Teaching about Sustainability

By Gregory Smith

During a summer symposium about ecological education more than a decade ago, David Orr, a professor of environmental studies at Oberlin College, suggested that humanity is now like a person experiencing a heart attack. Deteriorating environmental conditions threaten our species' future, and we've got to do whatever we can to take corrective measures. The first step is to stabilize the patient, and for a heart attack victim, this means drawing on all available technologies—defibrillators, emergency angioplasty, or clot-busting drugs. But these actions can do no more than prevent the patient from dying. They won't stop another attack. That will happen only when the patient adopts significant changes in lifestyle: altered diet, a regular exercise regime, reduced stress. Orr argued that as much as human beings may hope for a technological solution to problems like resource exhaustion, pollution, or climate change, technology will only go so far. What ultimately is required is a transformation of our way of life and our beliefs about humanity's relationship with the planet.

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Defining Terms

I've been teaching a graduate course entitled Envisioning a Sustainable Society since 1996 that seeks to explore the possible dimensions of this transformation. Designed for future teachers, educational leaders, and

counselors, the course focuses on the implications of contemporary environmental and social crises for people in schools and counseling centers and the role they might play in addressing these issues. The course considers technological changes that support the creation of a more earth-friendly and just society, but focuses primarily on cultural and attitudinal shifts needed to reduce humanity's footprint on the planet and to distribute its limited resources more equitably.

After introductions that include students' responses to a question about their own history of involvement with environmental and social justice issues, we watch Helena Norberg-Hodge's film, *Ancient Futures: Learning from Ladakh*. This documentary provides an opportunity to develop our own definitions of sustainability after witnessing what happens to a small traditional society opened to the forces of modernization in the decades after the 1970s. Situated in a nearly inaccessible section of northern India, Ladakh remained isolated from the rest of the world until a road was built to its capital, Leh, following the Indo-Pakistani War in 1971. Ladakh's first tourists arrived in 1974, and with them followed international trade, fossil-fuel burning vehicles, and the attractions of materialism.

The first half of the film recounts what traditional Ladakhi society was like when Norberg-Hodge, a linguist who accompanied the early tourists, first arrived. The second half describes the erosion of long-standing beliefs and social practices under the onslaught of international trade, the global media, tourism, and modern education. Despite or perhaps because of the harsh conditions encountered at 11,000 feet, the Ladakhis had developed a way of life capable of providing for people's needs in a remarkably equitable and sufficient manner. After witnessing the sizeable family homes and well-tended barley fields, Norberg-Hodge asked a young man about the whereabouts of poor people. He stopped for a moment, thinking, and said that there were no poor people in Ladakh.

While watching the film, I ask students to record information about common aspects of life in any society: human relations, economy, natural resources, governance, education, technology, food production, worldview. Following the film, the students break into groups of five or six to discuss factors that they believe contributed to the long-term sustainability of Ladakhi society. They note things such as the way extended families remain with one another across generations; well-established patterns of shared labor and support; the fact that people live within their means and all possess the skills needed to feed, clothe, and house themselves; the time devoted to celebrations; the blending of play and work; the absence of strong divisions between social classes or genders; the careful use and husbandry of natural resources; the integration of education into children's experience with their families and community; and a belief system that stresses the interconnection of all things. I emphasize that my interest in having them engage in this exercise is not to hold up Ladakhi society as a model to which we should return but to identify Ladahki approaches to common human issues that could be modified to help people in industrialized societies create more sustainable patterns of behavior and institutions.

I then ask them to consider what aspects of modernization seem to be contributing to the breakdown of a social system that had provided more than adequate support for people in a challenging natural environment. One of the first things students point out is the introduction of food crops produced in other countries sold at prices that undercut the sales of locally grown grains. As a result, the traditional Ladakhi economy has become compromised, and people in this region of the world are no longer able to support themselves through their own efforts. Schools, often seen as an unquestioned good, are in this society a vehicle for supplanting one world view with another and for drawing children away from an economy based on mutual exchange to one based on wages. With the influx of material goods and Western tourists after the mid-1970s, education has also called into question the integrity of Ladakh's traditional life ways and contributed to the alienation of Ladkhi youth from their families and communities. The use of fertilizers, pesticides, fossil fuels, and plastics has led to the pollution of the land, air, and water, and a growing disregard for the protection of these resources. Within only a few decades, Ladakh has come to exhibit many of the forms of social and environmental distress encountered in industrialized countries. Seeing this distress in such a localized setting helps students begin to recognize the cultural, economic, and social dimensions of sustainability.

