



CHILDHOOD AND NATURE

DESIGN PRINCIPLES FOR EDUCATORS

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CHAPTER 1

REPLACING CONTEMPT WITH LOVE

Kids say the darnedest things, and in those darnedest things are some of the gnarly questions of life. In Richard Louv's (2005) recent book, *Last Child in the Woods*, he quotes one of his children as saying, "What's the relationship between God and Mother Nature—are they married or are they just friends?" I'd like to bring that question down to earth to help clarify the point of this book: What's the relationship between School and Mother Nature? Are they getting divorced or are they committed to working on a long-term relationship?

Let's not even worry about marriage at this point—too tall an order. Instead, let's take it one step at a time. There have been times in the past, say in the early twentieth century during the Nature Study movement, when School and Mother Nature were at least friends. But nowadays, in this No Child Left Behind era, they're quite alienated from each other. To get them back together, School and Mother Nature first need to get to know each other again, then maybe start dating. Eventually they might want to go steady, even consider tying the knot. What might this relationship look like?

I've used these examples before in *Place-Based Education: Connecting Classrooms and Community* (Sobel 2004), but at the risk of being redundant, I'm revisiting them here because they articulate clearly the horns of the dilemma. The divorce option is well articulated in a thought-provoking article entitled "How My Schooling Taught Me Contempt for the Earth" (1996), in which Bill Bigelow describes growing up and going to elementary school in Marin County, north of San Francisco, in the late 1950s.



I loved the land. I spent every after-school moment and every weekend or summer day outside until it got dark. I knew where to dig the best underground forts and how to avoid the toffee-like clay soil... I knew from long observation at nearby ponds the exact process of a pollywog's transition into a frog, and the relative speed of different kinds of snakes: garter vs. gopher vs. western racer... We also had a love/hate relationship with "development." Almost as another natural habitat, we played in the houses under construction: hide and seek, climbing and jumping off roofs, and rafting in basements when they flooded.

How did our schooling extend or suppress our naïve earth-knowledge and our love of place? Through silence about the earth and the native people of Tiburon, Bel-Aire School, perched on the slopes of a steep golden-grassed hill, taught plenty. We actively learned to not-think about the earth, about that place where we were. We could have been anywhere—or nowhere. Teachers made no effort to incorporate our vast, if immature, knowledge of the land into the curriculum. Whether it was in the study of history, writing, science, arithmetic, reading or art, school erected a Berlin Wall between academics and the rest of our lives. ... The hills above the school were a virtual wilderness of grasslands and trees, but in six years, I can't recall a single "field trip" to the wide-open spaces right on our doorstep. (14–15)

This is the situation in too many American schools, where children actively learn to "not-think" about the relationships between what goes on inside the school walls and outside in the social and natural communities.

On the other hand, what would it be like if the Berlin Wall came down? What if children were asked to think, rather than not-think, about the earth? In Keene, New Hampshire, the Rachel Marshall Outdoor Learning Laboratory illustrates one such attempt. The initial idea was simple: Develop a three-acre tract of land into a learning laboratory for the five elementary schools, the middle school, and the high school in the city. At the dedication ceremony for a new park that included the Learning Laboratory, Hannah Jacobs (2001), a high school senior, describes how schooling can contribute to the development of a sense of place.

The laboratory is truly a little natural world in the midst of bustling Keene. It is amazing to experience the peace of a forest with cars, horns and sirens all blaring in the distance. When I was doing research here for my biology project, I stood in awe as I watched a Cooper's hawk hunting chickadees for a noontime snack. Math classes

have measured the slope of the land, art and archeology classes at the high school have researched the park's history, and writing classes have sat here to compose pieces with inspiration from nature.

I think the most incredible aspect of the laboratory is its level of community and student involvement. Many students are scared and upset when they see the natural landscape changing around them. We feel like we have no voice in the development of our community, and decisions that are made by the leaders about economic development do affect us significantly and change the character of Keene. The Learning Laboratory actually gave us a chance to make a positive impact and have our voices heard. We were participating in the preservation of a piece of land in our town and deciding how that land would be managed. How refreshing it is to have our suggestions and input listened to, acknowledged and implemented.

How refreshing! Wouldn't it be nice if children came home from school refreshed rather than bored? Instead of the "What-did-you-do-in-school-today?-Nothing" conversation, the response could be, "We followed the stream behind the school down to the Ashuelot River and learned all kinds of river words along the way." Or, "With the slate we got from Mr. Crossman's quarry last fall, we built a new walkway for the school garden. It was hard work, but it came out beautiful." Or maybe, "We went up to Fellsmere Pond and interviewed all the people walking their dogs and sitting on the benches about how the city could make the park better."

