

Environmental Education Library – Golden Zone

Childhood and Nature: Design Principles for Educators. David Sobel, 2008.

Public discussions of global climate change and other threats to the planet are making children more aware of environmental issues. As increasing numbers of kids come to school wishing to take action, educators want to know how to teach in a way that fosters a love of nature and an understanding of the complexity and seriousness of these issues.

In "Childhood and Nature," noted educator David Sobel makes the case that meaningful connections with the natural world don't begin in the rainforest or arctic, but in our own backyards and communities. Based on his observations of recurrent play themes around the world, Sobel articulates seven design principles that can guide teachers in structuring learning experiences for children. Place-based education projects that make effective use of the principles are detailed throughout the book. And while engaged in these projects, students learn language arts, math, science, social studies, as well as essential problem-solving and social skills through involvement with nature and their communities.

The pressures of test preparation, standards, and curriculum frameworks often reduce the study of nature and the environment to a set of facts and general concepts. However, as "Childhood and Nature "demonstrates, linking curriculum with an engagement in the real world not only provides students with the thinking skills needed for whatever test comes their way, but also helps them grow into responsible citizens and stewards of the earth.

Coyote's Guide to Connecting with Nature. Jon Young, Ellen Hass, and Evan McGown, 2008.

"Coyote's guide lifts the lid off the mind of a mentor to reveal what happens behind-the-scenes, and offers dozens of activities, stories, songs, and games, so mentors, educators and parents can lead in ways that fit their ecosystems, their clients, and their specific goals. Coyote's guide sets fresh standards for environmental literacy that engages body, mind, and spirit"

Dirty Teaching: A Beginner's Guide to Learning Outdoors. Juliet Robertson, 2014.

Juliet Robertson offers tips and tricks to help any teacher develop variety in their teaching. One of the keys to a happy and creative classroom is getting out of it and this book will give you the confidence to do it. It contains a wealth of ideas from cheat sheets to activities that allow teachers and parents to encourage outdoor learning and improve student participation. There is no need for expensive tools or complicated technologies; all you need is your coat and a passion for learning - oh, and you'd better bring the kids too!

**Ecological Literacy: Educating Our Children for a Sustainable World.
Michael K. Stone and Zenobia Barlow (Eds.), 2005.**

Our efforts to build a sustainable world cannot succeed unless future generations learn how to partner with natural systems to our mutual benefit. In other words, children must become "ecologically literate." The concept of ecological literacy advanced by this book's creators, the Center for Ecoliteracy in Berkeley, California, goes beyond the discipline of environmental education. It aims, says David Orr in his foreword, "toward a deeper transformation of the substance, process, and scope of education at all levels"-familial, geographic, ecological, and political.

The reports and essays gathered here reveal the remarkable work being done by the Center's network of partners. In one middle school, for example, culinary icon Alice Waters founded a program that not only gives students healthy meals but teaches them to garden-and thus to study life cycles and energy flows. Other hands-on student projects described here range from stream restoration and watershed exploration to confronting environmental justice issues at the neighborhood level.

With contributions from distinguished writers and educators, such as Fritjof Capra, Wendell Berry, and Michael Ableman, Ecological Literacy reflects the best thinking about how the world actually works and how learning occurs. Parents and educators everywhere will find it an invaluable resource.

**Nature Preschools and Forest Kindergartens: The Handbook for Outdoor Learning.
David Sobel, 2016.**

Environmental education expert David Sobel joins with a variety of colleagues to share their experiences and steps for creating a successful forest kindergarten program. Nature Preschools and Forest Kindergartens walks you through the European roots of the concept to the recent resurgence of these kinds of programs in North America. Going well beyond a history lesson, these experts provide the framework to understand the concepts and build a learning community that stimulates curiosity and inquisitiveness in a natural environment. This helpful guide provides the curriculum, ideas, and guidance needed to foster special gifts in children. It also gives you the nuts and bolts of running a successful nature preschool business, such as potential obstacles, staff and curriculum design, best practices for success, site and facility management, and business planning. Nature Preschools and Forest Kindergartens provides the mentorship and guidance to become a leader in nature-based education. David Sobel has spent the last twenty-five years working in the field of child development, place-based education, and parenting with nature. He currently serves as senior faculty in the education department at Antioch University New England in Keene, New Hampshire. His expertise and passion have led him to authoring seven books and being identified as one of the gurus and rock stars of environmental education by Teacher magazine.

Rediscovery, Ancient Pathways, New Directions: Outdoor Activities Based on Native Traditions. Thom Henley, 1989.

For over 25 years, the Rediscovery program has drawn from the timeless wisdom of native American elders to help teach youth, native American and otherwise, to respect the earth and each other. Today dozens of Rediscovery programs have been developed around the world, helping indigenous youth to rediscover their heritage and allowing

others the opportunity to learn important lessons about balance and harmony with our environment. This deeply respectful book provides more than 130 activities which schools and youth camps are able to use when they gather to reacquaint themselves with their place in nature.

Schoolyard-Enhanced Learning: Using the Outdoors as an Instructional Tool, K-8. Herbert W. Broda, 2007.

"Schoolyard-Enhanced Learning" shows how the school grounds--regardless of whether your school is in an urban, suburban, or rural setting--can become an enriching extension of the classroom. In this comprehensive handbook, Herb Broda blends theory and practice, providing readers with practical suggestions and teacher-tested activities for using the most powerful audio-visual tool available--the outdoors.