I conclude this discussion by asking students to develop in pairs their own definitions of sustainability. Some of the definitions they've developed include the following:

> Sustainability includes small-scale governance with local control as its priority. It is a state in which people are aware of both the means and the ends of their economic and interpersonal existence, and act accordingly.

> Sustainability is a system in which economic, ecological, and personal relationships are balanced for the current and long-term good of the whole.

> Sustainability is achieved when a community does not exceed the carrying capacity of its bioregion. Within its bioregion, all of the community's needs are met with regard to human relationships, economy, education, governance, and spirituality.

These definitions provide a starting place for our consideration of the variety of local and global factors that require consideration when exploring the issue of sustainability.

Looking Squarely at the Problems

During the next two weeks of the class, we explore a range of social and environmental challenges that call into question the sustainability of industrial civilizations in both the West and East. I have used a variety of texts over the years, sometimes relying on specific articles and sometimes on books. In the fall of 2007, I drew upon the *United Nations Millennium Ecosystem Assessment* (2007) as well as recent articles from *Scientific American* about global warming (Collins et al.,

2007). In 2008 and 2009, I chose Lester Brown's *Plan B, 3.0: Mobilizing to Save Civilization,* in part because this text provides a rich summary of information about threats to industrial civilization from a wide range of sources. It is important for people concerned about sustainability to have factual data at hand about climate change, population trends, resource exhaustion, the inequitable distribution of wealth and poverty, and habitat destruction as they consider both the threats to humankind as well as options for doing things differently. Referring back to Orr's analogy, we need to know what the disease is if we are going to treat it effectively.

For many people, however, the exploration of these issues can become an exercise in discouragement if not fear. For this reason, I've included a written assignment that asks people to discuss their emotional response to the issues we have been considering. These two-page papers are then shared in small groups, giving people an opportunity to voice anxieties that can lead either to denial or withdrawal. Students' observations in these papers are often insightful and heartfelt, deepening the quality of conversation in the class. One student noted, for example:

> I'm not optimistic that we can stop our carbon-dumping in time. There may be too many positive-feedbacks going already even if we shut everything down. Meanwhile, we can all strive to live with a growing awareness of the joy and freedom that comes with spirits free of obsession with material wealth. We can lead one another towards a new Western paradigm of stillness and contentment, appreciation for manual labor, lowered birth rates, shared assets, cooperation, and leadership that will speak the truth about the impact of our actions on the world and our communities. We can teach balance, complex systems, and the importance of community. (Ed Derby)

Another observed that

> Becoming a teacher is the next step in my attempts to fulfill my longing to be connected. As a teacher, I want to challenge the impoverished, compartmentalized, and sometimes violently disconnected culture of consumerism that perpetuates environmental degradation and social injustice. I hope that I can help students expand their imaginations beyond the parameters set forth for them by capitalism and industrialism. My efforts to work towards becoming more of a force of healing in my community flow from my attempts to cultivate a love for honor and integrity. (Gillian Barlow)

An experienced teacher stated

> I once heard David Suzuki urge young people to go home and ask their parents what they were doing to save the planet. He then said, "Whatever they answer you, tell them it's not enough!" Now I am also a parent, and his words still ring in my head. The global environmental crisis is not something that will impact life on Earth at some distant future time; it is doing so, and the impacts will hit hard during my son's lifetime. (Jim Hartmann)

When these sentiments are shared with others, what arises is a kind of solidarity

and commitment to do something that can buoy people up after a diet of frightening news.

Exploring Potential Solutions

In addition to this writing assignment, I incorporate a half-day fieldtrip within a few weeks of our brief review of environmental and social challenges. One Saturday morning, we visit a range of positive initiatives in the Portland area that are contributing to the creation of more sustainable practices in our community. I choose sites that represent actions taken by both mainstream and alternative groups. We often start off at a recently constructed building on the college campus where I teach that received a gold LEED (Leadership in Energy and Environmental Design) certification. During the most recent course, we then drove to Portland's ReBuilding Center, a decade-old business that recycles materials from dismantled buildings or contributed by do-it-yourselfers. Originally established by neighborhood activists interested in creating a source of income for community improvement activities, the ReBuilding Center now employs over 60 people at family-wage jobs.

