



THINKING OUTSIDE THE CLASSROOM

AN INTERVIEW WITH
ZENOBIA BARLOW

DERRICK JENSEN

Photo: Gregory Thorp

SAY you're driving through the country in the middle of a weekday and spot a group of children mucking around on the banks of a stream. Chances are, your first thought is: Why aren't those kids in school? Zenobia Barlow's answer is: Maybe they are.

Barlow is at the heart of an educational revolution aimed at reconnecting students to the natural world. "If we are to survive as a species," she says, "we need to shape minds capable of grasping ecological understanding." What this means in practice, she tells us, is getting our hands dirty, working in fields and gardens.

The Center for Ecoliteracy (www.ecoliteracy.org), which Barlow directs, wants to help young children hold on to the wonder they naturally find in trees, rivers, and animals, before it's lost to the culture of television, computers, and consumerism. The center is a public foundation that funds San Francisco Bay Area schools and manages a publishing imprint, *Learning in the Real World*. With the center's support, students at Martin Luther King Jr. Middle School in Berkeley have turned part of their schoolyard into a working garden called the Edible Schoolyard, which provides food for the school's "kitchen classroom." More than that, it provides inner-city children with the chance to put their hands in the earth, to get to know small wildlife, and to watch the seeds they planted grow into healthy plants. Several years ago, as part of another center-supported project, a class of fourth-graders began to rehabilitate the habitat of the endangered California freshwater shrimp. The project has since grown to include a network of a hundred classes and has helped bring the shrimp back from the brink of extinction.

Whether working in a garden or on a stream, these children are learning a crucial lesson: that their actions can make a tangible difference in the world around them. At the same time, they are building a sense of belonging to a place. And it doesn't hurt that their grades in every subject — math, science, writing, history — benefit from the time they spend outside the classroom.

Barlow is named for her grandmother, who lived on the Mississippi Delta and was a country schoolteacher and mother of thirteen. Barlow herself grew up on a ranch in west Texas, where she learned early on about the connection between people and the landscape. "The physical environment in which we grow up," she says, "radically alters how we behave toward each other, how we move through our days." As an adult, she worked for the Office of Child Development and the American Academy of Pediatrics. More recently, she was the executive director of the Elmwood Institute, an ecological think tank and international network of activists and scholars founded by physicist, systems theorist, and author Fritjof Capra.

In addition to her work with children and the environment,



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of a friend. As we spoke, a dove picked up twigs from the ground and carried them up to build its nest in the arbor above our heads. Before the tape started running, Barlow and I began talking about violence, and as I turned on the tape recorder, she was making some remarks that could easily have applied to the events of September 11 (still more than a month away) and the subsequent U.S. bombing of Afghanistan.

Barlow: At the heart of many of the atrocities we see around us is a failure of compassion, a failure of empathy. It is the loss of our capacity to see the Other and ourselves as sacred. When our capacity for compassion isn't nurtured, or when it breaks down, or when we distance ourselves until we begin to treat another being as if he or she has no heart or soul, then hatred and violence begin to seem inevitable.

Violence has been with us throughout our existence; in fact, it may be essential to our survival as a species. I don't think it would be inaccurate to say that the potential for cruelty is present in all human interaction. There are circumstances, though — certain historical times and cultural conditions — in which violence is amplified. Unfortunately, in this culture, at this moment in time, we seem to be magnifying our capacity to disturb, disrespect, and disconnect. This disconnection is at the heart of our problem.

Even though we seem to be creating conditions that magnify violence, in each of us there remains the capacity for empathy and compassion and the ability — even the tendency — to appreciate the sacred in one another and in the landscape. The question is: How do we create conditions that foster empathy, as opposed to violence? We could start with schoolchildren. Wouldn't it be wonderful if all kids had a collective experience that fostered empathy by evoking in them the capacity for reverence and awe?

Jensen: Isn't that a rather tall order?

Barlow is an accomplished photographer and has had a long and deep interest in spiritual practices around the globe. She has traveled extensively with her camera in India, Tibet, Nepal, and other regions, documenting traditional forms of worship.

She and her family live in Oakland, California, where she gardens and feeds the squirrels that scamper across her balcony. She also befriends the children who live in her neighborhood, talking to them and teaching them to garden. She says, "Little girls in the neighborhood come and work with me in the garden. That's how they learn. That's how humans have always learned: by working alongside the ones they love."

