetings include candid discussion of counselor dynamics and how to support them, as well as camper needs. When counselors visit from other sites, they become part of the program; there is always a need for assistance with campfire skits, field studies and cabin duties.

The outgoing, talented staff contributes to the camp atmosphere by leading movement games and songs on the basketball court where cabin groups gather before activities. The students engage in fun physical activities throughout the day, accompanied by nature-themed songs and games.



ESSENTIAL 8: Transportation, Food, Utilities and Waste Management

Perhaps the most complex part of launching an outdoor school program is planning the logistics: Getting the students to the camp, providing meals, ensuring there is energy and water in place for showers and dishwashing, and managing trash and recyclables.

These components of camp management underscore the importance of sustainability to creating and managing an outdoor school program. Sustainability means using resources wisely and efficiently, so that they meet the needs of the present generation without compromising the ability of future generations to meet their own needs. You'll find more

information on sustainable practices in the next chapter.

Transportation

Getting students to and from the camp, and planning for on-site transportation, can be challenging. Often, transportation is the responsibility of the participating school. However, it may be difficult to schedule buses in the springtime, or in seasons when buses are used for sports teams.

If you need to arrange for transportation outside of the school bus system, consider these tips and safety reminders:

- Check licenses to make sure drivers have the necessary training and endorsements for driving vans or buses.
- Find out if parents and teachers can arrange carpools.
- Use solar-powered golf carts to transport students and supplies across large camps.
- Make painted camp bicycles available to staff, many of whom may not have traveled with their own.
- Consider using waste vegetable oil from camp fryers to power camp vehicles.
- Seek a partner who offers transportation reimbursements for a curriculum that supports the partner's goals. For example, Oregon Forest Resources Institute (www.oregonforest.org) offers transportation reimbursements for qualified programs, as well as curricula, field trips and teacher training relating to state forest resources.

Feeding the Students

When planning meals, you must determine how much food you'll need, how to make it healthy and how to manage your food budget.

Outdoor school programs can feed each student for as little as \$4.50 per day, and may pay camp cooks as little as \$50 per day,

including room and board. This level of funding generally does not support a wide array of nutritional options, let alone organic items. However, some camps do manage to provide healthy, attractively prepared options.

- Outdoor school supplies are typically ordered online from large commercial and institutional suppliers. However, an education service district may be able to provide commodities like meat or frozen cheese blocks.
- Experienced OMSI food service staff has found that prices at Safeway and United Grocer are often cheaper than those at Sysco and Food Services of America.
- Free and reduced-price lunch subsidies are often available through the school district.

In-kind food donations are possible and may even be underutilized. Here are some ideas for increasing fresh foods in camp menus:

- Volunteers could join with area nonprofits like the Gleaners or Portland Fruit Tree Project to pick fruits and freeze them for the coming fall programs. Applesauce and pancake fruit sauces would be popular.
- Partner with nearby farms and ranches to provide fresh produce.
- Connect with community garden surplus and food bank donation programs.
- Solicit donations from families and businesses with food industry or farm connections. A donation to a nonprofit group would generate tax write-offs.
- Participate in bulk food buying groups for local and organic items.
- Some restaurants may be willing to donate leftover food to supplement counselor meals.

Kitchen staffing

Some schools economize by bringing their own kitchen staff, simplifying set menu plans and having volunteers lay food out on baking pans ahead of time.

Although camps often need extra kitchen help, they may have a hard time finding applicants who can pass background checks. New programs may also need to register for county-issued food handling permits, or pass kitchen safety inspections.

Kitchen managers may be good at planning menus, but not so good at managing food budgets, which means that they may have limited input on realistic costs and program needs.

Food allergies and special dietary needs

According to the National Center for Disease Statistics, “Four out of every 100 children have a food allergy. Eight types of food account for over 90 percent of allergic reactions in affected individuals: milk, eggs, peanuts, tree nuts, fish, shellfish, soy and wheat.”

Common sense dictates serving these foods in moderation and keeping them separate from other dishes. Every meal should include an alternative to each of these allergens. For example, if you serve wheat pasta or bread, you should also make whole-grain rice, potatoes or another palatable alternative available for gluten-free students.

Nondairy milk (e.g., almond, soy or oat milk) should be available for children with allergies and other dietary restrictions. Alternatively, you can encourage students to bring their own preferred brands.

Gluten-free, vegetarian and vegan items should be clearly labeled, and announced at the beginning of every meal. This helps to coun-

teract the peer pressure that can occur during “family style” meals.

Tofu is a common form of vegetable protein, but some students are allergic to soy products. Therefore, tastefully prepared and economical beans should be made available every day. Baked beans, green beans, bean dips or spreads, and chili are all popular and nutritious.

Parents of students with medical conditions such as diabetes or autism will often prescreen the outdoor school menu, and may even provide meals and snacks for the week. (See the *Resources* section for a sample dietary letter from Multnomah ESD.)

Highly processed and artificially colored or flavored foods have been linked to youth behavioral problems. Fresh and healthy foods are preferable.

Utilities (Water and Electricity)

If your program operates in a camp owned by someone else, the utilities should already be in place. However, you still need to know where the breaker boxes and shut-off valves are, and ensure that the hot water tanks and electrical systems are adequate for the number of students, staff and volunteers you plan to have on-site at any one time. You must also have access to emergency phone numbers in case there are any problems.

You can help your campers make good use of electricity and water – and also reinforce lessons about the environment – by posting reminders to turn off the faucet while they brush their teeth, turn off lights when leaving rooms, and limit the length of their showers.

Waste Management and

Prevention

Many Oregon students are well versed in the three Rs (reduce, reuse, recycle), so your program should reinforce common resource-conservation practices. This means avoiding the use of throw-away items, using recycled or recyclable materials whenever possible, and modeling waste-reduction and resource-conservation practices throughout the program. As one member of this guide’s Advisory Committee noted, sixth-graders recognize hypocrisy quickly and become offended when teachers and staff fail to model practices recommended in outdoor school.

The best way to manage waste is to generate as little of it as possible. Although Oregonians tend to be committed to recycling, we still generate more waste than we recycle.

The next chapter offers more information on making your waste management plan as sustainable as possible. In the meantime, here are some basic guidelines on waste management and recycling:

- Identify the waste and recycling hauler for your site and work with them to understand how to use the barrels, dumpsters and signs they provide. If you are using an existing camp, the owners probably have a good system in place already.
- If you can compost on-site, do it! Worm bins are a great way to compost food scraps and teach children about natural cycles.
- When you set up your camp, put the disposal receptacles close to where the waste is generated.
- Always use critter-proof waste and recycling containers.
- Reinforce classroom lessons on resource conservation with signs, marked pails and boxes, and recycling-oriented skits and songs.

It's also good to involve the students in waste management. For example, some camps measure the amount of discarded food at the end of each meal to encourage students to take only what they will eat.

- If possible, use real plates, cups and utensils. This requires access to a dishwasher and a staffed kitchen, but you'll save resources and reduce your trash bill. Stainless steel and recycled tableware are great options.
- When you plan menus and shop for food, be aware of packaging. Prepared foods often come in non-recyclable packaging. If you must buy these products, try to buy in bulk (e.g., look for large jugs of juice instead of single-serving containers).
- Waste, resource consumption and the environment are naturally linked. There are plenty of resources available to help you build resource conservation and awareness into your curriculum and daily activities. Metro is a good source (www.oregonmetro.gov/index.cfm/go/by.web/id=540), as is your local school.

To learn more about modeling sustainable practices using community-based social marketing principles such as prompts and social norms, visit Community-Based Social Marketing (www.cbsm.com).

Logistics Planning at OMSI

At OMSI outdoor schools, no operations manager is on staff and no special software is used. The staff relies on checklists, spreadsheets and a large whiteboard. The biggest challenges are curriculum, capital needs and maintaining participation.

OMSI uses online registration for summer only. Each facility has a program manager who orders supplies, hires instructors and coordinates training. Program

coordinators work with schools to customize their curriculum from an enticing menu.

Most schools provide their own transportation (paid for by the district), or organize carpools with parent drivers.

There is no standard curriculum, but some courses highlight the field site and focus on curriculum topics in depth. A registrar schedules schools using an Excel spreadsheet and FileMaker database. Upon confirmed registration, schools receive two packets comprising policies and rules, and teacher curriculum.



ESSENTIAL 9: Create a Safe, Secure and Inclusive Environment

You should recognize and resolve most safety concerns before students arrive at outdoor school.

Before students arrive at camp:

- Send out a safety memo for parents to review and sign, so that they and the students are aware of basic camp rules, as well as clothing and equipment needs.
- Provide contact and visiting information to parents.
- Make sure students and parents have filled out forms informing camp staff about medical and dietary needs, and provided necessary medications or special dietary items.

You will also need to address any issues identified in your "Hazard Analysis" form. This form documents hazards ranging from slippery surfaces to dangerous animals and plants (e.g., poisonous rough-skinned newts and stinging nettles).

Directions and Way Finding

- Signage should ensure that students can find their way, understand interpretive signs and maps, feel secure in their environment and know where to get help if they need it.
- If the camp location is out of the way on circuitous logging roads, provide detailed and accurate directions to parents, teachers and anyone else who needs to visit the camp. Advise visitors against using GPS or MapQuest computer programs if they will provide incorrect directions (e.g., by using paved roads exclusively, or basing directions on the shortest distance). Place directions and maps prominently on your website to prevent families from getting lost.

Camp orientation

- Lighted and covered signage is very helpful, as are large maps with "you are here" markings. It's better to have extra signs visible from multiple directions than to have too few. At camp orientation, counselors should review the campus map and general north/south directions with cabin groups before any activities begin.

Buddy System and Other Rules

- In addition to ensuring that staff is providing close, diligent supervision of the students, you can use a buddy system to ensure that campers always travel with their group or with a buddy, even if it's just to the nurse or the nature center. A buddy system is also an effective safeguard against child abuse.
- It is imperative to conduct a clearly worded staff orientation on working safely with students, so that there is no possibility of physical, verbal or sexual abuse.
- Other camp rules might include no running on trails; no cell phone use or text messaging; no

bullying; following instructions during water activities like boating, swimming and water slides; and no public displays of affection (especially for counselors).

Cabin Safety and Comfort

- Cabins can easily feel overcrowded, so leave the central space open for free movement and skit practices.
- Check fire alarms in all buildings, including cabins, on a schedule dictated by local fire district requirements. If you are renting the facility, test records should be available to outdoor school staff.
- Heat ducts in cabins should not be obstructed by furniture. Cabin decorations should not obstruct hallways, windows or bunk ladders.

Acoustics

- Some camp dining halls are cavernous and loud. Better acoustics help hearing-impaired or behaviorally challenged students follow instructions and enjoy table interactions during mealtimes. Cloth hangings – like Harrison Elementary School’s display of treasured banners on Camp Tadmor’s lodge windows – are an excellent solution to this problem, provided they comply with fire codes. You can also improve building acoustics by placing felt pads under tabletops.

Safety Equipment

- Fire extinguisher locations should be highly visible throughout the camp. Emergency phones should be clearly visible, easily accessible and regularly maintained, even if camp staff carry walkie-talkies, whistles or cell phones.

Welcoming Diversity, Planning for Accessibility

Meeting the needs of students with physical, behavioral or lan-

guage challenges is one of the more difficult responsibilities outdoor school programs face, particularly if funding is limited and the site has varied terrain. The Americans with Disabilities Act (ADA) is an unfunded federal mandate, so programs often need to be resourceful to comply with its specifications.

All staff should receive training on adapting curricula, games and activities for students with differing abilities. One approach is to alternate active games with more sedentary, thoughtful games. Other inclusive practices include bending down to wheelchair-bound students’ level to show them nature crafts and plants, adjusting the pace of a hike so that students on crutches are not struggling to keep up, and making frequent stops to admire flora and fauna.

Some camps use carts or wagons to transport students in wheelchairs. Note that relatively accessible camps may lack privacy if neighboring property owners have different patterns of property use.

The Multnomah ESD website offers resources for serving students with special needs (www.mesd.k12.or.us/os/OutdoorSchool/Teacher_Sp_Needs.html). Adventures Without Limits (AWL) is another model for integrating adaptive and safety components into an outdoor school program. You can read more about AWL on their website (awlouddoors.com) and in the *Appendices* section.

Other ideas for increasing camp accessibility:

- Build a small boardwalk so that students using wheelchairs or crutches can access wetlands and view wildlife.
- Ensure wheelchair access to doorways, bathrooms and other common areas.
- A professional trail designer can

Outdoor school has always been so good to me, from the time I was a sixth-grader to my third (last time) as student leader. I’ve always felt a little odd at school, but at outdoor school I was always awesome! In sixth grade I felt I belonged and so smart and happy.

– Student leader “Sunnystar”

incorporate ADA standards when designing new trails.

- Consult Association of Camp Nurses and American Camp Association building design standards, which incorporate ADA bathroom and doorway requirements.
- Write grants or solicit donations to acquire off-trail wheelchairs, more ramps, lighted walkways and ADA-friendly bathrooms.

For behaviorally challenged students, outdoor school typically has more rules than home or school. Structure, signage and routines can be helpful, but these students may also require personal attention from a school counselor.

ESL students may be more likely to sit or stand at the back of the group during a discussion, so the instructor should design hands-on activities that keep children circulating and engaged. It’s also important to use a variety of educational tools (e.g., pictures and models), and to be creative in finding ways to engage these students during group activities.

Outdoor school naturally incorporates best practices for English language learners, including hands-on activities, a minimal amount of text-heavy instruction, group learning, visual aids, and acting out or singing vocabulary. Dan Prince of Northwest Regional ESD notes that

many of the strategies in Project GLAD (Guided Language Acquisition Development) are standard components of outdoor school programs.

Engaging families and diverse communities

Getting underserved student populations to camp is a common challenge. These students may have financial constraints that limit participation, or a lack of appreciation for the experience. Some families may prefer to keep their children at home in a protective environment.

Holding an open house at the camp is the best way to help hesitant families warm up to the idea. Offering free food, beverages, music and translators can break the ice and help guests to feel at home. Offering storytelling or live animal exhibits for younger children can also make the experience more worthwhile for busy parents.

See the *Resources* and *Appendices* sections for additional ideas on engaging diverse communities.

Margaret Eng Talks About Access

According to Margaret Eng, supervisor and consultant with Multnomah ESD, participation at outdoor school depends on parents and special education teachers, and the degree to which the students are integrated or mainstreamed into a regular classroom. She has written ESD-specific curricula to make the outdoor school experience more accessible, and occasionally conducts seminars or comes out with a group to train and work alongside counselors.

Margaret notes that ADA is essentially an unfunded federal mandate; costs fall on school districts and parents. One-to-one student assistance and physical care is ex-

pensive, particularly with increased hourly rates at camp. Funding for equipment comes primarily from Friends of Outdoor School; ESD staff orders the equipment. For instance, ESD recently purchased two wheelchairs with oversize rubber tires for field study use.

Multnomah ESD's only ADA-accessible site is Camp Angelos, on the Sandy River. Sometimes, ESD staff must counter teachers' preferences for more rustic or hilly sites in order to ensure inclusiveness. Also, some programs do not have registered nurses or appropriate accommodations. In these cases, teachers may need to take responsibility for dispensing medications.

Margaret notes that outdoor school programs can sometimes serve students with special needs by providing ventilators or 24-hour nursing care, or offering an overnight stay or daytime visit instead of a full residential program. It may also be helpful to create separate "quiet" quarters for students who are sensitive to noise or have sleeping issues.

Accessibility at Camp Winema

At coastal Camp Winema, the topography is flat and facilities are close together. This makes it a good location for mobility-impaired students, but what makes this camp truly inclusive is staff training, awareness and the right equipment. ADA-accessible bathrooms and ramps are available in several buildings, and the nurse makes house calls.

When students from Clackamas River Middle School arrived for a recent visit, several were using wheelchairs and crutches to get around. "Alescia" brought three wheelchairs, including two designed for rugged outdoor

Some students are unable to attend outdoor school because they have behavioral issues that raise safety concerns. Katherine, an at-risk emotionally disturbed student, was someone who we were concerned would not be successful, based on her interactions with peers.

However, because we felt that the experience would greatly benefit her, we collaborated with the Crook County Juvenile Department. We had a one-on-one department counselor accompany her throughout the week.

During our candlelight ceremony, Katherine chose to share her feelings with camp participants.

She said, "I haven't been a good person this year to many of you. I have been mean and angry with you because of my home life. But here at camp I have learned how to be a better friend and person and I really want to do better. Camp has really changed my life. I want to be a better friend to all of you that I have hurt. Please forgive me. I am so glad I got the opportunity to come to camp. Thank you, teachers and my probation counselors for allowing me to come. I loved outdoor school."

– Excerpted from a
Crook County School
District Outdoor School
evaluation report to OCF

conditions. Her cheerful aide was determined that Alescia would experience all of the water-themed activities, from wetlands and wildlife observation to chasing mole crabs on the beach. Two other staff assisted Alescia while she

pushed and pulled her all-terrain chair across the wet sand toward a dead sea lion.

Staff consistently positioned themselves at Alescia’s level to talk with her and show her plants. Later, a kinetic “tree layers” game involved all the students, with Alescia chanting “I am the heartwood,” the sapwood students yelling “I make sugar,” the cambium layer singing “I grow,” and the outer bark stomping and shouting “I protect!”