Emphasizing the practical, this innovative book offers teachers step-by-step guidance to help ensure success when they take a class outside. It provides: Background that helps present the case for outdoor learning: educational theory that supports the concept; overview of the terminology; research on the benefits related to student achievement; alignment of outdoor learning with current teaching practices. Ideas for making the schoolyard an effective outdoor classroom: the planning process; enhancing and maintaining the site; developing gardens and attracting wildlife; finding community resources and funding. Advice on working with a class outdoors: garnering administrative and parental support; considerations before going out; making the most of your outdoor time; using GPS as an educational tool; building on the outdoor experience back in the classroom. An array of proven activities that utilize the schoolyard: activities related to specific subject areas; activities that teach process skills; activities that encourage initiative and build community.

At a time when children's natural curiosity about the outdoors is eclipsed by the demands of busy schedules and the ever-present glow of video screens, schools may be the only place where they are encouraged to interact with nature.

"Schoolyard-Enhanced Learning" can help teachers unlock the powerful learning experiences that exist just beyond the classroom door.

To Look Closely: Science and Literacy in the Natural World. Laurie Rubin, 2013.

*Whether it's a trickling stream, a grassy slope, or an abandoned rail line, the natural world offers teachers a wonderful resource around which to center creative, inquiry-based learning throughout the year. Nobody knows this better than veteran teacher Laurie Rubin. In *To Look Closely: Science and Literacy in the Natural World*, she demonstrates how nature study can help students become careful, intentional observers of all they see, growing into stronger readers, writers, mathematicians, and scientists in the process.*

Laurie invites you to join her class of twenty-one second graders as they visit a small stream in the woods behind a suburban elementary school, and she shares her reflections on class discussions, activities, and learning experiences. From setting a tone of inquiry-based thinking in the classroom to suggesting specific units of study for reading, writing, and science, Laurie guides teachers step-by-step through the basics of

how to integrate the skills acquired through nature study into every subject. You will also discover all the ways this purposeful work nurtures "green" citizens who grow up determined to value and protect the natural environment.

Filled with student journal entries, narratives, and poems inspired by experiences in the natural world, To Look Closely will inspire and encourage you to become a careful observer of your own "sit spots" outdoors and embrace nature study for a year—or for whatever part of a year is possible for you. This book will change the way you view the world.

The Outdoor Classroom in Practice, Ages 3-7: A month-by-month guide to forest school provision. Karen Constable,

The outdoor environment is now an integral part of many early years settings and schools, but is it being used to its full potential?

Providing extensive, challenging and ever-changing outdoor play experiences is an essential and valuable aspect of early years education. This book offers comprehensive guidance on how the outdoor environment can be used to teach and challenge all children across a range of settings drawing on forest school practice.

Following a month-by-month format, each chapter provides a selection of theme-related play experiences alongside planning and evaluations of how the ideas described were carried out, and reveals the impact that they had on the children. Including detailed information on the role of the adult, the environment, planning and using children's interests to guide their learning and development, the book features:

- *over 100 full-colour photographs to illustrate practice*
- *diary entries that reflect how the planning was delivered, what changes were made and how aspects of learning were recorded and assessed*
- *examples of practice as well as comprehensive resource lists and safety guidelines*
- *links to indoor play and opportunities at home.*

Written by a leading authority on forest school practice and full of practical ideas that can be adapted to suit individual children's needs, this book aims to inspire practitioners to make the most of the outdoor environment throughout the year.

The Elementary Years: Hands-on Learning in Grades K-5. Teaching Green, 2005.

Teaching Green-The Elementary Years is designed for anyone working with young people in grades kindergarten to five, whether in schools or non-formal education settings. It offers 50 kid-tested teaching strategies that promote interdisciplinary hands-on learning about natural systems and foster critical thinking about environmental issues, both local and global. The book includes background information and instructions for practical projects and activities on numerous topics. Rich illustrations and a curriculum index make this book of contributions from over 60 educators from across North America appealing to a wide range of

teachers, educators and parents seeking innovative ideas for incorporating green themes into their programs.

The Middle Years: Hands-on Learning in Grades 6-8. Teaching Green, 2004.

For anyone working with young people in grades 6-8-whether inside or outside schools-Teaching Green contains over 50 of the best activities and teaching strategies contributed to Green Teacher magazine over the last 10 years by educators from across North America. Organized into 'green teaching' categories, the book offers a host of ideas for hands-on learning about biodiversity, ecology, resource consumption, green technology and the world around us. This collection will inspire educators who are seeking innovative strategies for incorporating 'green' themes into their programs.

The High School Years: Hands-on Learning in Grades 9-12. Teaching Green, 2009.

This resource is ideal for anyone working with young people in grades 9-12, whether in schools or in non-formal educational settings. Richly illustrated, it offers 50 teaching strategies that promote learning about natural systems and foster critical thinking about environmental issues, both local and global. It contains new approaches to learning, strategies for living sustainably, and numerous activities that promote interdisciplinary learning. In addition, the book provides suggestions for how best to green individual subject areas, develop integrated learning programs or replicate exemplary programs created by innovative schools and communities.

Containing contributions from over 60 educators from across North America, the book's strength lies in its diverse content. Readers learn how best to apply systems thinking, teach about controversial issues and use a step-by-step approach to creative problem-solving in environmental projects. Also provided are instructions for measuring the ecological footprint of a high school, creating an indoor "living system" that cleans water, monitoring air quality with lichens and using green technologies to help green school campuses. Many articles and activities engage teenagers in outdoor learning and community restoration projects. Suggestions are included for connecting students with special needs to the environment around them.

Readers will find accessible background information and suggestions for many practical projects and activities. It is sure to appeal to a wide range of teachers, educators and parents seeking innovative ideas for incorporating green themes into their programs.

Note: Descriptions from various Google sources.