Barlow and I met for this interview on a hot summer day in July 2001, in Newport Beach, California, where she and her partner were staying at the home

Barlow: Not in my experience. I've discovered that it doesn't take much to create situations where people can rediscover their capacity for reverence and awe.

At the Center for Ecoliteracy there's a large room, approximately nine hundred square feet, with ceilings more than twenty feet high, capped by skylights. We keep the room empty except for some big pieces of bamboo, rocks, and a few pieces of simple furniture. Within minutes of walking in, people comment on how serene the space is. It calms them and encourages them to slow down. Something as simple as a spacious, empty room with a few natural elements can remind people what it means to be truly human. And this is in the middle of the city, in a building on a busy thoroughfare. It's that easy to shift our attention into a place of receptivity and serenity. And as people shift in this direction, they become kinder.

We have a small organic garden outside the spacious room, and once every few weeks, the staff members at the center work together in the garden. And every day, as people pass through the garden on the paths between buildings, they might stop for a moment to tie a tendril of peas to a bamboo pole or to pull weeds from the beds. Sometimes we pick raspberries or harvest lettuce for lunch. As we work together in the garden, we become kinder toward one another. We form deeper connections.

That's the sort of environment we're trying to create in schools: a sense of community and connection to the natural world, outside the tyranny of the schedule and the sterility of the classroom. We like to get children working cooperatively in the garden, to help them understand what it feels like to be connected to the rhythms and cycles of the natural world.

Jensen: How would you describe the current relationship between education and the natural world?

Barlow: The natural world is perceived as peripheral, if it is acknowledged at all. Although there are many programs that engage children in the environment, they do not allow the natural world to become a means of bringing school and community together. To a large degree, place is absent from the discourse in education. Educators have begun to talk about community, but the ecosystem in which the schools and communities are embedded is rarely mentioned. In the history of education, we even went through a phase when architects didn't put windows in classrooms, so that students could "focus their attention." That's how little relevance a sense of place has had to education.

Jensen: I teach at a maximum-security prison, and the first time I saw the building, I thought it looked remarkably

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like my high school: same concrete walls, same tiny windows that don't open.

Barlow: We laugh, but it's a painful truth: the architecture of schools is neopenal.

Jensen: It occurred to me just now that my junior high school was right next to a reservoir, yet we never once went there, much less used it as a tool for learning. And my high school was in the Front Range of Colorado, yet we never talked about the geology of the region.

Barlow: Except perhaps as an abstraction. Environmental educator and author David Orr, who serves on our board, has referred to learning in schools as "abstraction piled on top of abstraction." Education isn't connected to the places where we live and work. Educators have a limited sense of place, he says, because our immediate surroundings are no longer sources of

food, livelihood, energy, or inspiration.

I once led a workshop for the faculty of a preschool near the Marina District in San Francisco. In the workshop, we explored the neighborhood around the school. I gave them a half-hour to go anywhere within three blocks, write three lines of poetry or narrative based on what they observed there, and bring back a found object. We then used the writing they brought back to create a poem, and we placed the found objects on an oversized map of the school and its surroundings. The results were incredible. You don't need to be in the wild to use the environment for learning. Life is erupting everywhere. Weeds grow out of cracks in cement.

That preschool was actually divided into two groups, one that used the environment for learning, and another that didn't. I went back a few months later, and one of the teachers in the environmental group had begun taking his students on trips to the local post office, pet store, and Mexican restaurant, and having them draw and write about life in the city. It was the richest "curriculum" they could possibly have imagined — and it was cheap. The same teacher taught his class to build bird feeders in the yard outside the classroom and how to be still and observe what was happening there. One afternoon, a bird alighted on the finger of a four-year-old. By contrast, children in the nonenvironmental group often threw rocks at birds.

I have no doubt that having the bird land on his finger was a transformative experience for that child. Awakening reverence and a sense of wonder is crucial to teaching ecological views. It is important to see other beings as relatives with whom we can interact in a meaningful and respectful way, to recognize that we live on the same planet and drink from the same water hole. That's such a simple perceptual shift, and yet it means everything.

Jensen: What are some other examples of the relationship between education and place?