Accessibility at Camp Attitude

Camp Attitude is located in Foster, Oregon, near Sweet Home. This nondenominational Christian camp for disabled children, adults and families hosts summer programs with an all-volunteer staff. It is totally ADA-accessible and features attractive, well-maintained cabins with heating, lights and excellent amenities. OMSI manages food services and controls costs. Camp managers have offered to waive lodging fees for any disabled student who attends.



ESSENTIAL 10: Marketing and Publicity

The continuing success of your outdoor school program depends on your ability to market it in culturally relevant ways and raise community awareness of its value.

Creating a simple plan before launching your program will focus your marketing efforts. As your program grows, you’ll naturally find ways to improve the strategies that work, drop the ones that don’t, and add creative new outreach tools and publicity techniques that tell a compelling story about your outdoor school’s vision and how it helps students.

Standard publicity tools include:

- Newsletters, brochures and fliers.
- Newspaper, TV and radio ads (try to get free ad space and airtime).
- Stories in school newspapers and bulletins.
- Stories in the publications and on the websites of supporters and donors.
- News stories about outdoor schools, scholastic achievement, donations, grants and volunteer contributions.
- Bumper stickers, pins, T-shirts and other ways to display support and engagement.
- Social media (Facebook pages and other social media networks).
- Signage (signs not only help people find the camp, but also build awareness).
- Presentations to community organizations and business groups.
- Inviting news reporters to camp (make sure you have releases for the students).
- Slide shows at PTA meetings, or presentations to sixth-grade parents.
- Posters in high-traffic locations such as a school announcements board, with pictures of last year’s participants and activities.
- Open-house events for parents, teachers, community members and business owners.

See *Resources* for sample publicity and outreach fliers, brochures, letters and newsletters.

ADDITIONAL RESOURCES

Many of the materials you’ll need to support your program have already been developed. You can use these materials as-is or adapt them to your needs:



- Skits and songs.
- Sixth-grade field notebook.
- Procedures Handbook for field staff.
- Student Leader Handbook.
- Student Handbook.
- Teacher Information Packet (Multnomah ESD updates its packet seasonally; see *Resources* for more details).
- Activities for teacher-class meetings.
- Evaluation forms.
- Medical forms.
- Counselor handbook and application form.
- List of personal items to bring to camp.
- Program description, mission and goals.
- Water quality data table.
- Counselor training outline.

The *Resources* and *Appendices* sections contain links to, or actual copies of, these and other materials.



Launching an Outdoor School Program: Essentials Checklist

Build community support

- Assess community needs.
- Meet with teachers, administrators and parents about achieving school goals and state academic standards.
- Form a coalition of citizens, teachers, administrators and community partners.

Evaluation

- Decide which evaluation methods to use, and make sure they meet the needs of funders.
- Build evaluation criteria and methods into your program.
- Decide who will conduct evaluations.

Select an outdoor school provider or camp facility

- Select or develop a site that meets your program goals.
- Determine whether any retrofitting is necessary.
- Secure insurance (if the camp site is not self-insured).

Find money, partners and resources

- Create a budget.
- Brainstorm funding sources (e.g., school, community, fundraising activities, grants).
- Assign fundraising responsibilities.
- Seek likely community and business partners.

Develop curricula and relevant activities

- Work with teachers and administrators to determine appropriate curricula.
- Use resources in this guide, and curricula available from longstanding outdoor school programs.
- Integrate relevant curricula into the classroom before and after camp.
- Decide which activities support your vision and academic goals.
- Review your program design to ensure it meets your evaluation criteria.

Develop a staffing structure and job descriptions

- Estimate staffing needs based on number of students.
- Recruit and screen staff, including volunteers.
- Adapt job descriptions from other programs, or create your own.
- Determine pay schedule, insurance and other human resource policies.
- Plan for meeting the medical and behavioral needs of all students.

Recruit and train staff and volunteers

- Use training materials created by other programs, or create your own.
- Review responsibilities, expectations and evaluation protocols.

Logistics

- Arrange for transportation.
- Determine budget and sources for food and supplies (e.g., stores, gleaners, school).
- Create a plan for meeting the needs of students with food allergies and other special dietary requirements.
- Confirm or arrange for utilities, recycling and waste management.
- Incorporate resource conservation and sustainability measures wherever feasible.

Create a safe environment that meets the needs of all students

- Review camp layout, signage, lighting and accessibility.
- Review safety procedures, and make sure staff has basic first-aid training.
- Make provisions for ESL students and students with disabilities.
- Develop a "Hazard Analysis" form to identify and mitigate safety concerns at your site.

Marketing

- Adapt existing fliers, announcements and letters, or create new ones from scratch.
- Create stories about your outdoor school program to use in presentations.
- Host open houses and presentations for parents, extended family and prospective supporters.



Managing an Outdoor School Program

Many of the activities you undertook during the launch phase of your program will continue in this phase. Evaluation, for example, continues through every phase of an outdoor school program, from conducting performance reviews of student leaders and counselors, to responding to feedback you receive during and after outdoor school, to the use of testing methods that help you improve your program.

This chapter contains information and resources for managing an outdoor school program, including:

- A. Handling camp logistics.
- B. Managing and evaluating staff and volunteers.
- C. Managing risk and promoting safe practices.
- D. Establishing roles and activities for teachers.
- E. Creating and continuing traditions.
- F. Building sustainable practices into your program.



HANDLING CAMP LOGISTICS

Camp logistics includes arranging for food and waste management, transportation, paperwork flow, procurement, and staff and volunteer training. It is essential to delegate these responsibilities early on, especially for arrangements that must be made months in advance.

Logistics essentials include:

- Designating a logistics coordinator.
- Delegating responsibilities (see above).
- Processing camp registration forms and other paperwork, ideally using a database or camp management software.
- Determining final student counts by school and gender.
- Determining staff and counselor numbers, based on final student counts.
- Determining available funds, based on final student counts.
- Meeting with the camp facility manager to review overall plan and student counts.
- Assigning bus, cabin and study groups.
- Making reservations for buses.
- Planning for staff training.



- Hiring seasonal staff and volunteers.
- Training staff.
- Having experienced kitchen staff plan menus and order food.
- Ordering supplies, with an eye toward cost containment and sustainable products.
- Planning for waste disposal and recycling, if your facility has not already done so.
- Receiving and storing supplies and food.
- Finalizing take-along paperwork, including health forms.
- Inviting parents for a tour and question-and-answer session before students arrive.

Having campers register online reduces paperwork and conserves limited administrative staff time. Camp logistics software or websites can help you track registration, cabin assignments, transportation and staff scheduling. You can even print out reports and financial summaries. One such website is CampBrain (www.campbrain.com).

Site Visits Can Reassure Parents

It's crucial to involve and inform parents throughout the process of planning and launching your program. This means setting aside time to address concerns, especially from parents who are unfamiliar with outdoor school, reluctant to have their children spend time away from home or unsure about how your program operates.

Many programs provide presentations to parents, send informational materials home with students and offer a camp tour before outdoor school begins. For instance, Rainier Elementary School invites students to the site for a question-and-answer session and cabin orientation, during

which they distribute informational handouts and permission forms.

Parents should also be free to visit the camp when it is in session. Teacher Sherry Evans reports that roughly a third of the parents choose to attend on visiting day, when they can tour the camp and sit at a parents' table during lunchtime.

Managing Logistics

Virginia Tardaewether, Lincoln County Outdoor Education Group and MidCoast Watersheds Council

Having been the logistics person at our outdoor school for years, I've found that the most important thing for me has been to totally know and understand the daily schedule. Knowing where everyone is supposed to be and what they should be doing at all times helps keep everything flowing.

I try to arrive before everyone else and supervise the site set-up. I also set up the rooms, give cabin assignments and make sure everyone has a schedule and that schedules are posted in the main lodge and cabins.

I greet the outside educators and welcome them to camp, show them their lesson site and make sure they have everything they need. I also ring the bell to keep the whole camp on schedule and moving along. It helps to have instructors and counselors who can keep the campers busy for a few minutes when extra time is needed, such as when meals are running late.

I created cabin bags for each group that contain wood cookies, string, markers, flashlights, alarm clocks, tissues, sunscreen, clothespins, scissors, construction paper, songbooks, counselor handbooks and student journals, pencils, a couple of games, skit ideas and ideas



A Typical Day at Outdoor School

While no two outdoor school programs are exactly alike, most include a dawn-to-bed-time schedule that specifies activities for each part of the day. All activities – from field trips to cabin skits and campfire time – have a pedagogical purpose.

Here's a sample schedule for Northwest Outdoor Science School:

7:00 a.m.	Wake-up
7:35 a.m.	Flag ceremony
7:45 a.m.	Breakfast
8:30 a.m.	Duties and cabin clean-up
9:00 a.m.	Morning field study
12:00 p.m.	Lunch
12:45 p.m.	Relaxation with cabin group
1:30 p.m.	Afternoon field study
4:00 p.m.	Recreation
5:00 p.m.	Cabin time
5:45 p.m.	Flag ceremony
6:00 p.m.	Dinner
7:00 p.m.	Meetings and homeroom time
8:30 p.m.	Campfire
10:00 p.m.	Lights out

for things to do in the cabin. Cabin bags save me a lot of time getting these items for each cabin.

I'm also the person who attends parent meetings to answer any



(See the *Resources* and *Appendices* sections for relevant websites and sample materials.)

MANAGING RISK AND PROMOTING SAFE PRACTICES

Keeping students safe is the top priority for every outdoor school program. Chapter One covered safety basics. This section provides more detail on the procedures and practices that ensure a safe camp.

Facilities Management

Generally, the camp facility director is directly responsible for the facility's maintenance and upkeep. That person then coordinates maintenance activities with a school representative or outdoor school coordinator.

It's a good idea to review a facility checklist regularly to confirm that safety protocols are in place at all times. Outdoor school staff is responsible for checking first-aid kits and other emergency supplies, as well as fire alarms and walkways. Stocking firewood, repairing light fixtures, and building upkeep are other imperatives for a safe and welcoming camp.

Safety concerns also apply to camp furnishings like bunk beds and ladders, bathroom fixtures and outdoor gear. You must set clear responsibilities for inspecting and maintaining these amenities. Be especially vigilant if you are renting an older facility with outdated furnishings or equipment.

If your program needs to purchase furnishings and gear, pay close attention to safety-related recalls. In recent years, the U.S. Consumer Product Safety Commission (CPSC) has instituted a mandatory federal safety standard for bunk beds due to the risk of entrapment deaths.

The outdoor school program has shaped my life in ways that I didn't even know it could. I always thought that when I was sent out for a week on-site, I was the one having an impact on others. In hindsight, I can see that all the time those others were having an even more profound impact on me. What this program has given me is self-confidence. Because of outdoor school, more than any other factor in my life, I know myself to be capable, competent and worthy of responsibility. Even among groups of peers, and occasionally elders, I am comfortable being a leader and knowing that what I have to share is worthwhile.

– Student Leader “Golly”

Their searchable recall database is organized by product type. Other recalled items include camp axes, mess kits, lanterns and stoves. You can learn more at www.cpsc.gov.

American Camp Association

The American Camp Association (ACA) offers many safety resources, as well as approximately 300 standards that apply to their accredited camps. An accredited camp may be held liable if it does not adhere to ACA standards, which include camper-staff ratios, 24-hour emergency transportation availability and developmentally appropriate activity goals.

ACA draws a clear distinction between its accreditation process and mandatory state licensing that may address different standards.

The ACA website also lists state resources. Note that Oregon state

questions the parents have. The teachers set this up. Teachers also order the buses, gather all the necessary forms and administer medication. The medicines are stored with the nurse. I usually supervise the daily counselor meeting with other staff and help out with the counselor training. This helps establish me as the go-to person in the eyes of counselors and any parents who are present.

MANAGING AND EVALUATING STAFF AND VOLUNTEERS

During the recruiting and training phases of your program, you provided printed information to staff, high school counselors, teachers and volunteers. Accordingly, they should all have a solid understanding of their everyday responsibilities, as well as techniques for dealing with common behavioral and situational challenges.

Most of Oregon's well-established outdoor school programs have created procedure handbooks for staff, teachers and counselors. These handbooks include evaluation form templates and models for delivering criticism and helpful feedback. Using these techniques and forms is a good way to conduct fair, responsible evaluations. Everyone involved in creating a good experience for the campers should have an opportunity to offer and receive feedback.

requirements may vary, depending on the county in which the camp resides.

According to the ACA website, "At a minimum, camp staff should be trained in safety regulations, emergency procedures and communication, behavior management techniques, child abuse prevention, appropriate staff and camper behavior, and specific procedures for supervision."

American Camp Association Accreditation at OMSI

ACA sets the standards for the national camp industry. However, ACA accreditation is higher among for-profit and East Coast camps than it is in the West. ACA bases its fees on a percentage of the camp's operating budget, which can be a huge investment. Thus, while ACA safety standards are very useful as guidelines, accreditation may not always be feasible for smaller outdoor schools.

Although ACA accreditation includes many standards that OMSI programs already attain, OMSI's insurance company strongly suggested pursuing accreditation to avoid facing higher insurance rates.

All OMSI staff members share in the ACA accreditation process, which requires compiling all human resources, finance and insurance paperwork in a single binder.

ACA conducts an initial accreditation visit and tour, and visits every three years thereafter to assess paperwork, program orientation and adherence to standards.

OMSI prominently displays its ACA signs by the outside drop-off area and in its catalog, which enhances the credibility of its programs.

Essential Safety Training for Staff and Campers

When hiring and training staff, you must consider your program's needs as well as the climate and habitat at your camp. Your organization might sponsor a first-aid course before camp sessions begin, or at the end of spring season for returning counselors. Ideally, outdoor school staff should be trained in wilderness first-aid and CPR.

Wilderness First Responder training, which typically involves 10 days of intense emergency simulations and practice sessions, should merit a pay increase. Staff members with associate and higher degrees in outdoor education may also have further training in swift water rescue, challenge course facilitation and avalanche safety.

Although a nurse is typically on-site, students may have a medical emergency on a trail more than 10 minutes from camp. It may not be practical to equip all counselors with first-aid kits and walkie-talkies, but you should definitely ensure that you have personnel trained in first-aid and that emergency contact tools are part of your program.

Camper Training and Preparation

Anyone who plans on spending time outdoors should learn about hiking safety, as well as basic map and compass reading. This is especially important for youngsters who are beginning to enjoy freedoms that involve taking risks.

Entertaining skits on the "10 Essentials" (see list in sidebar) have been well received at outdoor schools. Some map and geocaching classes also take place, but they are not widespread as of this writing. A team-based "Island Essentials" survival game is another popular group



The "10 Essentials" for Outdoor Safety

According to the classic mountaineering textbook *Mountaineering: The Freedom of the Hills*, the 10 Essentials are:

1. Map
2. Compass (optionally supplemented with a GPS receiver)
3. Sunglasses and sunscreen
4. Extra food and water
5. Extra clothes
6. Headlamp (outdoor)/flashlight
7. First-aid kit
8. Firestarter
9. Matches
10. Knife

The textbook recommends supplementing these 10 essentials with:

- Water treatment device (water filter or chemicals) and water bottles
- Ice axe for glacier or snowfield travel (where applicable)
- Repair kit, including duct tape and a basic sewing kit
- Insect repellent (or clothing designed for this purpose)
- Signaling devices, such as a whistle, cell phone, two-way radio, unbreakable signal mirror or flare
- Plastic tarp and rope for expedient field shelter



Safety Checklist

Facilities

- Review site maintenance needs.
- Review and update list of on-site staff contacts (roles/responsibilities).
- Fire alarms and extinguishers.
- Emergency phones.
- First-aid supplies, including EpiPens and snakebite kits.
- Walkway, building and lighting maintenance.
- Meet accessibility requirements, remove barriers.
- Check integrity of fencing and gates.
- Check for recalls on major equipment and furniture.

Communications

- Staff walkie-talkies.
- Whistle or siren emergency codes.
- Annual program observation by neutral third party.

- Annual staff trainings.
- Annual staff safety evaluations.
- Background checks on all staff and volunteers.

Safety

- Buddy system enforced, including in water.
- Limited student access to rivers for specimen collection, or staff access only.
- Backpack first-aid kits for adult staff; basic kits for trained high school counselors.
- One-at-a-time rule enforced on water slides and canoe loading.
- "10 Essentials" training.
- Camp orientation on first day.

Wellness

- Ample handwashing stations.
- Require closed-toe shoes (ACN recommendation).
- Require water bottles.
- Maintain shade and rain structures.

ing on installation, harness safety, setting proper expectations and discussing safety with students.

- "One size fits all" does not apply when it comes to harnesses. Although hip harnesses are standard, older or overweight students may be more comfortable with a full-body harness, which could put less pressure on their sides (especially if they turn upside down).
- Harnesses should be checked by two staff.
- It's best not to mix different activity groups on a trail adjacent to a ropes course. Passing hikers may be a distraction from safety practices, so ropes activity should stop while they pass.
- A ropes course must have an enforced clearance area restricted to staff and participating students. This pertains especially to zip lines and entry and exit points, but it can also apply to low elements.
- Students with cameras must obey the clearance areas.

Low-cost, practical alternatives to traditional ropes courses exist. See the *Maintaining Innovative Curricula* and *Resources* sections for information on yoga-inspired challenge activities that may be appropriate for team building at camp or in the classroom.

ESTABLISHING ROLES AND ACTIVITIES FOR TEACHERS

Most outdoor school programs rely on help from committed teachers who help plan the program, contribute to curricula or field guides, and prepare students to attend the camp (i.e., through classroom lessons, getting forms filled out and setting expectations). When students return from camp, teachers should also reinforce what they learned and experienced.

activity. Alternatively, a basic canoe excursion could be enhanced with a labeled map and an ecological scavenger hunt across a lake. This curriculum could be suitable for post-camp field study, or incorporated into another field study.