All these comments come from children engaged in real projects that connect the core curriculum to real places and real problem-solving in the community. Moreover, these approaches start from inside the child's world, recognizing children's inherent fascinations with nature and people, and then build from these starting points to create sturdy, community-valued knowledge. This is what I'm advocating for—an approach to education that simultaneously honors developing a child's love of the earth and developing a child's academic and social competence.

Let me give you a recent example that weds these two. The eighth-grade social studies curriculum in Vermont calls for students to learn early American history with a focus on colonial America and the Revolutionary War. Some of the standards in the Vermont Frameworks call for:

6.4 Historical Connections: *Students identify major historical eras and analyze periods of transition at various times in their local community, in Vermont, in the United States, and in various locations worldwide, to interpret the influence of the past on the present.*

6.6 Being a Historian: *Students use historical methods to make interpretations concerning history, change, and continuity.*

6.9 Interrelationships: *Students analyze factors and implications associated with historical and contemporary movements and settlements of people and groups at various times in their local community, in Vermont, in the United States, and in various locations worldwide. (Vermont Department of Education 2000)*

Jennifer Kramer, the middle school social studies teacher in Guilford, Vermont, is a master of using local resources to bring the teaching of history alive. She partners with the historical society and town clerk's office. She has a classroom set of the *History of Guilford* as a resource, conducts oral histories, explores local natural resources, and uses cemeteries and census records to engage her students in primary-source investigations. (See Chapter 10 for a description of an autumn's worth of projects in her classroom.) For her unit on colonial Vermont, she knew she wanted to start with having students read the original charter and then develop an understanding of carving a farm and livelihood out of the primeval forested landscape of New England hills and valleys. And she was intrigued with the idea that the charter required that new landowners clear five acres of forested land in five years. Here was the starting point—how could she make this real?

We considered this challenge in a curriculum-planning conversation, and I suggested that we use the children and nature design principles (elaborated in Chapter 3) to identify a childhood fascination that could provide an entrée into the unit of study. We asked: How can children's fascination with *Small Worlds* be used to help students connect personally with the history of Guilford and the history of Vermont? I had used the Small Worlds principle to teach seaside plant communities and ecological design; why not Vermont history? The plan that emerged was to have the students create the five-acre cleared parcels in miniature.

First, Mrs. Kramer gave the students a blank outline map of a Vermont town. Groups of four students had to locate a mill, a meetinghouse, a store, and their own house. Next, a transparency of the rivers, lakes, and streams was layered over their maps, and the students had to decide if this changed their proposed locations. Then a transparency of topography was added, and the students could change their locations one last time. This was an effective way to develop an understanding of the relationship between geographical features and the functions of cultural institutions. Where should the mill be located so that it best serves the needs of the local farmers?

With this basic understanding, students were asked to choose an original Guilford family and one of the original hundred-acre lots and then research early farm life, investigating questions such as:

- ◆ What did Vermont farms look like?
- ◆ How were buildings made?
- ◆ How did they clear the land?
- ◆ What kinds of animals did they have?
- ◆ What kinds of jobs had to be done on farms?

Next came the Small World challenge:

Miniature Farms: Clearing the Land and Establishing a Home

On the school's nature trail, find a piece of land that is topographically similar to your family's town lot. Stake out a four-by-six-foot rectangle, representing five acres of your farm, and clear the land and build your family's farm using natural materials from the woods.

Include: a house, a barn, a pasture, an orchard, a water source, cropland, stone walls, and anything else that is historically accurate and reflects classroom reading.

It worked like a charm. In the early spring woods, the eighth graders shed their adolescent cynicism and reentered the world of model trains and dollhouses, yet with clear parameters and content objectives. The vehicle of building a miniature world allowed students to enter into the consciousness of the farmer: Which part of my land gets the most sun and would be best for a garden? Do I place the barn right next to the house? What's the best use of this stony patch adjacent to the outcropping of bedrock? Once the farms were complete, students made sketch maps in the field, which then served as the basis for refined, more formal maps back in the classrooms. The finished products were elegant.

Having settled into their farms, the students were then asked to learn more about their families. Where had they come from? Why did so many children die at an early age? Did my husband really marry my sister after I died? They pursued answers to these questions through visiting local cemeteries, examining burial and census records,