Barlow: One suburban elementary school decided to encourage each student to find a special place in the open space contiguous to their campus. The children drew or photographed their special places and wrote about how they changed with the seasons. By the end of the year, each child had established an intimate relationship with a particular place.

Many urban campuses are covered with asphalt, but even there, one can still find a special place. Children have this tremendous ability to focus on minute things. If you're small yourself, you're more likely to see all these other tiny life forms — ants and such — that the rest of us pass by. Something's always happening any place you look. Ecological awareness can start with a seed in a cup on the windowsill.

We keep hearing that children have increasingly limited attention spans from watching television or playing computer games. The natural world fosters an expanded sense of time. Schoolchildren involved in garden projects want to go back daily to see how the plants are doing. Their attention spans expand out over days and weeks and months just by being in a garden. We're working with students who've planted willows along a stream, and they all say that, when they grow up, they want to bring their own children back to witness what they began.

Jensen: When I plant a seed even now, I check it every day.

Barlow: It is natural to nurture other life forms, to want to see what happened to your seed. And if the plant dies, you notice; you care. Children enjoy watching radishes grow because they go from a seed to a beautiful, edible plant in just thirty-five days or so. But look at what has happened: suddenly, we're talking about more than a month as a short time span.

Unless children are immersed in the natural world, they will lose this expanded sense of time. The natural world is such a rich learning environment that we could never afford to create its equivalent. And the natural world is available everywhere, right now, if we simply step outside.

Jensen: I spent a good portion of my childhood flat on my stomach looking at anthills. Not just me, but my friends, too. Our attention wasn't always benign, but at least we were attending to something. And we knew that stretch of the irrigation ditch like nobody else did.

Barlow: In one exercise, we ask teachers to draw a map of someplace they knew as a child. For most, it's a place in the natural world, although for some, it's a basketball court or another paved spot. Regardless, they're astonished by the details they recall. They can still smell the smells. They *knew* that place intimately. And this reminds them that the children in their classrooms are absorbing life with that same intimate attention to detail.

Until very recently in human history, people spent most of their time outdoors. Our brains are wired for the intricacies of the natural world. If you ask adults to remember a learning

experience from their childhood, the richest memories will be of outdoor experiences, rather than anything that happened in a classroom. Something memorized in a classroom isn't as likely to be retained, because it isn't charged with meaning, socially reinforced, or applied in the world.

The current generation, though, is discouraged from going outdoors. The outdoors is considered too dangerous, or too boring. They've got their electronic games and so on. The assumption today is that our children will be economically successful if they become computer savvy at an early age. But being intimate with your place and developing kinesthetic skills are of more use than computer know-how for young children. When you ask businesspeople what sort of employees they're looking for, they say, "Generalists, people who can think, who are resourceful, who can get along with each other." The priorities we are imposing on our educational systems fail to create these very capacities.

Jensen: You've written a lot about nested systems. What are they?

Barlow: Fritjof Capra, one of the founders of the Center for Ecoliteracy, has written about nested systems in a book titled *The Web of Life*. The term "nested systems" refers to the understanding that, at every level in the universe, from galaxies to subatomic particles, systems are embedded within other systems to form one interconnected whole. At the center, we recognize that the classroom is embedded in the school, the school in the district, the district in its community, and the community in the ecosystem. For example, we are working with the Berkeley Unified School District to link the curriculum to gardens, alternative food services, and sustainable farms in the region.

To look at something as a system, you have to shift your focus, if only momentarily, away from the individual parts and observe the dynamic processes of the whole system. Most children are acute observers of relationships and processes, such as the behavior of ants.

Probably one of the best ways to kill children's interest in anthills, or anything else, is to focus exclusively on nomenclature. Memorizing a list of words pales in comparison to the experience of lying on your stomach, watching the ants carry things around and interact with each other. Teaching science is supposed to be about training children to observe, but much of the old-fashioned science class is just about naming things.

Jensen: When I taught writing at a university, I never taught grammar, because teaching grammar is pointless until the students have found something they want to say. And once they've found something they want to say, they automatically want to learn grammar.

Barlow: Curiosity is the most important thing. I'm not saying naming isn't important, because it is. But if you have a motivation for wanting to know something's name, you're more likely to remember it than if you've been forced to memorize the name in a vacuum.

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