

Learning With Nature Idea Book

Creating Nurturing Outdoor Spaces for Children

Field-tested principles for effective outdoor learning environments



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Introduction

Why Learning With Nature is Important

“Early experiences with the natural world have been positively linked to the sense of wonder. This way of knowing, if recognized and honored, can serve as a life-long source of joy and enrichment, as well as an impetus or motivation, for further learning.”

Ruth A. Wilson, “The Wonders of Nature: Honoring Children’s Ways of Knowing”

This book is for anyone wishing to create or recreate outdoor spaces that nurture children’s sense of wonder and encourage rich learning. The field-tested guiding principles developed by Dimensions Educational Research Foundation can be applied in many settings, from early childhood education programs to elementary schools to public playgrounds. The way the principles are implemented will vary greatly, since each organization will bring its unique approach to this undertaking.

The ideas in this book are based on research and field-testing conducted by Dimensions Foundation in various settings serving children from ages six weeks to 10 years. Dimensions’ cadre of teacher-researchers, researchers and consultants from fields such as architecture, landscape architecture, neuropsychology, movement and music, art, mathematics, and science education, have identified profound benefits for children who spend time interacting with nature on a daily basis. The photographs we use illustrate how these field-tested ideas can work for children in urban and rural settings, in cold and warm climates, and in public and private spaces.

Dimensions’ research has shown the value of comprehensive nature education for young children that goes beyond simply having well-designed outdoor spaces. Children benefit most in programs that have educators who are knowledgeable about how to use these spaces as an integral part of daily learning, and families who understand and support the need for children to connect with the natural world.

Dimensions Foundation develops resources for educators and families to support this important learning. Ultimately, if there is to be a new generation of environmental stewards, connecting with nature must once again become an important part of children’s daily experiences.



“If a child is to keep alive his inborn sense of wonder, he needs the companionship of at least one adult who can share it, rediscovering the joy, excitement, and mystery of the world we live in.”

Rachel Carson, The Sense of Wonder

A Few Words About the Growing Problem of Children's Disconnection From Nature

“Without continuous hands-on experience, it is impossible for children to acquire a deep intuitive understanding of the natural world that is the foundation of sustainable development. A critical aspect of the present-day crisis in education is that children are becoming separated from daily experience of the natural world.”

Robin C. Moore and Herb H. Wong,

Natural Learning: Creating Environments for Rediscovering Nature's Way of Teaching

Educators and mental health professionals worldwide are becoming concerned that many of today's children are no longer able to spend unhurried hours exploring the natural world in the same ways that previous generations enjoyed. Research is showing that children need connections with the natural world as a regular part of their healthy growth and development (Crain, 2001; Kahn & Kellert, 2002; Moore & Wong, 1997; Nabhan & Trimble, 1999). Disconnection from nature is leading to increases in problems such as childhood obesity, children's dislike and even fear of the outdoors, and increased reliance on behavior-regulating medications (Louv, 2005; Rivkin, 1995; White, 2004).

Research shows a dramatic decline in the amount of time today's children spend outdoors. Hoffert and Sandberg (2000) site the following statistics: Between 1981 and 1997, the amount of time U.S. children aged six to eight spent playing outdoors decreased by four hours per week while the amount of time they spent indoors in school increased by almost five hours per week.

One result of the reduction of children's direct experiences with the natural world is the rise of what researchers refer to as biophobia, a fear of the natural world and environmental issues (Sobel, 1996). Research by Wilson (1994) and Simmons (1994), based on personal interviews with groups of children varying in age from preschool to age nine, found that the attitudes children expressed toward various aspects of the natural environment (rain, wildflowers, trees, birds) included more fear and dislike than appreciation, caring or enjoyment. Cohen and Horm-Wingerd (1993) believe that children's



unfounded fears and misconceptions about the natural environment develop when they have very little actual contact with living things and obtain most of their attitudes through the electronic media.

Many children no longer spend long, unstructured hours playing outdoors creating positive bonds with nature. Families and educators must now provide intentional experiences and create spaces that give children the opportunity to better understand and appreciate the natural world. Dimensions' teacher-researchers have documented much evidence of valuable skill development occurring across all learning domains as children spend daily time in well-designed outdoor spaces with nurturing adults (Miller, 2007). This is especially true for children with sensory integration challenges (Taylor, Kuo & Sullivan, 2001).

Excerpts from focus group interviews conducted with educators in Dimensions' research classrooms will be highlighted throughout this book. They provide glimpses into the profound changes that can occur when outdoor spaces become nurturing places for learning with nature. We hope this book will inspire you to bring these kinds of life-changing experiences to children as together you reconnect with the joys of the natural world.

Field-Tested Guiding Principles

The most wonderfully designed natural outdoor classroom will only be as effective for children as the adults who explore it with them. As developmental psychologist Lev Vygotsky taught years ago, children’s learning takes place best as part of caring relationships with adults and with other children (Vygotsky, 1962). Adults who themselves delight in experiencing the natural world and understand the rich learning that can take place in natural outdoor spaces will greatly aid children’s healthy growth and development. Dimensions’ field-testing and research, as well as other research noted on page 50, shows great benefits across the curriculum for children who explore well-designed outdoor spaces with nurturing adults. Educators and families who encourage children to master new challenges, develop increasingly complex skills, and closely observe and appreciate the natural world will give children gifts that will last for a lifetime.

A new way of thinking may be needed for many educators and families as children begin to spend more and more time learning with nature. Outdoor time will come to be seen as more than “recess,” and will instead be viewed as an invaluable part of each day’s learning activities. Families will help children dress appropriately for outdoor time in all kinds of weather, and educators and administrators will build time in the outdoor classroom into daily schedules.



Adults who understand and support the rich learning that can take place in natural outdoor spaces will significantly aid children’s healthy growth and development.

The Ten Principles

The ten guiding principles on the following page are based on years of Dimensions’ field-testing, and represent a well-rounded mix of experiences that can and should occur outdoors for preschool and elementary children. Explanations and examples for each principle can be found on pages 6-35.

Adults who observe closely will celebrate the intellectual, physical, social and emotional growth that can take place for every child every day in the natural outdoor classroom. And, they will delight in sharing the wonder and awe that nature can inspire in each of us, no matter our age or where we live.