Ropes Courses

A ropes course is a challenging personal development and team-building activity that usually consists of "high" and "low" elements. Low elements take place on the ground only, or just a few feet above the ground. High ropes courses are usually strung between poles or trees.

High ropes courses are not common in Oregon outdoor schools; they are more prevalent in eastern states. Some Oregon programs focus on a science curriculum without incorporating any ropes activities to avoid negative public perceptions of how dollars are being spent. However, others have incorporated low ropes and challenge courses on the grounds that they provide opportunities for personal growth and character development.

These key safety practices apply to ropes and challenges courses:

- All staff working on ropes courses must have annual refresher train-

The more you can do to make things easy for teachers, the better. Provide them with checklists, templates for letters and forms, medication logs, site information and written answers to frequently asked questions. These resources encourage teacher participation and help them keep students and parents informed.

The Multnomah ESD and Northwest Regional ESD websites offer tried-and-true teacher resources. Take advantage of these resources and adapt them for your own use. (Some of these forms also appear in the *Resources* section.)

Integrating Environmental Education Into the Classroom

There are many time-tested resources for integrating curricula before and after outdoor school. These activities expose students to ecological concepts in a classroom setting before they venture into the field on a day trip or attend an established overnight program.

Creating environmental field days is a good way to preview or reinforce the lessons and spirit of outdoor school. Best practices include:

- Encouraging familiarity with the subject matter and habitat before the trip in order to improve knowledge retention.
- Planning field trips after the students attend outdoor school to reinforce and build on its lessons.
- Enhancing curricula and meeting state benchmarks by drawing on interdisciplinary topics like music, literature, math and art.
- Incorporating physical games and visual activities that engage active learners.
- Sharing cultural history that will inform younger students about



the place in which they live, or the larger ecosystem.

- Using storytelling and visualization.
- Introducing international themes into specific activities in order to broaden awareness.
- Modeling sustainability in classroom and field study activities.

Involving Teachers at Camp

Multnomah ESD Outdoor School's information packet for teachers includes the following list of teacher participation activities:

- Observe and interact with students during the flag and weather activities, twice daily.
- Act as a "guest" at three meals daily.
- Discuss student needs and issues with student leaders on Monday from 4:45 to 5:45 p.m.
- Meet with the outdoor school staff Sunday evening after campfire.
- Attend campfire each evening. Participate as much as possible.
- Interact with student leaders every evening after campfire.
- Provide staff with evaluations of student leaders.

- Interact with students during field day on Thursday.
- Help with daily recreation.
- Help the cleaning team after mealtimes.
- Assist in emergencies.
- Supervise and participate in fire drills.

CREATING AND CONTINUING TRADITIONS

Traditions are vital to the camp experience. They are the stuff of memories and scrapbooks, providing the glue between one generation of campers and the next. They help drive home important lessons and social courtesies. They create a context in which campers, staff and student volunteers can explore and develop creativity and leadership. And they help each outdoor school program develop and sustain its own identity.

New camps have the opportunity to create their own traditions or borrow them from other programs. Consult the *Resources* section for links to songbooks, skits and other ideas.

Camp Tadmor Creates Memorable Outdoor School Traditions

At lakeside Camp Tadmor, veteran Harrison Elementary School teachers have cultivated a vibrant outdoor school tradition that draws on natural sciences and the arts.

Colorful banners dating back at least 20 years surround the rustic lodge walls. Students take great pride in their hand-painted wooden notebooks, which parent volunteers varnish after school. Themed cabin decorations are also selected by high school counselors, many of whom are alumni from the same school district in Sweet Home.

Teachers are so dedicated that they have been attending for 20 or 30 years, and many continue after retirement. The thrifty school kitchen staff has also returned many times, and helps reduce costs and food waste with advance preparation and an established menu.



BUILDING SUSTAINABLE PRACTICES

INTO YOUR PROGRAM

For most outdoor school programs, incorporating sustainable practices is a long-term commitment. This is especially true if they are building capacity, renting facilities and cultivating relationships with site managers.

For schools operating on their own sites, these practices are easier to implement, but can still be time-consuming and costly. Chapter One offered ideas on site design and implementation for managing water, food, wastes and transportation. Further sustainable practices – beyond greening the camp itself – can be accomplished gradually or all at once.

Procurement

Committing to a sustainable procurement policy can be expensive, but once you have a baseline of practices in place, you can start looking at incremental ways to make greener, more durable choices. For example, Camp Westwind has found less expensive green products because its staff carefully tracked supply sources in a procurement matrix.

It often helps to hire a procurement professional with relevant purchasing experience and contacts. If you are working with a partner agency that trains procurement staff in green purchasing (e.g., the Bureau of Land Management or the Forest Service), you can also ask them for advice and vendor recommendations.

Major purchase categories include:

- Cleaning supplies
- Clothing
- Equipment
- Food
- Plates, cups and utensils
- Personal care products (e.g., sunscreen and bug spray)
- Disposable products, plastics, paper
- Vehicles
- Classroom supplies, waterproof notebooks

Major outdoor outfitters like REI sell many recycled or locally produced products, including outerwear, gloves and equipment. In addition, regional green sources exist for all of these categories; some of them have generously donated their products to camps and outdoor or green-oriented auctions.

Eden Village Camp, a summer camp in New York, espouses core values of social and environmental responsibility. Its purchasing reflects



these values: It includes stainless steel and recycled tableware; safe cleaning products, sunscreen and bug spray; organic cotton apparel; compostable trash bags; and 100-percent recycled paper goods. Learn more at edenvillagecamp.org/greening.

Camp Activities

Outdoor schools can incorporate environmental education throughout their daily schedules. Some even integrate sustainability education with their activities, such as weighing food waste, feeding worm compost bins and monitoring water catchments.

At Eden Village Camp, campers make smoothies with a bicycle-powered blender, learn about herbalism and eat organic produce.

Waste Management

As we've already noted, managing trash and recyclables is fundamental to site logistics. Trash and recycling receptacles must be conveniently located; secure from mice, raccoons and other hungry critters; and emptied on a regular schedule.

Outdoor school provides many opportunities to teach students

Dear Metro,

Thank you very, very, very much for the donation to help us go to outdoor school. Without you, a lot of people wouldn't be able to go. Everybody had a great time at Camp Westwind. We learned a lot about how important it is to reduce, reuse and recycle and respect nature. We studied the beach, forest and estuary and all the amazing animals that live there. I especially enjoyed exploring the tide pools and studying the fascinating sea creatures.

This was a wonderful experience that I will remember all my life, and it might not have been possible without you. So again, thank you, thank you, thank you.

– Miranda, John McLoughlin
Elementary School

about the effect their choices and actions have on the environment.

In the Portland metropolitan area, Metro developed a program that contracts with outdoor school providers to provide 6.5 hours of waste reduction education for sixth-grade students from eligible schools, based on the provider's registration records.

Waste reduction activities are incorporated into all aspects of these programs, including meals, field study, recreation, and evening programs. Created in 2009, this program has reached thousands of sixth-graders, teachers and high school students. Questionnaires show that it has increased waste reduction behavior.

Sustainability at Camp Cedar Ridge

The dining hall atmosphere is lively at Camp Cedar Ridge in Vernonia. It's also environmentally friendly, thanks to "Dirt," the sustainability intern who organized staff recycling efforts, worm bins and eco-skits during meals.

Since the inclusion of Metro funds to incorporate 6.5 hours of solid waste education into MESD and NWRESD outdoor school programming, much has changed around camp. The camp has been composting on-site for the last two years.

At mealtime, after seconds were served, a costumed "Cap'n Conservation" made a grand entrance with a 5-gallon bucket, demonstrating the world's water supply and talking about water conservation. Staff members then measured the collected food waste, announced the total and noted that they were aiming for less than five pounds of discarded food.

Later, a high school counselor led students in brainstorming and rehearsing a skit in their cabin. The skit's title was "What does it mean to refuse?" It carried a strong conservation message about turning down plastic bags and unnecessary consumption.

Sustainability at OMSI and Camp Westwind

OMSI owns the unique Hancock Field Station in the high desert. It is usually full; some loyal schools have been coming here for 20 years.

The staff comprises two cooks, a manager, a program coordinator, a maintenance crew and instructors. Hancock has a strong food-waste reduction program, so the staff tries to gauge kids' appetites. Local farmers have made a commitment to match Food Services of America



Ideas for sustainable activities and operations:

- Art made from natural or recycled items.
- Skits with conservation and stewardship messages.
- Basketweaving with locally available fibers.
- Making maps of local resources.
- A tour of the camp's resource management facilities.
- Adding measured food wastes to compost and worm bins.
- Comparing seasonal weather patterns over time.
- Water conservation design contest.
- Recycled items can be used for projects or campfire skits (e.g., making 4-inch terrariums out of recycled CD cases, or using a sleeping bag around a camper to portray a caterpillar).
- Placing a recycling center near an art station or nature center.
- Training kitchen staff on estimating portions and inventory control.
- Cafeteria policies that discourage food waste.
- Strict check-in process for loaner gear, especially rain jackets and boots, that might otherwise go home with students.

or Sysco prices for meats, vegetables and dairy products.

Hancock's staff reuses and maintains many supplies, and avoids craft activities that generate waste. Managers for each program are accountable for cost containment.

The main OMSI building in Portland also sends all food waste and café cups to a municipal composting system.

At Camp Westwind, the board and staff are committed to purchasing products from the green supply stream, including paper goods and cleaning supplies (many of which are

actually cheaper than conventional brands). The staff researches green items and ranks them on a matrix that tracks transport distance, greenness and corporate values.

They are also building relationships with green suppliers. The camp has switched to a food service company that uses an "eco-soap" product, and a local recycling company recycles paper towels from designated containers near the sinks.

They also try to incorporate organic, regional or local foods, although it's difficult to find locally grown food in Lincoln City.

Camp Westwind has implemented 20 energy-saving initiatives, including purchasing water heaters with lifetime guarantees at cost, for a 40-percent savings. The camp has also reduced costs by contacting companies directly and explaining its mission. They encourage carpooling, and have undergone a carbon-offset assessment through a California research company. They are hoping to install solar panels as well.



Managing an Outdoor School Program: Essentials Checklist

Logistics

- Designate a logistics coordinator and delegate essential duties to staff.
- Conduct staff training and reminders as needed.
- Invite parents to tour camp before students arrive.
- Process camp registrations, including health forms and cabin assignments.
- Finalize budget and number of staff, student leaders and volunteers needed.
- Meet with camp facility manager to confirm facility needs.
- Finalize bus schedule, and cabin and study groups.
- Order supplies.

Manage staff and volunteers

- Review assigned tasks and responsibilities.
- Conduct evaluations and gather feedback.

Safety and risk management

- Complete "Hazard Analysis" form.
- Complete safety training for staff and campers.

Roles and activities for teachers

- Send out pre-camp letters, permission and medical forms, and cabin group forms.
- Host open house for parents.
- Integrate relevant curricula into classroom before and after camp.
- Participate in camp lessons and activities.

Build environmental sustainability into your camp

- Research green procurement.
- Use recycled and recyclable materials.
- Improve recycling and waste management practices.
- Plan strategies for waste-free meals and other resource conservation practices.

Program evaluation

- Assess whether goals were met and discuss gaps.
- Compare actual costs to budget.
- Collect feedback from campers, student leaders, counselors, parents and teachers.



From the moment I don my wood cookie, I become a member of a team, and I begin to see what skills and resources each staff member, student leader and sixth-grader brings to the table.

I have learned that having the answers isn't everything; the important thing is having the ability to connect the questions and questioners with their answers, by giving them a push in the right direction.

– Student Leader “Sirius”



Sustaining Your Program

Outdoor school programs are like a living, breathing organism: They need food and water (money and support), a healthy ecosystem (community involvement), and the ability to adapt to changing conditions (creative and flexible oversight).

This chapter will discuss the following ways to sustain the outdoor school program you've worked so hard to establish:

- A. Securing ongoing funds.
- B. Managing and containing costs.
- C. Staff retention and succession planning.
- D. Maintaining innovative curricula.
- E. Nurturing relationships with site owners and managers.
- F. Improving the process.
- G. Sustaining the spirit and lessons of outdoor school.

SECURING ONGOING FUNDS

Finding reliable sources of funding and support – money, volunteers and donations – is the key to sustaining an outdoor school program.

Most of Oregon's outdoor school programs rely heavily on local support. Once you've created a strong and stable program, publicizing it to the broader community will help you to continue building partnerships and finding new income sources.

It's also important to cultivate an organizational culture in which every staff member thinks about prospective funding sources and shares ideas with the development staff. Every connection is important, and no donation is too small.

Here are some proven ways to increase community support for your program:

- Send personalized thank-you notes that do not include additional “asks.”
- Send out quarterly newsletters that spotlight camp news, upcoming events, wish lists and volunteer opportunities.
- Invite donors to a VIP camp tour or sample field study as part of a larger event.
- Host a donor breakfast with a slide show, alumni talks and networking opportunities.

- Send interesting or inspiring stories to the media.
- Find students enrolled in a grant-writing class in a local college to help write grants.

Grants are a particularly important source of funding. Large, competitive grant sources like foundations, governments and businesses require you to invest considerable time in preparing applications, budgeting, reporting and evaluation. Applications that demonstrate broad support and past grant funding tend to be more successful.

Here are a few grant sources:

- North American Association for Environmental Education (www.naaee.net/).
- U.S. Environmental Protection Agency (www.epa.gov/enviroed/grants.html).
- Metro regional government (www.oregonmetro.gov/index.cfm/go/by.web/id=24924).
- The Oregon Community Foundation (www.oregoncf.org).

MANAGING AND CONTAINING COSTS

As costs for supplies, transportation and utilities rise, adopting the following cost-containment strategies can allow you to serve more students over time.

- Monitor year-to-year venue costs. In metro areas, there are often many camps from which to choose, so you may be able to negotiate a cheaper contract.
- Require camp facilities to save on energy and waste disposal by installing insulation, energy-efficient lighting, and recycling receptacles.
- Reduce training expenses by retaining experienced staff.
- Maintain a strong volunteer pro-

gram, so that each instructor can be shadowed by a volunteer instead of a paid staff member.

- Share resources (like curricula and forms) with other outdoor schools.
- Partner with other agencies for curriculum assistance, instructors and facility use, especially for field study days.
- Maintain secure storage and strict inventory controls for expensive equipment and supplies.
- Reduce food waste and creatively procure nutritious foods (see Chapter Two).
- Reduce insurance costs by improving program-wide safety, or registering for American Camp Association accreditation.
- Place a cost-containment worksheet in your program manual for returning staff to complete and update.
- Consider having your program or expenses audited by an independent evaluator.
- Schedule your program in the off-season.
- Hire one cook and ask Job Corps culinary arts students, or parents, to help with food prep.
- Use the food bank and school gardens, and get food delivered from the school district.
- Use Craigslist and Freecycle to find or request free and low-cost supplies.



Managing Food Costs

Interview with Virginia

Tardaewether, Lincoln County Outdoor Education Group and MidCoast Watersheds Council

Initial funding for our program came from Title III funds via Oregon State University Extension, as well as

Oregon Watershed Enhancement Board funds available through the Watersheds Council. Local Native American tribes also contributed funds toward materials and supplies. Eventually, we received a stable funding source of \$2,000 to \$3,000 per year to pay for food and counselors. This included James Standard funds.

Because Lincoln County is an economically depressed area, where 88 percent of students qualify for free or reduced-priced lunches, most of the outdoor school food has come from Food Share (the local food bank) at a greatly reduced cost. They've also saved \$1,200 to \$1,500 by having culinary arts school students prepare most meals ahead of time.

The Drift Creek facility has a full kitchen. Its staff prepares some food on-site, including chili, oatmeal and cakes. They don't serve hamburgers, hot dogs or any other fast food. Food expenses used to cost as much as renting the camp facilities, which could cost \$5,000 for one week.

During a pilot program held at a new state park in Toledo, the students have learned fire safety. They make fires and cook some of their meals over charcoal, in Dutch ovens and in the rain.

It would cost about \$10,000, including user permits, to bring in a fire camp setup with a portable kitchen and bathrooms in trailers, which is not in their budget.

As the logistics point person, I pick up the food and arrange for a storage room and a freezer at the Council. I also reserve the school buses well ahead of time. The biggest challenge is getting an accurate head count of students and their gender in order to plan study groups, cabin groups and food volumes, so we can commit to the facility a year in advance.



STAFF RETENTION AND SUCCESSION PLANNING

Teachers and Administrators

Schools and teachers usually have a choice of which outdoor school to revisit, unless costs are prohibitive at a given facility. Factors like natural beauty, amenities, food, staff and curricula strongly affect their decisions.

Here are some general guidelines for making teachers want to return to your program:

- Provide teachers with comfortable accommodations (not bunk beds), and an adjacent meeting space.
- Issue an annual program update to keep teachers informed.
- Offer fundraising incentives, if applicable.
- Provide clear paperwork that makes the teacher's job easier.
- Schedule ample planning and downtime for teachers.

Creating an advisory committee comprising teachers, administrators and members of the community is a wise investment in your program's future. Multnomah ESD holds a monthly public meeting that includes a representative from each

local school district. Topics include outreach to ESL students and their families, development and revision of in-class preparation materials, support for Friends of Outdoor School efforts, and recommendations for procedure and practice. See *Resources* for more information.

Ideas for engaging school districts include:

- Providing grant ideas and funding resources to districts so that they can participate in your program.
- Offering innovative partnerships and activities for new and existing schools.
- Inviting administrators to open houses or ropes course workshops.
- Using your advisory committee to offer networking opportunities to regional administrators.

Staff and Volunteers

Outdoor school staffers tend to be seasonally employed, and to have greater geographic mobility than the average worker. By increasing staff retention, you can avoid the time and expense of recruiting and training new staff; improve the educational value of your programs; build institutional memory; and create loyal advocates for your program.

Here are some tips on recruiting and retention:

- Offer subsidized coursework at local community colleges and universities that have a relationship with your program.
- Offer referral bonuses to employees who recruit new staff.
- Offer bonus certificates toward outdoor adventures or equipment (e.g., a ski pass, special event or outfitter's store).
- Offer an end-of-season (or year) bonus.

- Pay for outdoor professional association fees or conference attendance.
- Support staff in developing presentations or research for professional conferences.
- Offer special opportunities for off-season projects that will enhance the camp's curriculum, accessibility, cost-effectiveness or sustainability.
- Create schedules well in advance, so that veteran staff members have priority for vacations or nights off.
- Advertise "career ladder" positions to give staff an equal opportunity for advancement.

Developing experienced and loyal staff is possible with stable funding support, training and mentoring opportunities, and supportive partnerships with other organizations. Partnerships bring in more curriculum and venue variety, which can also energize veteran staffers. Professional networking is also very important to seasonal employees.

In 2010, Multnomah ESD Outdoor School and Friends of Outdoor School created a professional group for seasonal environmental educators. This group hopes to share job and professional development opportunities, identify options for shared housing and transportation, solve health insurance and retirement issues, and work with Environmental Education Association of Oregon on advocacy for seasonal staff. Visit seasonaleducatorsor.ning.com for more information.

Succession Planning

Succession planning is also critical to sustaining your program. Outdoor school is a high-energy endeavor, so it's essential to develop, build and maintain new partnerships that will keep the program running

if you decide to leave. Always be on the lookout for ways to engage new people, publicize your program to prospective partners and cultivate loyal relationships within your community.

OMSI's Staff Recruitment and Retention Practices

At OMSI camps, most staff members are recent college graduates and all instructors have degrees. Travis Southworth-Neumeyer says that most staff members transition from fieldwork by the time they are 28. Many leave OMSI to enter graduate school.

There is a generational shift among young people. Many of them don't want to be underemployed or take seasonal work, and they worry about not having health insurance once they are ineligible for their parents' insurance.

Therefore, OMSI offers full medical and dental benefits for seasonal employees who work from February through November. Instructors receive a day rate that is competitive with National Outdoor Leadership School (NOLS) and Outward Bound rates. This rate also accords with the seasonal camp day rate exemption in the federal Fair Labor Standards Act (FLSA), which dictates that employees employed by certain seasonal and recreational establishments are exempt from the FLSA's minimum wage and overtime pay provisions. Returning employees receive a \$10 per day increase in their second year. Other salary factors include level of education, work experience and certifications.

Peer mentoring is important at OMSI. Early-season training includes job shadowing and 10 days of general pedagogical and curriculum topics, as well as site-specific classes. ESD peer leaders sometimes work in both programs.



OMSI sponsors Wilderness First Responder training each February and offers it to staff at cost. It also hosts an in-house commercial driver's license (CDL) training, and has set up its pool for lifeguard certification.

Instructor positions require 48-hour program-specific trainings, including these three certifications. This means that employees must make an investment of approximately \$1,000, while potentially handling student loan and other debts. However, certification is tied to pay increases.

Retention at the Hancock Field Station has been excellent, with most staff staying a second year and half staying for a third year. Employees report that they enjoy the location, the consistent room and board – including housing in winter with volunteer hours – and the opportunity to work on curriculum development and other projects. At OMSI's other sites in western Oregon, roughly half of the employees stay for a second year.

A Story About the Importance of Mentoring

Virginia Tardaewether of the MidCoast Watersheds Council and Lincoln County Outdoor Education Group recounts how a beneficial mentoring relationship helped foster new outdoor school programs.

Virginia met Jan Robbins, a hydrologist with the Upper Willamette Bureau of Land Management, when they were both working with natural resource crews comprising at-risk high school students who were doing trail and trash surveys. (Eventually, these crews participated as counselors at outdoor school.)

Jan worked with Virginia on outdoor school planning while also serving as an instructor and running campfires. Although Virginia has always been the primary funding grant writer, Jan helped with ideas and writing during the first year.

Virginia and Jan later attended a leadership clinic hosted by the Gray Family Fund. Other attendees included the U.S. Forest Service, county extension agents, water-

shed councils, the Bureau of Land Management (BLM), and Northwest Steelheaders.

Jan came to that meeting with the six-member Lincoln County Outdoor Education Group. Although the focus was service learning, the group's main interest was planning an outdoor school program.

Because Jan had experience planning a program in another area of the state, the Lincoln County group took what they felt would work from this program and made it their own. Their outdoor school model is still based on the one that Jan's group created.

MAINTAINING INNOVATIVE CURRICULA

Over the years, the outdoor school tradition has assimilated many classic curriculum ideas for the study of habitats, water quality, geology, animals and plants. However, as innovative programs emerge nationally and globally, opportunities arise to incorporate new ideas into future programming. These ideas can create a more relaxed, imaginative and self-affirming experience for young people, as they enjoy guided imagery, learn about pioneer history, hear about global environmental issues from a traveler or undertake yoga-based team-building activities.

International Connections

Fellow educators and travelers can be a great source of inspired curricula or volunteerism. For example, Peace Corps alumni who have prepared slide shows showcasing their personal involvement with international environmental issues could offer this presentation before or after your program, or as part of a campfire gathering. Some

alumni are also musically gifted and experienced with singing around the campfire. Your local Peace Corps chapter may have a volunteer or service coordinator who can match your program needs with their alumni (www.peacecorps.gov/).

Healing Arts Connections

There is increasing recognition of the connections between environmental and human health. Emerging curricula take a multidisciplinary approach to exploring these connections.

For instance, the "Yoga Calm" curriculum created by Jim and Lynea Gillen integrates yoga, ecopsychology and environmental education through the principles of opening the senses, developing trust in the natural world, fostering a sense of belonging, and encouraging stewardship.

The curriculum incorporates such tools as journaling, guided meditation and yoga poses. This approach can benefit all children and adults, including those with behavioral issues, by developing social and physical skills (www.yogacalm.org/sustainable.asp).

Camp Winema Curriculum Training

At Camp Winema, high school counselors and adult staff hired by Northwest Regional ESD receive valuable training on group dynamics, positive teaching methods and setting expectations. Cue cards with activity questions complement the ecology journals, and help counselors impart visual and content-rich lessons in Oregon geography, plate tectonics, orographic lift, pollution, surface runoff, water conservation, geology, erosion, beach safety and "leave no trace" practices.

The key message of "respect yourself, others and the environment" is modeled throughout camp. Counselors learn such teaching techniques as using a dynamic voice and "I need you to" statements; acknowledging participation and not ignoring wrong answers; staying upbeat despite weather conditions; and positive redirection. They are careful to look at things from the students' perspective, and to recognize "teaching moments" that may take away from lesson time, but will make a lasting impression on their students.

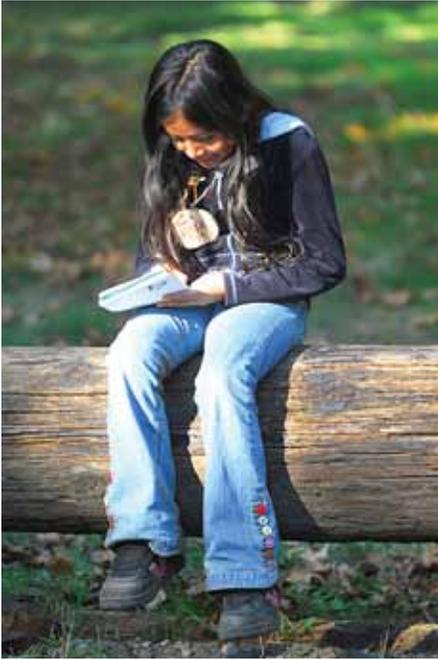
Sustainability Education in the Classroom

Greg Smith is a professor with Lewis and Clark's graduate teacher education program. He is also involved with the Center for Community Engagement, a separate department that connects with school districts. Greg is serving on the No Oregon Child Left Inside (NOCLI) professional development task force.

Greg wrote a successful grant for \$19,000 to The Oregon Community Foundation's Gray Family Fund. These funds support incentives, tours and training for 50 to 60 West Linn and Wilsonville K-12 teachers to incorporate sustainability education in the classroom.

This is not a pilot program. When stakeholders proposed long-term program changes to the superintendent, he strongly supported introducing sustainability themes and activities throughout the district, partly because he has grandchildren and is concerned with water issues and climate change.

Teachers have already toured Portland's Zenger Farm, which is a large urban greenscape that features educational programs, organic produce and eco-retrofitted historic



New students start collecting “novice data” in water monitoring, but eventually become skilled at collecting credible data that are submitted to the Willamette Watershed Council and Department of Environmental Quality. Greg sees this as an excellent example of how environmental education gives students the necessary skills to produce valuable scientific work.

NURTURING RELATIONSHIPS WITH SITE OWNERS AND MANAGERS

It’s important to establish a positive working relationship with the owners and managers of your site. Outdoor school administrators should routinely meet with site owners and managers to discuss the major topics covered in this guide, including safety and maintenance schedules, accessibility, scheduling and fees, food service and recycling, green services, equipment availability, insurance and liability. Meeting regularly to discuss goals and program realities will help you evaluate how well the facility meets your evolving needs.

Relationship-building ideas include:

- Assigning a staff representative to the facility’s advisory board.
- Monthly in-person or phone discussions on programming.
- Having staff volunteer for habitat clean-up days in the area.
- Having staff help with special projects like building a site-based curriculum, or a color-coded site map that the facility can use for other programming.
- Collaborating on a shared grant for capital projects that will benefit both programs under a long-term agreement.

IMPROVING THE PROCESS

You began planning your outdoor school program with evaluation in mind. Now, that initial commitment to evaluation will keep your program strong by enabling continual process improvement.

Here are two of the most important evaluative questions to ask:

1. How well is your program meeting the needs of the community and schools you serve?
2. Where should you focus your improvement efforts?

Answering these questions requires constant dialogue, data collection and reevaluation. An advisory committee can help you evaluate your program and recommend strategies for improvement. For example, Multnomah ESD has created an outdoor school advisory committee that meets monthly throughout the school year. Current initiatives include:

- Outreach to English language learners and their families.
- Development and revision of in-class preparation materials.
- Supporting Friends of Outdoor School efforts.
- Feedback on outdoor school website resources for teachers and parents.
- Guidance on program assessment and evaluation projects.
- Analysis of credit options for high school student leaders.
- Input on the development of inquiry-based field study and follow-up activities.
- Ongoing guidance and recommendations for procedures and practice.

farm buildings in the Johnson Creek watershed. Young people will not just be doing grunt work like pulling ivy; they will actually collect scientific data and offer testimony at public hearings.

Five thousand dollars was set aside to make small seed grants (\$300-\$400) to teachers. Uses of these grants include:

- Tools and gloves to restore a dry creek bed on school property.
- A major garden project at Bolton Primary School.
- Advertising to raise money for a forestry project.
- Equipment to assemble composters for students to bring home.
- A greenhouse in West Linn schools.
- Purchase of *Last Child in the Woods* books by Richard Louv (for parent education).

Greg recently visited Al Kennedy Alternative High School in Cottage Grove, which is currently integrating environmental education into its curriculum. The school has many low-income and credit-deficient students.

Friends of Outdoor School and The Intertwine Prepare for a Five-Year Study

Friends of Outdoor School has collaborated with Northwest Regional ESD's Outdoor School and The Intertwine (www.theintertwine.org) to secure more than a million dollars in federal grant funding that will send Washington County students to outdoor school.

This project will compare the five-year educational results for students who do not attend outdoor school, students who attend for a week, and students who attend for half a week. Friends of Outdoor School expects this study to demonstrate that outdoor school is a strong foundation for educational success in middle and high school.

SUSTAINING THE SPIRIT AND LESSONS OF OUTDOOR SCHOOL

The spirit and lessons of the outdoor school experience need not end when the last busload of students leaves camp. Teachers and parents can help children continue exploring their relationship to nature, and keep the personal connections they made at camp alive and growing.

Here are some worthwhile ideas:

- Take the class on a watershed tour (for example, low-cost bus tours are available to Portland's fenced Bull Run watershed).
- Have students design a field study guide for their school or local natural area.

- Collaborate with an outdoor organization like The Mazamas mountaineering group (www.mazamas.org) to offer an alpine hike and orienteering session.
- Invite popular high school student leaders to school to help with a service learning project or park excursion.
- Host a school dinner and campfire night for fifth- and sixth-graders.
- Have students wear their wood cookies on subsequent outings.
- Create a school display with pictures of outdoor school experiences.



About four weeks after our outdoor school experience, I decided to take my students on an overnight field trip to Camp Kiwanilong.

From the inception of the idea, my students – with outdoor school memories still fresh in their minds – began planning the entire two-day event. They planned the menu, cooked the food, and planned and executed the duty schedule (dining room duties, kitchen duties, campfire prep). They even taught the parent chaperones about symbiotic relationships, and how the four field studies at outdoor school are interconnected.

While we were at the beach, a number of kids climbed up onto a sand dune and urgently called to me.

Thinking something was amiss, I scurried up the hill, only to find that the kids wanted to show me that the view from the dune revealed a distinct edge between four very different biomes.

I was a very proud science teacher when I saw how excited they were to be applying powerful scientific concepts learned at outdoor school in the real-world context of our field trip.

– David Wierth, Science Teacher



Sustaining Your Program: Essentials Checklist

Secure ongoing funds

- Cultivate support and loyalty through events and newsletters.
- Use media to highlight outdoor school benefits and student and school achievements.
- Explore new grantwriting and fundraising ideas.

Find ways to reduce costs

- Hold your camp in an off season.
- Compare costs and amenities of different facilities and negotiate.
- Review staff retention strategies (remember: retraining costs money).
- Seek out preexisting materials (guides, field books) to fill holes in your program.
- Look for ways to reduce food and insurance costs.
- Consider hiring an outside evaluator to review budget and expenditures.

Retain staff and plan for succession

- Create a mentoring program.
- Seek ways to recognize and thank staff and volunteers.
- Review pay scales as needed.
- Utilize professional networking sites online.

Maintain and improve innovative curricula

- Research new or improved curricula online.
- Stay connected through Outdoor School Summit, conferences and other networking opportunities.
- Work with your advisory committee to identify unmet community and academic needs.

Nurture relationship with facility owner

- Assign someone to stay in touch with facility owner throughout the year.
- Collaborate on site improvements (e.g., create volunteer group for litter patrols).

Improve the process

- Create a school/parent/community advisory committee.
- Use your evaluation tools to prioritize and implement program improvements.
- Compare notes and share ideas with other providers.

Keep the outdoor school spirit alive

- Take students on field trips after outdoor school.
- Create social opportunities for students, teachers, staff and student leaders to get together.
- Create a display with pictures to put up in your school.
- Encourage parents to share outdoor experiences with their children.



RESOURCES

This guide contains many inline links and references to useful information. Here are some additional resources to explore, along with links to many of the organizations mentioned in the guide.

Statewide and Regional Networks

- **Environmental Education Association of Oregon** hosts an annual conference and spring evaluation workshops. See also the “No Oregon Child Left Inside” pages on the EEAO website (www.eeao.org).

National Networks

- **American Camp Association** offers guidelines on “How to Start a Camp” (www.acacamps.org/startacamp), as well as the *CampLine* newsletter (www.acacamps.org/campline). The ACA website also has a comprehensive listing of resources in 14 essential areas of camp management: business and finance, food services, health and wellness, human resources, leadership, marketing, mission and outcomes, participant development and behaviors, program design and activities, risk management, site and facilities, strategic planning, target population and diversity, and transportation. ACA has an office in downtown Portland.
- **Association for Experiential Education** is “a nonprofit, professional membership association dedicated to experiential education and the students, educators and practitioners who utilize its philosophy” (www.aee.org).
- **Association of Outdoor Recreation and Education** is a Michigan-based organization that promotes outdoor and environmental education. It hosts an annual conference in fall (www.aore.org).
- **Leave No Trace Center for Outdoor Ethics** offers grants to educate culturally diverse communities and train master educators (www.lnt.org).
- **Outdoor Industry Association** is a nonprofit foundation that encourages active outdoor recreation for all Americans. The OIA also sponsors an “Outdoor Idols” program for sports role models under the age of 23. Useful OIA research papers include “The Next Generation of Outdoor Participants Report” and “Special Report on Youth: The Next Generation of Outdoor Champions” (www.outdoorindustry.org).

Oregon Outdoor School and Program Resources

- **Hood River Middle School Outdoor Classroom Project** (<http://www.clearingmagazine.org/archives/881>).
- **Multnomah ESD Outdoor School** (www.mesd.k12.or.us/os/OutdoorSchool/Welcome.html).
- **Northwest Outdoor Science School** (www.nwresd.k12.or.us/instrserv/noss/).
- **OMSI Outdoor Science School Programs** (www.oms.edu/outdoor-science-school).



- **Trackers NW** (trackersearch.com). See profile in *Appendices*.
- **Tryon Life Community Farm** (tryonfarm.org/share). See profile in *Appendices*.
- **Tsuga Community Commission** is an Oregon-based organization working on community and camp development, including Operation Purple camps for military families (www.tsuga.org).

Other Providers

- **Drift Creek Camp** (www.driftcreek.org).
- **Maiden Spirit** offers female-specific youth development and rites of passage for girls aged 9-13 in Portland (www.maidenspirit.com).
- **Peace Warriors** offers male-specific youth development and rites of passage for boys age 9-13 in Portland (www.peace-warriors.com).
- **Rite of Passage Journeys**. The motto of this Washington state outdoor program is "Get out and go within." Activities emphasize coming of age in community and rite of passage experiences for young people and adults (riteofpassagejourneys.org).

Sample Curricula

- **Environmental Education Association of Oregon Resource Directory** (directory.eeao.org).
- **Multnomah ESD Curriculum Goals** (www.mesd.k12.or.us/os/OutdoorSchool/Resources_for_Teachers/Entries/2010/8/2_Outdoor_School_Curriculum_Goals.html).
- **Multnomah ESD: Oregon State Curriculum Content Standards** (www.mesd.k12.or.us/os/OutdoorSchool/Resources_for_Teachers/Entries/2010/8/1_Oregon_State_Content_Standards.html).

- **Office for Standards in Education, Children's Services and Skills** (Ofsted), *Outdoor Education: Aspects of Good Practice*. London: Ofsted, 2004. Ofsted was commissioned by the Department for Education and Skills (DfES) in the United Kingdom to undertake an evaluation of the personal development aspects of outdoor education within the context of the National Curriculum in physical education, with a specific focus on the work of outdoor education centers. This report concentrates on the outdoor education opportunities provided to students aged 9 to 16. It's available for download in PDF or Word format (www.ofsted.gov.uk/resources/outdoor-education-aspects-of-good-practice).



- **Place-Based Education Evaluation Collaborative** (www.pecworks.org/index).
- **Primitive Outdoor Skills** (www.natureskills.com/skills/primitive).
- **State Education and Environmental Roundtable** (www.seer.org).
- **Yoga Calm** offers wellness workshops for educators, counselors, occupational therapists, nurses and adults who work with children. The emphasis is on earth-centered activities that enhance groundedness and connection with nature, including breathing and relaxation exercises, simple yoga poses, social and emotional skill development, mindfulness and storytelling (www.yogacalm.org).

Manuals and Forms

- **Multnomah ESD Forms for Teachers** (www.mesd.k12.or.us/os/OutdoorSchool/Resources_for_Teachers/Entries/2010/8/2_Forms_for_Teachers.html).
- **Multnomah ESD Resources for Teachers** (www.mesd.k12.or.us/os/OutdoorSchool/Resources_for_Teachers/Resources_for_Teachers.html).
- **Northwest Regional ESD Forms for Teachers** (www.nwresd.k12.or.us/instrserv/noss/FormsforTeachers.html).
- **Northwest Regional ESD Resources For Counselors** (www.nwresd.k12.or.us/instrserv/noss/ResourcesforCounselors.html).
- **Northwest Regional ESD Resources for Staff** (www.nwresd.k12.or.us/instrserv/noss/ResourcesforStaff.html).
- **Wildwood Outdoor Education Center Sample User Group Manual** (www.wildwoodctr.org/PDF/user%20group%20manuel.pdf).

Program Evaluation Resources (from The Oregon Community Foundation)

- D.B. Bennett, *Evaluating EE in Schools: A Practical Guide for Teachers*. UNESCO-UNEP, 1984 (unesdoc.unesco.org/images/0006/000661/066120eo.pdf).
- *Does Your Project Make a Difference? A Guide to Evaluating Environmental Education Projects and Programs*. Sydney, Australia: 2004 (www.environment.nsw.gov.au/community/projecteval.htm).
- J. Frechtling, *The 2002 User-Friendly Handbook for Project Evaluation*. Washington, DC: National Science Foundation, 2002 (www.nsf.gov/pubs/2002/nsf02057/nsf02057.pdf).



- **“My Environmental Education Evaluation Resource Assistant”** is an online evaluation program created by the Natural Resources and Environment Department at University of Michigan, Ann Arbor (meera.snre.umich.edu).
- B. Simmons, ***Designing Evaluation for Education Projects***. Washington, DC: NOAA Office of Education and Sustainable Development (wateroutreach.uwex.edu/use/documents/NOAAEvalmanualfinal.pdf).
- W.K. Kellogg Foundation, ***W.K. Kellogg Foundation Evaluation Handbook*** (www.wkkf.org/knowledge-center/resources/2010/W-K-Kellogg-Foundation-Evaluation-Handbook.aspx).
- **University of Wisconsin - Stevens Point (UWSP): Applied Environmental Education Program Evaluation Course** (www.uwsp.edu/natres/eetap/aeepe_course_page.aspx).



Environmental Education Resources (from The Oregon Community Foundation)

- **North American Association for Environmental Education (NAAEE)**. Established in 1971, NAAEE is a network of professionals and students working in environmental education throughout North America (www.naaee.net).
- **EElinked Networks**. A project of NAAEE, EElinked Networks is the primary portal for online environmental education information. Resources include a calendar of EE events in North America, jobs and grants for environmental educators, and classroom resources (eelinked.naaee.net).
- **National Project for Excellence in Environmental Education**. Another project of NAAEE, the National Project for Excellence in Environmental Education has established standards for the development of “balanced, scientifically accurate and comprehensive” environmental education programs that “support student learning and increase environmental literacy” (<http://eelinked.naaee.net/n/guidelines>).

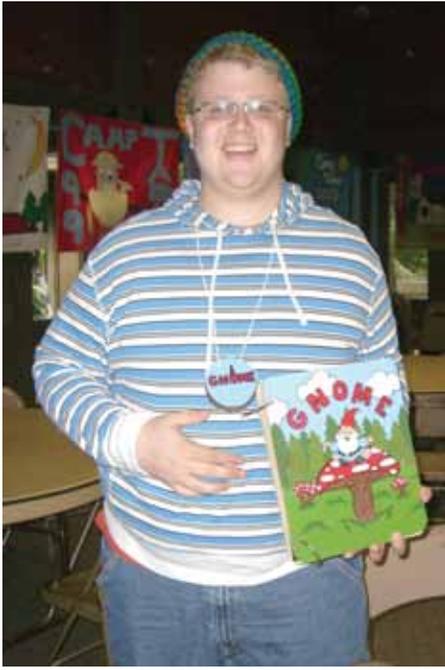
- **Environmental Protection Agency’s Office of Environmental Education** advances and supports educational efforts to develop an environmentally conscious and responsible public, and to inspire personal responsibility in caring for the environment (www.epa.gov/enviroed).

Additional Environmental Education Resources

- **Diack Ecology Education Program** (diack-ecology.org).
- **Environmental Education and Training Partnership** (eetap.org).
- **National Audubon Society** (www.audubon.org).
- **National Environmental Education Foundation** (www.neefusa.org).
- **National Wildlife Federation** (www.nwf.org).
- **Oregon Explorer** (oregonexplorer.info).
- **Project Learning Tree** (www.plt.org).
- **Project WET** (www.projectwet.org).
- **Project WILD** (www.projectwild.org).
- **World Wildlife Fund** (www.worldwildlife.org).

Sustainability, Waste Management and Resource Conservation

- **Metro Waste Reduction Education at Outdoor School** (www.oregonmetro.gov/index.cfm/go/by.web/id=29198).
- **Metro Waste Prevention and Recycling Resources for Schools** (www.oregonmetro.gov/index.cfm/go/by.web/id=546).
- **Natural Step** offers sustainability training and workshops for outdoor school staff (www.naturalstep.org/fr/usa).



Green Design and Building Practices

- **East Bay Regional Park District: Camp Arroyo.** Straw-bale insulation and solar-heated pools are among the many green features at this camp in California (www.ebparks.org/activities/daycamps/arroyo).
- Mark E. Benton et al., **"Green and Sustainable Design for Camp Facilities"** *Camping Magazine*, March-April 2005, accessed February 27, 2011 (findarticles.com/p/articles/mi_m1249/is_2_78/ai_n13681609/).

Green Procurement

- **"Green Procurement,"** GreenBiz.com, accessed February 27, 2011 (www.greenbiz.com/business/research/report/2004/01/20/green-procurement).

Safety and Wellness

- **American Camp Association** offers online injury and illness prevention courses related to providing healthy camp experiences for participants and staff. These courses, based on results from ACA's Healthy Camp Study

and developed with support from the Association of Camp Nurses, teach camps and other youth development programs to reduce the likelihood of camp injuries and illness. A current "healthy camp" study focuses on summer residential camps only from 2005-2010 (www.acacamps.org/einstitute/healthycamp/).

- **Association for Challenge Course Technology** (www.acctinfo.org).
- **Association of Camp Nurses** offers professional networking, conferences, current research and online study courses (www.acn.org/researchrefs/healthycamps.html).
- **Outdoor Ed** is an excellent site for safety resources and training. This website hosts the Adventure & Recreation Law Community, a private online community that requires an annual subscription. Many members specialize in outdoor and recreational law (www.outdoored.com).
- **Outdoor Safety Institute** is a Colorado-based company offering custom risk management services and online assessments (www.outdoorsafetyinstitute.com).
- **SNEWS** is a fee-based website featuring outdoor and fitness-related news, including national safety reports (www.snewsnet.com).
- **Oregon Environmental Management and Oregon Military Department, Search and Rescue Annual Report** (www.oregon.gov/OMD/OEM/tech_resp/sar.shtml).
- **Corvallis Outdoor School: Emergency Medical Information Form in Spanish** (http://www.csd509j.net/outdoor_school/wp-content/uploads/2008/09/informacion-medica-en-caso-de-emergencia.pdf).

Diet and Nutrition

- **Berkeley, CA School Lunch Initiative.** Among many other achievements, Berkeley school lunches now feature organic breads, grass-fed meats, hormone- and antibiotic-free milk, brown rice, salad bars and a 95-percent reduction in processed foods (www.school lunch initiative.org).

Health Benefits of Being in Nature

- **Western Rural Development Center: Rural Connections** (wrdc.usu.edu/htm/rural-connections).

Accessibility and Special Needs

- **Adventures Without Limits** offers a good directory of Oregon and regional resources on working with people of all abilities (www.awloutdoors.com).
- **National Center on Accessibility** provides studies on accessibility, facility retrofitting and inclusion (www.ncaonline.org).
- **Just DO-IT** (Disabilities Opportunities Internetworking Technology) is a University of Washington program that lists communication guidelines and housing considerations to improve education accessibility and universal design principles (www.washington.edu/doit/; www.washington.edu/doit/Brochures/Academics/equal_access_hrl.html; www.washington.edu/doit/Brochures/Programs/ud.html).
- **Multnomah ESD: Supporting Children with Special Needs** (www.mesd.k12.or.us/os/OutdoorSchool/Special_Needs.html).
- **Individuals with Disabilities Education Act of 2004** (en.wikipedia.org/wiki/Individuals_with_Disabilities_Education_Act).

- Steve Brannan et al., ***Including Youth with Disabilities in Outdoor Programs: Best Practices, Actions and Resources*** (Urbana, IL: Sagamore Publishing LLC, 2003). Two copies and one CD are available at the PSU library. The CD contains skill level assessment information for both students and parents. More than 150 parks, recreational and educational titles, including this one, are available from Sagamore Publishing's website (www.sagamorepub.com).
- Melissa Navas, **"Tigard-Tualatin Nurses Raise Liability Questions Over School Requests."** *The Oregonian*, August 28, 2010, accessed January 30, 2012 (www.oregonlive.com/tigard/index.ssf/2010/08/tigard-tualatin-schools_nurses_seek_balance_in_caring_for_medically_fragile_students.html).



Case Studies and Evaluation of Camp Benefits

- Steve Brannan and Ann Fullerton, **"Case Studies Reveal Camper Growth."** *Camping Magazine*, January/February 1999, accessed February 27, 2011 (www.acacamps.org/campmag/cm991case).

English Language Acquisition and Literacy

- **Project GLAD** (Guided Language Acquisition Development) is a model of professional development in the area of English language acquisition and literacy, which promotes academic achievement and cross-cultural skills (www.projectglad.com/glad.html).

Multicultural Communication

- **Corvallis Outdoor School: Outdoor Camp Information in Spanish** (www.csd509j.net/outdoor_school/wp-content/uploads/2008/09/escuela-campestre-informacion-2008.pdf).
- **Multnomah ESD: Parent Information in Four Languages** (www.mesd.k12.or.us/os/OutdoorSchool/Resources_for_Teachers/Entries/2010/8/2_Parent_Info_in_Spanish%2C_Russian%2C_Vietnamese____.html).

Funding Resources

- **E² Foundation** (www.mesd.k12.or.us/foundation).
- **Friends of Outdoor School** (www.friendsofoutdoorschool.org).
- **InspireOut.** Justin Swift and Melissa Amacher of InspireOut have formed an organization to raise scholarship funds for three outdoor schools, including Klamath Outdoor Science School in Southern Oregon. They hiked the entire Pacific Crest Trail in 2010 to raise awareness and funds (inspireout.com).

Human Resources

- **American Camp Association** has position description templates for most camp jobs (www.acacamps.org/members/jobdesc/titles.php).
- American Camp Association's **"State by State Information for Camps - Regulations and Other Info"** offers information pertaining to hiring seasonal workers and wage law (www.acacamps.org/sites/default/files/images/public_policy/regulations/print.pdf). For additional information, see www.acacamps.org/publicpolicy/minwage and www.dol.gov/elaws/esa/flsa/screen75.asp.



- **Multnomah ESD Job Descriptions** (www.mesd.k12.or.us/os/OutdoorSchool/Opportunities/Opportunities.html).
- **Nature's Classroom in New Hampshire** offers a helpful recruiting job description with a realistic daily schedule (www.naturesclassroom.org). This site was formerly known as Boston University's Sargent Camp.
- Dr. Lynette Fleming's **Reflective Practitioners: Environmental Educators Share Their Professional Development Needs for the Next Five Years** (2010) is available on the Environmental Education and Training Partnerships (EETAP) website (www.eetap.org).





Notable School and College Programs

- **Mt. Hood Community College** in Portland, Oregon is “the only collegiate-level academic program in the Northwest affiliated with the Wilderness Education Association (WEA). Mt. Hood Community College is a current educational institutional partner with the Leave No Trace Center for Outdoor Ethics. The Leave No Trace principles strive to educate all those who enjoy the outdoors about the nature of their recreational impacts as well as techniques to prevent and minimize such impacts.” Graduates of the MHCC Wilderness Leadership and Experiential Education (WLEE) program receive the following certifications: First-aid/CPR; Wilderness First Responder; Leave No Trace Master Educator; Swift Water Rescue Technician; Climbing Wall, Single Pitch and Challenge Course Facilitator; Avalanche Level I and II; WEA Stewardship; and WEA-certified outdoor leader (www.mhcc.edu/WildernessLeadership.aspx).
- **Prescott College** in Arizona offers interdisciplinary fields include

ecopsychology, environmental education, outdoor adventure education and wilderness leadership (www.prescott.edu).

- **Antioch College** in New Hampshire offers majors in environmental education and science teaching (www.antiochne.edu).
- **Lewis & Clark College** Graduate School of Education and Counseling offers place-based education and eco-therapy courses. See profile in Chapter Four (www.lclark.edu).
- **Western Washington University** in Bellingham, WA has an outdoor leadership major and environmental science programs (www.wvu.edu).
- **Montreat College** in North Carolina offers a Bachelor of Science in Outdoor Education or Outdoor Ministry, as well as minors in outdoor education and outdoor ministry (www.montreat.edu).
- **Catlin Gabel** offers private pre-K through high school education in Portland, OR. See profile in *Appendices* (www.catlin.edu/middle/outdoor-program).

Further Reading

- Harvey Daniels et al., ***Best Practice: Today's Standards for Teaching and Learning in America's Schools*** (Portsmouth, New Hampshire: Heinemann, 2005). Child-centered instruction with an emphasis on interactive approaches.
- Jeff Albin, ***Changing the Message: A Handbook for Experiential Prevention*** (Bethany, OK: Wood 'N' Barnes Publishing, 2004). An interesting discussion of ropes courses and group development activities, from a professional with a background in drug and alcohol prevention, yoga instruction and wilderness survival. Includes a classroom-based “Yoga on the Ropes” course that uses yoga tools like blocks, mats and straps for adaptable team-building exercises.
- Gregory A. Smith and David Sobel, ***Place- and Community-Based Education in Schools*** (London: Routledge, 2010). Discusses the effects of place-based education on academic performance, student engagement and civic participation, and notes the limitations of relying upon test scores.
- Randall Grayson, ***Creating Exceptional Camps: Tools and Resources for Improving the Outcomes of a Camp Experience***. Grayson is a specialist in emotional intelligence, and camp development consultation (www.visionrealization.com).
- Collin Ellard, ***You Are Here: Why We Can Find Our Way to the Moon, But Get Lost in the Mall*** (New York: Knopf Doubleday, 2010). This Canadian author writes about modern people losing intuitive wayfinding abilities. Discusses studies on spatial cognition; psychology and the built environment; the effects of natural settings on behavior and feelings; and reconnecting children with natural spaces.



Appendices

REPRESENTATIVE HISTORIES, MISSION STATEMENTS AND PROGRAM DESCRIPTIONS

Multnomah Education Service District



Outdoor school began in Multnomah County in 1966 as a week long residential program. Multnomah Education Service District (MESD) – then known as the Intermediate Education District – received a federal grant through the 1965 Elementary and Secondary Education Act to pilot an outdoor school project in the four-county metro area. Known in the 1960s as Oregon Outdoor Educators, this was the state’s first large-scale, long-range outdoor education program.

During the 1966-1967 school year, 8 percent of sixth-graders in Multnomah, Washington, Clackamas and Columbia counties attended outdoor school, thanks to federal grants.

In 1968, the Intermediate Education District took over program funding and provided Outdoor School to students in the other three metro counties at cost.



The program grew quickly; by the 1970-1971 school year, all 9,000 sixth-graders in Multnomah County had the opportunity to attend. Other counties, including Washington and Clackamas, soon added similar programs.

Today, MESD operates five residential sites in spring and fall. It offers Outdoor School to every district in Multnomah County, and also contracts with outside schools. In Multnomah County, classes must participate at the district level: either the entire district participates, or no classes from the district participate. As of 2011, all eight county districts participate, with some doing partial-week programs.

MESD Outdoor School’s mission is as follows:

- Teach field-based science concepts as they relate to natural resources. This instruction is hands-on and meaningful for real life.
- Provide instruction that promotes critical thinking and collaboration.
- Extend science instruction beyond the classroom.
- Implement planned activities that promote participation in cooperative living experiences, performing arts, recreation and structured events.
- Provide for the safety, physical and medical needs of all students.

- Promote self-esteem, leadership and confidence among sixth-grade and high school students.
- Practice gender and ethnic equity, and honor and promote diversity and multicultural awareness.
- Teach interpersonal skills and provide opportunities to apply them in a variety of settings.
- Address the needs of all learners, regardless of individual learning differences or challenges.
- Treat each student and staff person with dignity and respect.

www.mesd.k12.or.us/os/OutdoorSchool/Welcome.html

Northwest Regional Education Service District

Northwest Outdoor Science School contributes to the development of environmental literacy and responsible citizenship, provides hands-on learning experiences that integrate with local school curricula, and promotes knowledge and appreciation of the natural world.

Its curriculum meets standards set by the Oregon Educational Act for the 21st Century, and aligns with benchmarks for fifth- and eighth-grade science, math, English, social sciences, health and physical education, and the arts. It also exposes students to careers in science and natural resource management, by allowing them to participate in real scientific research through data collection and analysis.

www.nwresd.k12.or.us/instrserv/noss/index.html

Tillamook County Outdoor School

Outdoor school for sixth-grade students in Tillamook County began in the late 1960s as a pilot project of Oregon State University. It took

place at Camp Magruder in Rockaway Beach under the auspices of Tillamook County Education Service District.

In the 1977-1978 school year, the program moved to Camp Meriwether, a coastal Boy Scout camp just south of Cape Lookout. Because camp was held in late spring, it tended to be an extremely wet, muddy and windy experience for all concerned.

After a few years of spring at Camp Meriwether, the three camp directors – Bill Bentley, Sandra Archerd and Dean Bones – decided to hold camp in fall, when the weather was nicer and the trails were in better shape. Another benefit of offering camp in fall was that students would begin the school year with the knowledge and skills gained during camp still fresh in their minds. At that time, camp consisted of three one-week sessions, each of which hosted roughly 100 sixth-graders.

In the early 1980s, Tillamook County ESD ended its support of the program. Dean Bones continued to plan and direct outdoor school for the Tillamook School District; other school districts provided their own outdoor school programs. After several years of this arrangement, all of the school districts were once again holding outdoor school together.

During this time, all program money came through East Elementary School, where Dean was teaching. In the summer of 1988, concerns arose about the legality of processing other districts' money through one district's school. Therefore, roughly a month before the 1988 camp session, Dean and his wife Laurie formed a company to provide the program. Creative Memories Co. operated as a for-profit company, because this was the only way to form the company

in time for the 1988 camp season.

In 1990, Creative Memories Co. reformed as a nonprofit. Two years later, it gained tax-exempt status. In 1997, a law firm insisted that the name be changed, on the grounds that The Antioch Company of Ohio had a "Creative Memories" division. To avoid legal costs, Creative Memories Co. changed its name to Tillamook County Outdoor School (TCODS).

In the late 1990s, DeAnna Walker Upton, along with many helpers, began fundraising efforts to wipe out the debt Dean and Laurie had incurred while producing outdoor school, and to keep the per-student price as low as possible. Fundraising included rummage sales, sales of local savings cards, dunk tank operations at the county fair, and waiting on tables at the annual Oregon Hunters Association dinner (which has since become the annual TCODS Steak Dinner and Auction). Thanks to these efforts, the debt was taken care of, and Tillamook County Outdoor School was able to lower its per-student price from \$98 to \$90.

www.oregoncoast.com/tcods/

Coast Range Natural Resources Education Organization

The Coast Range Natural Resources Education Organization (CRNREO) is a partnership of schools, businesses, agencies, organizations and individuals dedicated to developing, implementing and promoting natural resources education and related programs, including Forest Camp Outdoor School.

Forest Camp Outdoor School provides environmental education to the public through partnerships with local schools; local, state and federal agencies; businesses;

and organizations. The program's primary focus is to increase knowledge and appreciation of Oregon's natural resources among its sixth-grade target group. The intent is to make students aware of Oregon's culturally diverse environment and inspire them to take informed actions that protect natural resources. By fostering individual responsibility to recognize, conserve and preserve these resources, the partners further their message of caring for the land and serving its peoples.

Coast Range Natural Resources Education Organization

A History by Jan Robbins

In the early 1990s, the small communities of Alsea, Eddyville and Alpine joined with the Alsea Ranger District of Siuslaw National Forest and two Oregon Department of Fish and Wildlife fish hatcheries (Fall Creek and North Fork Alsea River) to put on a five-day residential outdoor school program for sixth-graders. Zion Lutheran School in Corvallis joined the participants during the development phase of this program.

The founders' motivations varied. Some had taken students to outdoor school and been impressed, and some had children for whom they wanted to provide this opportunity. Others were educators who needed an effective way to reach regional youth. No single person had a great deal of time or money to contribute, but they found that by pooling their resources, they could produce a quality program.

The first Forest Camp took place at Fall Creek Fish Hatchery in spring of 1992. Roughly 90 students participated at a cost of \$35 per student. Student groups camped in surplus military tents, with a parent and high school student supervising each



group. A cook prepared food on-site with assistance from parents, and a "Camp Mom" kept the students accounted for and busy. Classes were taught by resource professionals who volunteered time and materials. The nurse was also a volunteer. Conditions were primitive, and there were no shower facilities.

In 1996, participating schools and partners formed CRNREO to clarify partner roles, obtain recognition and support from participating businesses and organizations, and attain nonprofit status for the purpose of applying for grant funding.

Despite many challenges, Forest Camp proved to be sustainable, thanks in large part to the commitment of individuals representing the partners. Two of the original schools closed, and new schools joined CRNREO. Alsea Ranger District was consolidated to another district and the Alsea ranger station was sold. Fall Creek Fish Hatchery became the Oregon Hatchery Research Center, and the upgraded facility could no longer house Forest Camp. One business partner was sold to another company and eventually left the area, while another business partner has been a stalwart

supporter. Founding staff retired or moved on, but a significant number of the founders still return each year to volunteer at Forest Camp.

Today, Forest Camp serves about 170 sixth-grade students from Alsea, Zion Lutheran, Monroe, Scio, Hamilton Creek and Lacombe schools. Forest Camp moved to Camp Tadmor in 2003, and the program costs about \$100 per student for the entire five days. Parental support with cabins, kitchen duties, transportation and fundraising is critical to the continued success of Forest Camp. Instructors from roughly 10 agencies and businesses, and coordination from the CRNREO board, are also essential to producing a quality annual program.

Lincoln County Outdoor Learning Program

Mission:

- Teach field-based science concepts as they relate to natural resources. This hands-on instruction is meaningful for real life, and supports Oregon's educational benchmarks. It also aligns with the mission and goals of the natural resource agencies involved.

- Provide instruction that promotes critical thinking and collaboration, and helps youth to be good stewards of the land.
- Extend science instruction beyond the classroom, giving students much-needed laboratory and outdoor field experience. These activities promote learning and health goals supported by the research of Richard Louv, and nurture a cultural and historic understanding of the area through native arts and culture.
- Implement planned activities that encourage participation in cooperative living experiences, performing arts, creative arts, singing, storytelling, recreation and structured events.
- Provide for the safety, health and well-being of all students.
- Promote self-esteem, leadership and confidence among sixth-graders and high school students. Give students opportunities to share their artwork with each other, and with a wider audience, through performance and other means.
- Practice gender and ethnic equity, and honor and promote diversity and multicultural awareness. Students practice native language acquisition skills.
- Teach interpersonal skills and provide opportunities to apply them in a variety of settings.
- Meet the needs of all learners, regardless of individual learning differences or challenges.
- Treat each student and staff person with dignity and respect. Give youth opportunities to practice these skills. Native art teachers and staff are especially known for modeling these qualities in all aspects of the daily routine.



Klamath Outdoor Science School

A conversation with Bill Hunt, Executive and Education Director with Klamath Outdoor Science School

Klamath Outdoor Science School (KOSS) was originally conceived in 1999. The first tent camps were in place by 2003, and yurts followed in 2005.

Currently, 30 to 80 students and staff routinely attend two- to four-day residential programs at this rustic camp. The facility is usually at capacity.

KOSS prioritized building capacity before improving its facilities. Its current two-part master plan includes electricity, heat, septic and restroom improvements to be funded by a local capital campaign, as well as secondary improvements to the kitchen and dining hall.

KOSS is located within the 10-acre Sun Pass State Forest and surrounded by 30,000 acres of undeveloped land and tent space. The Klamath Bird Observatory is nearby.

Nine overflow U.S. Forest Service sites (or “out camps”) are available, including Lake of the Woods, which is roughly 20 miles away. These sites can be leased if KOSS is double-booked. If satellite camps are utilized, the main camp needs to have state-of-the-art facilities in order to meet county requirements.

Budget and Funding

Because KOSS is a nonprofit with a mission to channel funds toward education, it originally offered free or low-cost programming. It has since had to “retrain” participating schools to get them to pay at least 30 percent of the cost. KOSS staffers often meet with teachers one on one, which has earned the program important allies.

KOSS analyzed its \$45 per student per day resident fee and found that it did not cover employee salaries, phone, insurance or administrative support costs. Therefore, KOSS has updated this fee to \$65 per student per day, which reflects all expenses.

The U.S. Forest Service and the U.S. Fish and Wildlife Service pro-

vide scholarship funding and take lead roles. KOSS has never turned a student away, not even for its summer programs. The scholarship fund has rarely been used in past years, but is set to increase after a recent InspireOut fundraising trek along the Pacific Crest Trail.

KOSS depends on multiple partner funding sources, including Oregon Watershed Enhancement Board, Klamath County Title III funds, the Meyer Memorial Fund, the Gray Family Fund, the Jeld-Wen Foundation, the Collins Foundation and OSU.

Bill would like to oversee fewer time-intensive grants and save more money internally, so that more funds can go toward programming. Local fundraising has been sluggish, but some banks have made sizable donations. Construction and logging business contributions have been on hold.

Bill would also like to streamline statewide communications and funding, and reduce competition among the wide range of community groups trying to offer outdoor education services. KOSS currently has 30 to 40 partners, and has a goal of working with 70 providers to provide “cradle to coffin” education from Northern California through the Klamath Basin and into the Rogue Valley.

Curriculum and Outreach

Schools can design their own curriculum. KOSS provides the residential program and food service, as well as a packet that includes a packing list, scholarship form and gear rationale. A “winter wonderland” curriculum is popular through June, when the snow melts. KOSS draws from a pool of naturalists who work with three to four schools, as well as Park Service staff

from the nearby Lava Beds National Monument.

Paid liaisons trained as naturalists or teachers work 20 hours a week in area schools. They give presentations, break down barriers to outdoor education, locate funds and target small grants.

Insurance

As of this writing, KOSS is reviewing its costly \$2 million local insurance policy. Bill noted that there are often legal ramifications to insurance duplication between school districts and private programs. Camp insurance may be totally void where other coverage, including the Oregon Health Plan, applies. 4H programs provide full dental/health insurance for partners at a rate of 25 cents per student per day.

State law or county health departments may also require a participating hospital letter for rustic camp settings.

www.klamathoutdoorschool.org

Two School-Based Programs

Crook County Schools in Prineville

A Conversation with Lori Meadows, Teacher and ODS Director

Crook County’s outdoor school program has enjoyed more than 50 years of continuous support, much of which has come from dedicated grandparent alumni. An Oregon State University grant launched this program in the 1950s. In the first year, a teacher named Mrs. McCormack took one class. By 1960, all students were attending.

As of 2011, all sixth-graders from three Crook County schools attend this five-day program together.



Site

Outdoor school is held at the Sutter Lake Methodist Camp near Sisters, which is about 60 miles from Prineville. The school rents the facility for three weeks in the spring, and provides its own educators, cook and food. A lake, creek, fish hatchery and forested areas are all in the immediate vicinity or within a short bus ride.

Curriculum

Students use the curriculum guide primarily in the classroom. On the three full days, they undertake forestry, wildlife and plant plot studies.

Students learn to work together early in the week. Teachers lead them in a low ropes course on the first day, teaching them to climb a “spider web” and over a high wall.

Evening programs include music, storytelling and skits. At a concluding banquet, each student receives an award.

Budget and average costs

Annual costs range from \$60,000 to \$65,000. The majority of the expense comprises personnel costs, including contract pay for 24/7 duty for nine teachers and substitutes, and three cooks.

The average cost per student is \$350 per week. Each student is

asked to pay \$100, which is less than a third of the true cost. Some students contribute their school lunch money subsidy for the week.

Between 2007 and 2010, the program faced cuts, but it was saved by fundraising (including grants and private donations). Recently, \$24,000 in grant funds contributed to the annual total of \$65,000.

Transportation and food

At \$10,000, transportation costs are a relatively small part of the budget. The state reimburses 70 percent of this amount, after which the school district pays for only \$3,200.

Food costs total approximately \$1,600. Staff taps into the school lunch program; at least one-third of the food comes from this government commodities program. One school district employee works with other chefs (including a retired head cook who has worked for 15 years at outdoor school). They order fresh milk and purchase fresh vegetables.

Home-style meals served to tables of eight are a big part of the camp experience. Students also help to prepare and serve dishes. The menu accommodates food allergies, and a school nurse is always on duty.

Staff

Two co-directors, one male and one female, alternate between directing and teaching each week. They split the director's salary.

Teachers choose 50 high school counselors after an application process and assembly day. Each new group of staff members receives three consecutive nights of training on the ground rules for working with students. On the Sunday before camp, counselors take the students' role in the plot study they will lead that week. Three program counsel-



ors run the evening programs and help out in the cabins.

Mt. Pleasant Elementary, Oregon City

A Conversation with Principal Carol Kemhus

In 2009, when Mt. Pleasant Elementary returned to outdoor school after a 15-year absence, the other seven elementary schools in Oregon City were participating. Clackamas ESD had paid for outdoor school in previous decades. When allocations changed, Carol Kemhus spent three years researching programs and locating new funding.

Carol found that OMSI offered a high-interest, hands-on outdoor school curriculum with a strong science foundation. Without this high-quality program, her school would probably not have been able to return to outdoor school. She also points out that OMSI programs require less work from teachers, which results in greater buy-in.

Fifty-six percent of the students at this Title I school live in low-income households. They tend to have low vocabulary scores and limited hands-on experiences. Many of them live in apartments and have never been to the beach. Sixty fifth-grade students attend the program each year.

Funding

Carol used the Oregon Department of Education standards guide as a basis for evaluation, which was integral to the school's grant application to the Gray Family Fund. Grant amounts ranged from \$8,000 to \$10,000 per year.

The recent addition of Metro's solid waste and recycling funding (\$57 per student) is also immensely helpful. Each student contributes \$50 toward the \$270 tuition for a four-day spring program. Fall and winter fundraisers, including sales of discount pizza cards, help with the rest. The PTC or parent club also provides each teacher with a small stipend of \$125 as a token of appreciation.

Carol feels that her school would not have been able to participate without this crucial grant support. She worries about the sustainability of outdoor school participation without the Gray Family Fund and Metro programs.

Staff

Staffers plan with OMSI teachers, who then teach a customized curriculum. High school counselors assist during program time and meals. They attended Camp Magruder for two years, and will now attend Camp Attitude.

OMSI charges fees for attending adults and students. They do not charge fees for one-to-one aides who serve students with disabilities. These aides usually work six hours per day and donate their time while at outdoor school.

Evaluation

1. Pre- and post-camp tests. All campers take the Oregon Assessment of Knowledge and Skills (OAKS) test. Results are charted and recorded online. Science test scores show an improvement of up to 20 percent since 2009. Students can take the test up to three times in one year. Newer teachers learn to tailor lessons to improve scores and support the outdoor school curriculum.
2. Journal writing. Students make journals with recycled paper covers and write in them every day. At camp, OMSI staff asks them to answer questions in these journals.
3. Slide show. Each student receives a CD copy of this emotional presentation.
4. Surveys. Students and counselors fill out surveys on the last day of outdoor school.
5. Thank-you letters. Students write thank-you letters to the Gray Family, and teachers review them for writing improvements and evidence of concrete learning.

Carol notes that it's difficult for standard evaluation tools to capture the emotional intensity and life-changing impact of outdoor school on students' outlook and behavior. Of the sixth-graders who attended in fifth grade, 90 percent say it was the best experience of their school year and hope to return as counselors.

CASE STUDIES AND INTERVIEWS RELATED TO DEVELOPING A NEW SITE

Creating a Master Plan

A master plan provides the framework for developing a facility that meets practical goals, fulfills an organization's mission and attracts funding sources and community support.

The Snowden Wetlands Outdoor School Master Plan – published in 2010 as a report to The Oregon Community Foundation and the Gray Family Fund – includes program inspiration and history; an executive summary; organization background and mission; site access, map and natural features; ecology of site, flora and fauna; current site uses; curriculum description; outdoor school case studies; goals and keys to success; safety considerations; strategy and implementation summary of research, restoration, facilities and permitting; financial plan and conclusion; and relevant forms.

Putting this amount of detail into a master plan requires a long-term commitment and expert input. An active board comprising volunteer experts in specific fields like permitting, budgeting and site restoration will make this task much easier, and can also help to raise funds when appropriate.

Camp Design, Construction and Retrofitting

Some locales may not have a suitable facility available for outdoor sessions in spring and fall. Existing facilities may not have adequate heating, especially if they are used primarily for summer programs. Other facilities may have use restric-

tions, exorbitant costs, or run-down or inadequate amenities. Still others may be too small, too expansive or too upscale to accommodate school-age youth. In some cases, planned curricula may require the camp to be near a specific natural feature or resource.

Given adequate financial resources, retrofitting an older camp facility may be feasible. Alternatively, designing a new facility with eco-friendly features could be a great opportunity to create a lasting legacy.

Sustainable design

With ample planning, an experienced designer and adequate funding, it is possible to incorporate sustainable features into your camp design, including:

- Energy-efficient lighting, HVAC systems and daylighting.
- Rainwater harvesting.
- Water conservation features in all plumbing and landscaping.
- Local, recycled or salvaged building materials.
- Solar electricity, lighting, heating and hot water.
- Green roofs.
- Composting restrooms.
- Movable, multipurpose covered spaces.
- Waste reduction and recycling stations.
- Low-maintenance landscaping.

Retrofitting a Camp

A retrofitting project at Camp Twin Lakes in Georgia is adding many green features, all of which are described on the camp's website (www.campTwinLakes.org/aboutus/going_green.html).

The renovation is funded in part by an innovative partnership between The Community Foundation

for Greater Atlanta’s “Grants to Green” initiative and Southface Energy Institute, which is a nonprofit focused on resource conservation. Through this partnership, building assessment and implementation grants are available to Georgia workplaces, including camps.

Recent improvements to Camp Twin Lakes include installing low-flow fixtures for plumbing; converting existing teepee structures into breathable, adjustable covered areas; and constructing a treehouse with a green roof.

Kitchen design

Camp kitchen spaces typically require larger, commercial-sized appliances and lots of counter space. It’s particularly important to have ample clearance next to opening ovens, and good acoustics so that co-workers can hear each other across the workspace. It’s also helpful to locate prep space next to a storage area for clean trays and other supplies, so that staff will not have to pass through the cooking area to access them.

Many older kitchens lack adjacent covered or animal-proof recycling facilities. When retrofitting such facilities, it’s wise to add space for a composter, worm bins, and roll carts or shelves containing recycling stations.

Selecting an Outdoor School Site

A Conversation with Aaron Morehouse, Columbia Gorge Ecology Institute

Aaron Morehouse has served as director of Columbia Gorge Ecology Institute (CGEI) since 2009. CGEI serves students within an hour of Hood River, Oregon, in a service area that extends 2,000 square miles across the Colum-



bia River Gorge, from Mt. Adams in Washington to Mt. Hood in Oregon.

Aaron suggests that when looking for a new school site – especially one that requires building new structures – you should choose a site that has already been disturbed in some way, so that the development is less detrimental to the environment. An old log-landing site is one example of a disturbed site.

Central proximity to the population being served, and to a natural area that typifies the region, are also important. As an example, the Hood River Valley is an accessible transition zone between forest and shrub/steppe ecosystems.

Site design should be simple and accessible, while aiming for the smallest possible environmental footprint. This generally requires a longer planning process. It’s particularly important to consider the program service area and the possibility of decreasing transportation costs. Sites should model the highest building standards and technology, including green power generation and construction materials.

Eventually, CGEI hopes to have the capacity to move forward with a capital campaign. With help from nonprofits, timber companies and a realtor, CGEI is looking for property close to Hood River. The staff would consider a long-term lease or ownership, and will conduct due diligence for any prospect. To support this effort, CGEI recently held a benefit concert series in partnership with local wineries and food-oriented nonprofits.

Michael Becker is a science teacher who has transformed a Hood River middle school into a model green school with a classroom that meets the Living Building Challenge standard. He and Aaron have discussed the need to have an outdoor school center that also functions as a community center throughout the year. They have made inquiries with the county and looked at long-term lease possibilities. You can read more about the Hood River Middle School Outdoor Classroom Project and CGEI at www.clearingmagazine.org/archives/881.

www.gorgeecology.org

EXAMPLES OF INSTRUCTIONAL PHILOSOPHIES AND TEACHING STYLES

Place-Based Education at Columbia Gorge Ecology Institute

At CGEI, outdoor day programs emphasize ecology and culture. CGEI and its partners have created several outdoor-focused education opportunities for K-12 children and a school culture that embraces experiential learning.

CGEI director Aaron Morehouse described the experiential 10-week SECRETS program, which includes eight classroom ecology lessons and a field study day. Students then present what they've learned to their peers and other classes at a family day, by performing skits or songs that dramatize the concepts, lessons and hands-on activities they enjoyed while at outdoor school.

Students are also helping to restore the site's 60-acre wetland, which is habitat for endangered greater sandhill cranes.

Nontraditional Models For Outdoor Education

Informal Education at Mother Earth School

Based at Tryon Life Community Farm in Portland, Mother Earth School provides summer programs for preteens. Both primary instructors are certified in Waldorf education. The school also pays for additional training in permaculture and "primitive skills," some of which happens on-site.

The school combines Waldorf education with a variety of earth-centered philosophies, which are more experiential than academic in

nature. Meals begin with blessings and classes celebrate a variety of seasonal ceremonies. Students help with chores like animal husbandry and gardening. They reuse catchment water in the garden, make natural wax from the farm's beehives, and make dyes to color the wool from its sheep.

Mother Earth School does not follow a specific curriculum. Instead, outdoor experiences and "forest adventuring" – rather than class lessons – cultivate gratitude, reverence and awareness. You won't hear children singing "rain, rain, go away" at Mother Earth School. Here, rain is cherished, plants are guides and nature is not merely something to "extract lessons from." Relationships with people and animals are fundamental, and group dynamics are carefully cultivated.

In the forest, students track beavers, raccoons, coyotes and deer, and learn to recognize edible plants. Down by the stream, they dig for clay and make pottery. They also mix natural paints, and paint symbols or animal totems on their bodies.

Daily activities include circle and story time, yoga and finding "sit spots" for quiet introspection. Older students often sleep out under the stars during overnight sessions.

www.motherearthschool.com/

Adventures Without Limits

A Conversation With Kris Williams, Program Director

Adventures Without Limits (AWL) is a community-supported nonprofit that has demonstrated best management practices since 1990 through its inclusivity, affordability, accessibility and broad partnerships.

AWL is modeled after Wilderness Inquiry (www.wildernessinquiry.org/),

which was one of the first accessible recreation programs. This Minnesota-based program, which began in the 1970s, hosts multiple day trips and also offers international experiences.

AWL co-founder Brad Bafaro started the first Community Based Activity Program (CBAP) in 1990. It's a six-week, state-funded summer program for children with disabilities and individual educational plans (IEPs). AWL also hosts the Social and Recreational Companion (SRC) Program, and year-round Adventures Without Limits trips, which started in 1995.

Staff

Kris Williams is AWL's sole full-time staff person. Part-time staff includes an executive director and a registration coordinator. AWL relies on well-trained interns and up to 30 volunteer trip leaders each year. The program also benefits from the help of three work-study graduate students who are earning degrees in physical, recreational and occupational therapy at Pacific University. They earn \$1,500 per semester.

Kris looks for mature volunteers who have experience with the outdoors, young people and people with disabilities. It is rare to find qualified staff with experience in all of the year-round activities that AWL organizes (e.g., skiing, rock-climbing and caving). Safety and risk management are especially important. For instance, rafting guides must have swift water and rescue knowledge.

Funding and costs

In addition to a well-supported fall fundraising auction, AWL organizes annual Swim-a-Thons and Christmas tree sales. Foundation and business grants, program fees and a donor drive also support AWL's mission. For example, a 2010 Nike active sports

grant of \$20,000 supported AWL's work with P:ear and Girls Inc. on programming for homeless and at-risk youth. In 2006, the Gray Family Fund supported custom trips with P:ear as well.

For 10 years, REI has been the main sponsor for the Banff Mountain Film Festival, which runs for three sold-out nights at the Bagdad Theater in Portland. REI advertises and sells tickets, and AWL receives ticket proceeds of approximately \$14,000.

Trips are relatively low-cost. A normal rafting trip costs AWL \$25 to \$30; the open-enrollment client charge is \$48. The majority of their trips are custom trips for other organizations, for which students usually pay nothing. There is normally one open-enrollment trip each week.

AWL also offers "adventureships" that help low-income adventurers and families of disabled children to participate. AWL never turns people down for lack of income.

AWL provides up to six two- and three-day activity trainings each year. Trip insurance is provided locally through WSE insurance; AWL pays \$12,000 annually, based on the diverse population they serve and the activities they offer.

Office and warehouse space is donated, and AWL shares it with complementary organizations that Brad, a special education administrator, manages. AWL's landlord also provides furniture, a copy machine and computer assistance.

Adaptive equipment

AWL's custom recumbent bike program uses 15 three-wheeled cycles that have a backrest and hand pedals for people who can't use their legs. These cycles also provide stability for riders with balance

issues. A Washington County grant serves youth with this program.

AWL also uses adaptive equipment that makes it possible for quadriplegics and amputees with varying degrees of trunk strength to kayak and raft. Specially retrofitted boats, like a foam outrigger that will not tip over, are also useful for this purpose. Shriner's Hospital, Oregon Disability Sports and Portland Public Schools all have adaptive and inclusive recreational programs through AWL.

A recent open-enrollment raft trip on the North Santiam River included able-bodied persons, young adults with developmental disabilities like Down syndrome, and companions or family members assisting them. A young student attending with his friends clearly appreciated the supportive atmosphere, and remarked that he felt out of place at his high school. Although neither of the men with Down syndrome was very verbal, one of them obviously loved the water and could swim quite well.

Companion program

Many of AWL's disabled clients work with state-funded brokerages, which were established in 2000 to ensure that all disabled people are able to connect with necessary resources, particularly after graduating from high school or turning 21.

Each client is matched to a paid companion for 40 hours each month, and participates in activities that build life and transition skills (e.g., learning how to ride MAX, or shop without assistance). AWL's Companion Program meets contracts with these brokerages and pairs companions with clients.

Other programs

AWL staff recently took a Girls Inc. summer group comprising Portland inner-city youth to Camp Yamhill to

work on communication skills and decrease infighting.

Synergo (www.teamsynergo.com/) trains team-building facilitators throughout the Northwest. Staffers run or build custom high ropes courses for camp facilities, including Camp Yamhill, which also has a climbing tower, low elements and a zip line.

Other northwestern Oregon ropes courses are available at Camp Collins on the Sandy River, and Tree to Tree Adventure Park, which is a for-profit high ropes and aerial adventure facility located on Hagg Lake (www.treetotreadventurepark.com/).

The Forest Grove School District organized an afterschool program and summer success academy as part of a \$2 million, five-year federal grant program. In 2010, AWL organized their first six-week academic and outdoors program for 125 Hispanic students, including some from migrant families. During this "adventure summer camp," the sixth- to eighth-grade students studied academics each morning. Monday through Thursday, from noon to 5 p.m., they had kayaking instruction at Hagg Lake, engaged in on-site recreation and community-oriented service learning, and took trips to OMSI and the Oregon Zoo. On Fridays, they took full day trips: rafting on the North Santiam River, caving near Mt. St. Helens, creek walking in the Columbia River Gorge, recumbent bicycle riding, ropes courses and indoor climbing.

During the river rafting trip, students were able to raft safely with life jackets and safety instructions, even though many of them did not know how to swim. One student fell out of the boat at Spencer's Hole, a Class 3 rapid, and floated a small distance down river. When he was back in the boat, he said it was the best thing he'd ever done.



This program is a model that AWL hopes to provide to other school districts. Although the outdoors has not been part of many students' cultural experience, AWL activities have reduced these students' fears while building their self-esteem and confidence.

www.awloutdoors.com

Portland Environmental Engagement Program (PEEPs)

PEEPs is a project of AmeriCorps and Northwest Service Academy (NWSA). It demonstrates best practices in creating interdisciplinary, multicultural and place-based outdoor education field studies during summer day programs for young teens. These "Portland Explorers" take trips all over town, including area parks, the Metro garbage transfer station and Dignity Village, a community for the homeless. Every program week has a different theme.

Counselors receive two weeks of training, which includes non-violent and active communication, naturalist training at Metro's Oxbow Regional Park, a driving tour to hiking sites, activity planning, first-aid,

an AmeriCorps and NWSA overview, ropes courses and an overnight retreat at Mt. Adams.

During a recent "Science in Nature" program, students ran in a "plant identification relay race," which required them to remember characteristics of native leaves and cones. Afterward, they hiked down a trail in Sellwood Park, pausing to sample an unusual wild yellow plum on their way to the Oaks Bottom wetlands. Counselor Bailey referred to his copy of *Wild in the City*, and informed them that the area had been a garbage dump in the 1960s.

Students later discussed Rachel Carson's book *Silent Spring* and talked about eggshells cracking due to the bioaccumulation of DDT. They learned that other countries, including Mexico, have different regulations that allow organic farms to use similarly harmful pesticides.

Counselor Bailey then told a fascinating story about the unintended ecological effects of a program in Borneo, which parachuted cats into the rainforest to end an introduced cycle of predation involving caterpillars that ate villagers' roofs, geckos that ate caterpillars, and rats

that ate geckos. The story clearly sparked the students' imagination and interest in the wider world.

Afternoon activities included cutting up pizza boxes to make solar cookers, and checking a solar distiller to see how much water it had collected.

www.nwserviceacademy.org/

Catlin Gabel

A Conversation with Paul Andrichuk, Head of Catlin Gabel's Middle School Programs

Catlin Gabel, a private school in Portland, has never participated in a traditional outdoor school program. Nonetheless, it has cultivated an extensive tradition of outdoor education and campus sustainability goals. Teachers are philosophically dedicated to planning these experiences themselves.

Students initially get to know each other at summer orientation. This is especially important during the middle school transition, when as many as 26 new students may join. Discovery and campus days with a place-based focus continue during the year, as students go out and work on the campus together.

Every fall session begins with the first-graders taking a class trip, with an emphasis on outdoor education, taking positive risks, learning to live in tents and cooking together. Fifth- and sixth-graders go to the coast or Mt. St. Helens. Early intentional planning and curriculum integration with these more formal trips helps students begin cooperative activities, and try out activities from Project Adventure and other well-known sources.

In late winter, each division participates in four-day "breakaways," which are a combination of day trips and overnights outside of middle



staff members for grades 6-12, with a half-time middle school staff, a three-quarter-time high school leader and a half-time director.

A core group of interested people was willing to fund a strong outdoor program at Catlin Gabel; they raised \$500,000 to sustain the operational budget. Students are still charged for activities, but this fund subsidizes them. A longstanding faculty member still leads trips, even after retirement.

In light of recent climbing tragedies at other schools, an advisory group that meets with the director of outdoor education has discussed what constitutes “acceptable risks” for Catlin Gabel. The head of the school has faith in this program and the staff has a high risk tolerance. As they see it, the alternative to positive risk-taking is students who are either entirely risk-averse, or prone to taking inappropriate risks.

Sustainability

The 54-acre campus chose to work toward a goal of zero waste by 2012. In support of this project, 50 teachers, parents, dining hall and facilities staff participated in the 25-hour Natural Step training (see *Resources*). Energy use, heating and lighting goals have been “metrixed out,” and staffers receive regular updates on the school’s progress. In addition, Paul hopes to have skylights installed in the library to increase day lighting.

Sixth-grade students work in a garden as part of their curriculum, and eighth-grade students visit organic farms as part of their food unit, gleaning and preparing meals. High school students have access to an environmental elective combining history and science, which includes hands-on research like collecting soil samples.

school. There are also “winterim” experiences for high-schoolers and “experiential days” for lower grades. Some students go camping, while others may sleep on a city gym floor. These activities are led by teachers and parents who share their passions; topics range from glass fusion art, cyclo-cross bicycling and healing arts, to birding and related research in wild eastern Oregon.

Costs for these mandatory sessions do not exceed \$300. Financial aid is available to all students for both programs.

Outdoor education

Breakaways and day trips are different from the outdoor education program; 60 percent of the older students participate in the latter program. In 2008, the outdoor education staff integrated its curriculum into the regular classes. Over the course of six sessions, students learn necessities like dressing for weather and altitude, setting up camp and using camp stoves. The school publicizes these programs ahead of time and notifies parents at back-to-school night. The programs require strong parental support, because parents cannot take students on col-

lege visits or vacations during class trips or special sessions.

Trips during the summer and school year have included a llama packing trip in the Wallowas, fly fishing on the Clackamas River, rock scrambling in the Trinity Alps and a caving trip. The school is also planning a global education program that will offer two annual trips. As an example, middle and high school students will be able to sign up for a rigorous trek in Nepal or a visit to Botswana and Senegal.

Peter Green, the director of outdoor education, is a member of the Mazamas, a Portland-based mountaineering and hiking organization. Several Mazamas Explorer members are students at the school.

A previous director of outdoor education at Catlin Gabel organized high-end trips – such as telemark skiing and skiing down Mt. Hood – but participation was limited. In 2004, staff researched “nature deficit disorder,” and put together a proposal to get students “unplugged,” instead of “just playing soccer year-round.” The position of outdoor education director was reestablished. Now, there are three outdoor education

Community

Catlin Gabel hosts a summer leadership program called PLACE (Planning and Leadership Across City Environments), which is open to students from other schools in grades 9-12. This program works with PSU masters planning students and Bureau of Environmental Services staff, and does not focus on outdoor education.

Catlin Gabel hopes to become more diverse. Previously, the school reserved two free spots in its summer experiences for students of color from other local high schools. Unfortunately, they found that some communities attach a stigma to participation in private school activities; African-American boys, in particular, have been accused by their peers of "acting white" on returning to their community after a camping trip.

www.catlin.edu

Trackers NW

Tony Deis used to work as a contract educator at Portland's Tryon Creek State Park, the Audubon Society and Metro. He saw increasing demand for traditional skills relating to wilderness survival, hunting and gathering. He branded this idea by launching Trackers, a bi-state outdoor education organization that hosts day and overnight programs that teach "ancient skills" to people of all ages.

As of 2011, Trackers is expecting to lease or buy a 40-acre site on the Sandy River. It plans to build a residential summer camp, which it will also contract out for outdoor school programming.

Trackers' approach is philosophically different from Multnomah ESD's more traditional model, which lacks a permaculture component. For instance, the Trackers site would have composting toilets, and pos-

sibly even a graywater system (provided legal codes can be modified).

Business plan

Trackers is a for-profit entity that pays its staff \$200 to \$300 above the ordinary weekly scale. They have seen phenomenal revenue growth over five years, from \$40,000 to \$500,000. An ambitious part of Trackers' five-year plan is to build a 70-foot sailing boat that will sail to Hawaii.

Trackers leverages its resources as well as, or better than, most nonprofits. Furthermore, they don't need to write grants, and generally have more agility than nonprofits. Tony and his wife, Molly Strand, each take a modest salary of \$21,000. The remaining revenue goes to staff salaries, scholarships, program needs and infrastructure investments.

Parent demand has increased from 14 children to about 180 children per week in both the Portland and San Francisco programs. As of this writing, Portland's program is larger, but Tony believes the California program will eventually surpass it. Although the southeast Portland site could be expanded, Tony feels that it is now at the optimal "village size."

Twenty-five percent of Trackers students receive scholarships. This self-funded program is not well advertised on Trackers' website; parents seeking scholarships generally hear about it through word of mouth. Families don't have to fill out forms answering specific income questions, but they do have to meet with staff and explain their current need for assistance.

Staff recruitment and retention

Because Trackers pays higher wages than average, their recruit-

ing pool is "awesome." Staff is hired through a collaborative panel. Although Trackers is not hierarchal, it does utilize some corporate-world structures, as well as techniques for "colleague and peer development." A minimal or flat bureaucracy is one of the program's goals.

Trackers is run like a "family business with core values." Staff set their hours and salaries based on three numbers: organizational goals, personal salary needs and capital development.

Trackers looks for skilled, collaborative, low-drama people. Tony sees resumes as a "field guide" to each person, and scans them for evidence of traits like discernment and creativity. Viable candidates attend a roundtable activity where they can meet up to 30 employees.

Tony hopes that Trackers will soon be able to offer a full year of health insurance with co-pays to any outdoor educator who works 10 weeks with the program.

Program planning

Trackers adds classes based on client feedback; comments received through social media avenues, including a Trackers blog and Facebook; one-on-one conversations; parental input on program planning; and instructor knowledge. The afterschool program was created in response to student need, organizational fiscal development and the demand for year-round jobs for outdoor educators.

Trackers has not participated in the emerging EEAO curriculum database. Its staff does not use one specific curriculum. Instead, it utilizes a series of useful stories to teach skills such as boat building, tracking, fishing and identifying edible and medicinal plants.

Tony is planning four to 19 overnight and day trips for middle school students, along with wilderness survival skill workshops and archery apprenticeships where students make their own bows. He is also working on a series of books for parents, which will deal with topics relating to outdoor education and Trackers programs.

Sustainability and the local economy

Tony's goal is for Trackers to have all supplies, foods and equipment be "hyper-locally made" within the Portland region. They spend \$150,000 a year on these supplies. They are incorporating the local food map and handmade economy into their curriculum, raising goats

and chickens, and connecting with local organic farmers and ranchers for bacon and meat preservation. Tony also expresses interest in hyper-local coffee and local food buying groups.

Other activities focusing on sustainability include having Trackers make their own beeswax crayons from locally produced honeycombs, and re-purposing wood pallets into useful crates.

Youth experiences

When asked whether Trackers includes "rites of passage" activities in its programs for older youth, Tony said that this "buzzword" brings to mind "little elves integrated into the landscape." Tony feels that such passages work best within

indigenous cultures that have clear cultural archetypes and a realistic buildup to adult responsibilities. For example, Apache youth may leave their village guided by elders, travel for many miles, experience adversity, and return to the village with new information or skills that are useful to their people.

By contrast, "youth camping overnight with a bag of granola" are not experiencing a realistic passage experience that incorporates a buildup to adulthood or relinquishing of control. That type of experience remains outside the context of their daily lives. Therefore, a more culturally relevant passage experience might be to work with homeless youth in the city.

www.trackersearch.com



10 Tips for Teachers in Integrating Service Learning

These tips developed by The Straub Environmental Learning Center may be helpful for teachers who are beginning to integrate environmental literacy into the classroom:

1. Start small, and find other teachers who are interested in doing a community project. Support and collaboration are critical for success as you begin this work.
2. Don't let issues like transportation and funding stand in your way. Be creative and persistent, and employ all available community resources.
3. Getting to know community partners is a must, so be prepared to make calls and meet with prospective partners. They will probably be more than willing to work with you, and may have resources you can use.
4. Don't let your class become a work crew. The work you do should be the work of your partner. This is not a field trip or guest presentation, but authentic involvement in your partner's work.
5. Be organized and plan ahead. You can never foresee all possibilities, but staying organized will make you more successful with students and partners.
6. Promote the program. It's not about you; it's about the students and their capacity to serve as a resource for their community.
7. Involve students in the selection of their work, and in designing their products. This may be the first time they have some control over their learning. It can be empowering for them.
8. As your work expands, think about ways for the program to sustain itself after you leave.
9. Don't worry about having to know the content, or being in charge of direct instruction. You will become a facilitator; instruction comes from the community partner and the curriculum resources you organize. One of the great joys of this approach is that you often get to learn along with your students. Sometimes, they can even teach you. In other words, the teacher is not the "sage on the stage," but the "guide on the side."
10. Remember: This is about community! The work students do must have a clear context. They should come out of their study knowing what their community is, how it functions and how they can participate. This approach also fosters community building within the classroom, as students reconnect with themselves and each other.

Sample Evaluations

THE OREGON COMMUNITY FOUNDATION Environmental Education Program

Grant Evaluation Form

You may recreate and expand this form on your computer, or download it from www.oregoncf.org.

Organization name: Portland Public Schools

Date: June 30, 2010

Contact title: Senior Development Manager

Address: 501 N. Dixon Street, Portland OR 97227

Phone: 503.916.3447

Amount of grant: \$40,000

Grant #: 2009-05113

Date received: November 2009

1. Please describe the progress made to date on your project objectives.

Portland Public Schools' Outdoor School Project had two objectives: (1) to increase the nature-oriented experience of the sixth-graders and high school students (Student Leaders) who attended the two weeklong programs; (2) to improve participants' understanding of natural systems.

Activities and evaluation measurements address these objectives, both of which were met. The activities described in the Evaluation Plan were completed with the target audiences, using the specified tools. Participants were surveyed, activities were monitored and recorded, and the results were analyzed.

Objective I focused on the experience of 3,318 sixth-grade students and 779 Student Leaders who attended Outdoor School for a week during the 2009-2010 school year (one group in fall, and one in spring). Without this opportunity, none of these students would have been able to attend the program (a 100-percent increase in participation). Support provided through the Gray Family Fund covered the costs for 147 low-income sixth-graders, allowing them to participate fully. All district sixth-graders had the opportunity to attend Outdoor School, and all qualified high school students had the opportunity to become Student Leaders.

A sample of students who attended in spring 2010 completed a pre- and post-camp assessment survey. Participation in this survey was not mandatory.

Objective II focused on improvement in students' understanding of natural systems. The attached survey reports demonstrate the program's success in meeting this objective. In spring, approximately 170 sixth-graders submitted pre- and post-camp assessment surveys comprising nine identical science questions. The post-camp surveys show strong improvement on each response.

2. Please describe the measurable results of the project so far.

Measurable results of the PPS Outdoor School Project include:

- A.** A total of 3,318 sixth-grade students, including approximately 1,493 low-income students, were able to participate in Outdoor School for one week during the 2009-2010 school year. This figure is 7 percent higher than the target of 3,100 sixth-grade students.
- B.** All qualified PPS high school students had the opportunity to participate in the program; 779 did so, which is fewer than the 930 targeted. All participants learned to teach at least one field study lesson, and more than 50 percent learned to teach two or more lessons.
- C.** Students who completed the pre- and post-camp assessment survey demonstrated a significant improvement in their understanding of natural systems.

Of the five identified outcomes (three for Objective I and two for Objective II), four were met. The remaining outcome (student level of participation in nature-oriented activities other than Outdoor School during the school year) has yet to be measured, but may be addressed in a questionnaire for seventh-grade students in fall 2010.

3. Please describe any unanticipated outcomes of the project so far.

We expected a higher level of participation among high school students. We will address this issue in coming years through improved communication. The survey instrument was not implemented until 2010. Thus, although we developed useful data relative to both objectives, the full complement of 2009-2010 data is not yet available. In future, the assessment will be conducted throughout the year.

Some outcomes were not supported by data, because key questions were not included on the pre- and post-camp assessment surveys. In future, we will revise the instrument to align more closely with specific outcomes outlined in the proposal. Of the data collected, the post-camp assessment results indicate that the district's students definitely learned excellent science at the Outdoor School sites. Each question shows strong improvement over the pre-camp assessment.

4. Reaching intended objectives can present unforeseen challenges. Describe how your program adapted to overcome unexpected changes.

A primary challenge was how to measure whether 25 percent of sixth-grade students and 50 percent of Student Leaders would participate in nature-oriented experiences other than Outdoor School during the school year. No separate instrument was developed to measure this outcome, nor was this question included on the pre- and post-camp assessments. In future, we will either revise this objective, or develop an instrument to collect the necessary data from students at the end of the school year.

5. Sometimes, the positive impact of a project is not easy to communicate in statistical terms. If this is true of your project, please share a story that illustrates the effect the project has had.

From David Wierth, Science Teacher:

About four weeks after our outdoor school experience, I decided to take my students on an overnight field trip to Camp Kiwanilong. From the inception of the idea, my students – with outdoor school memories still fresh in their minds – began planning the entire two-day event. They planned the menu, cooked the food, planned and executed the duty schedule (dining room duties, kitchen duties, campfire prep). They even taught the parent chaperones about symbiotic relationships, and how the four field studies at outdoor school are interconnected.

While we were at the beach, a number of kids climbed up onto a sand dune and urgently called to me. Thinking something was amiss, I scurried up the hill, only to find that the kids wanted to show me that the view from the dune revealed a distinct edge between four very different biomes.

I was a very proud science teacher when I saw how excited they were to be applying powerful scientific concepts learned at outdoor school in the real-world context of our field trip.

Attach a copy of your original project budget, and identify both income and expenditures to date.

July 31, 2010

Senior Development Manager

Date

Please submit your electronic evaluation to Lara Utman at lutman@oregoncf.org or call 503.227.6846.

GRAY FAMILY FUND OF THE OREGON COMMUNITY FOUNDATION

Environmental Education Program: Evaluation Plan

Goals addressed by your proposed program (see *directions*):

OBJECTIVES What do you hope to accomplish by implementing this program?	ACTIVITIES What are your primary project activities? How many of each do you expect to complete?	TARGET AUDIENCE Who is your target audience? How many participants do you expect to serve?	DATA COLLECTION TOOLS How will you gather necessary data? What records or tools will you use to measure progress?	EVALUATION DESIGN When and from whom will you collect your evaluation information?	OUTCOMES What specific results do you expect to accomplish (e.g., what test results do you expect)?
PART I OBJECTIVES					
<ul style="list-style-type: none"> Number of individuals participating in nature-oriented experiences will increase. 	<ul style="list-style-type: none"> ODS will recruit 930 high school Student Leaders from Portland Public Schools for at least one week of the 2009-2010 school year. PPS will send 3,100 sixth-graders to ODS for a week. 	<ul style="list-style-type: none"> 3,100 sixth-graders and 930 high school students from Portland Public Schools. 	<ul style="list-style-type: none"> Actual count of students attending ODS. Survey Student Leaders on participation in nature-oriented experiences during the 2009-2010 school year. Survey sixth-grade ODS attendees on participation in nature-oriented experiences during the 2009-2010 school year. 	<ul style="list-style-type: none"> PPS will ask sixth-grade teachers how many students attended ODS. PPS sixth-grade teachers will survey students on other nature-oriented experiences during the year. ODS will report to PPS how many HS students attended. ODS will survey Student Leaders on other nature-oriented experiences during the year. 	<ul style="list-style-type: none"> All qualified PPS high school students have the opportunity to become Student Leaders. All PPS sixth-graders have the opportunity to attend ODS. 25 percent of sixth-graders and 50 percent of high school students who attend ODS will participate in other nature-oriented activities during the school year.
PART II OBJECTIVES					
<ul style="list-style-type: none"> Understanding of natural systems will increase. 	<ul style="list-style-type: none"> High school students will undergo training to teach one of four field studies (plants, animals, soil, water) to sixth-graders. High school students will volunteer as camp counselors for a week of ODS. Sixth-graders will learn how the four field studies work together as part of a larger natural system. Sixth-graders will learn how their actions affect the natural world. 	<ul style="list-style-type: none"> 3,100 sixth-graders and 930 high school students from Portland Public Schools. 	<ul style="list-style-type: none"> Actual count of students attending ODS. Survey Student Leaders to discover which field study each learned to teach. Pre- and post-camp assessments of sixth-graders to determine what they learned at ODS. 	<ul style="list-style-type: none"> PPS will ask sixth-grade teachers how many students attended ODS. PPS sixth-grade teachers will work with ODS to perform pre- and post-camp assessments of sixth-graders. ODS will report to PPS how many high school students attended training, and how many attended ODS. ODS will survey Student Leaders on which field study they learned, and their favorite lesson activities. 	<ul style="list-style-type: none"> All Student Leaders will learn to teach at least one field study lesson. Fifty percent will learn to teach two field study lessons. All sixth-grade attendees will learn how their actions affect the natural world and how natural systems work together.

SAMPLE BUDGETS

PORTLAND PUBLIC SCHOOLS OUTDOOR SCHOOL PROJECT 2009 – 2010 Project Budget Evaluation Report

REVENUE SOURCES				
SOURCE	DETAIL	ORIGINAL FUNDING	STATUS	INCOME TO DATE
Metro	\$57 for 3,680 students (Revised: 3,318)	\$209,760	Secured	\$189,126
Friends of Outdoor School	Donation	\$80,000	Secured	\$97,494
Fee-for-Service	\$100 per student for students who do not qualify for free or reduced-price meals (56 percent of 3,680 students) Revised: 3,318	\$206,080	Secured	\$185,808
District Contribution	Cost of teachers, substitutes, fees and all other costs related to Outdoor School participation for 3,680 (Revised: 3,318) district and private-school students.	\$776,214	Secured	\$668,756
Gray Family Fund	Covers the cost for 147 low-income sixth-graders to participate in Outdoor School at \$273 per student (\$330, less \$57 from Metro).	\$40,000	Secured	\$40,000
TOTAL		\$1,312,054		\$1,181,184

ANNUAL BUDGET				
CATEGORY	DETAIL	EXPENDITURE	TOTAL	EXPENDITURE TO DATE
Personnel	Teachers (143 teachers, 5 days, additional duty and overnight responsibilities) (Revised: 122)	\$58,065	\$81,024	\$49,538
	Substitute Teachers	\$19,564		\$16,562
	Classified Employees to Support	\$3,395		\$3,395
Benefits	FICA, Workers' Compensation, Other Paid Benefits	\$19,591	\$19,591	\$16,749
Contract with MESD	\$330 per student (3,680) (Revised: 3,318)	\$1,214,439	\$1,214,439	\$1,094,940
TOTAL			\$1,315,054	\$1,181,184

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Thank you to the following for providing photos:
Jan O'Dell Communications, Multnomah
Education Service District, Friends of Outdoor
School, Gladstone School District, Hudson Park
Elementary School.



The Gray Family Fund's Environmental Education Program seeks to encourage a strong local land ethic, sustainable communities and stewardship of the natural environment by citizens throughout Oregon.