We then visited a home being remodeled by the founder of a business called Environmental Building Supply. The house is powered entirely by solar panels and wood heat, significantly reducing its carbon footprint. The Sunnyside Environmental School, a K-8 school that is part of the Portland Public Schools, was the next site on our tour. The school's founding principal walked us around and through the building as students and parents participated in a fall clean-up of the flower, berry, and vegetable gardens that fill much of the grounds. Our final site was Luscher Farm located on land now owned by the Lake Oswego Parks Department. The farm contains a sizeable area devoted to a community garden and multi-acre subscription farm where families pay for weekly pick-ups of vegetables throughout the growing season. Visits to these individuals and organizations provide class members with a chance to meet with people who are imagining and enacting innovative approaches to business, material use, building design and alternative energy, education, and agriculture. Students leave this experience with a sense of hope and possibility. The fieldtrip has now become a pivot point for the class.

The second half of the course elaborates on these possibilities primarily through an investigation of ways that people in other parts of the world are experimenting with related innovations. During the past few years, I've used David Suzuki and Holly Dressel's *Good News for a Change* as a primary text. This volume describes grassroots efforts in the United States and elsewhere that are addressing the development of more just and sustainable approaches to commerce, forestry, farming, range management, fishing, and water conservation. This year, I included the final chapters of Brown's *Plan B. 3.0* with his more extensive discussion of activities that are taking place at the national level in a wide range of countries. I want students

to understand that movement is occurring both at the top and the bottom, and that supporting innovation at all levels is crucial.

I also have people read a short essay by Paul Hawken (2007a) that summarizes the central point of his 2007 book, *Blessed Unrest: How the Largest Movement in the World Came into Being and Why No one Saw It Coming*. Hawken believes that over a million non-governmental organizations have arisen during the past few decades to address generally local threats to people or the natural environment. Oftentimes, these groups are unaware of others who are addressing similar issues in other places. I want students to understand that the positive practice they see in Portland and encounter in our readings are not outliers, but part of a leaderless effort that includes hundreds of thousands of people globally, and that the possibility of creating a sustainable society is not a pipedream imagined by the powerless but a vision that is in fact being enacted by others just like themselves right now.

Engaging Educators

Two weeks are then devoted to schools and their potential contribution to this movement. The Sunnyside Environmental School serves as an exemplar. Adding to stories I'm able to share about its creation and operation, students also read chapters from Michael Stone and Zenobia Barlow's 2005 volume, *Ecological Literacy.* We look in particular at accounts describing the creation of the edible schoolyard and kitchen classroom at the Martin Luther King Middle School in Berkeley, the STRAW (Students and Teachers Restoring A Watershed) Project in the Bay Area, and Dana Lanza's environmental justice program at Bayview Hunters Point in San Francisco. Each of these projects grew out of the commitment of teachers convinced that they could create powerful learning experiences for their students beyond the boundaries of the classroom and still fulfill district and state curricular requirements.

I supplement these accounts with my own research in the area of place-based education, an approach to curriculum development that emphasizes the value of incorporating local culture, natural resource issues, and economic possibilities into students' school experience with the aim of connecting them more deeply to their community and place. I conclude this segment of the course with an exercise that gives students a chance to design a school aimed at preparing young people to become involved citizens and stewards committed to the shaping of more socially just and environmentally sustainable communities.

Throughout the final weeks of the course, students embark on a research project of their own, choosing topics that have emerged in our discussions or designing a unit that could possibly be taught in the coming months that deals with an issue related to sustainability. These are then presented during our last class meeting. I encourage students to come up with topics that in some way resonate with their own experience. Over the past few years, students have interviewed their grand-

parents about farming in Oregon or their previously countercultural parents about ways they worked to maintain some of the values of their youth as they assumed the responsibilities associated with jobs and families. Others have written letters to skeptical relatives about their commitment to adopting more earth-friendly practices into their own lives or chronicled their experiment with a hundred-mile diet. Some have chosen very specific topics to investigate: the questionable value of biofuels, challenges faced by the airline industry posed by the peaking of oil production, the use of non-toxic materials in an art classroom, or the design of language arts units that explore environmental issues or the impact of globalization. I encourage students to develop class presentations that are to-the-point and lively, and people leave this concluding class energized with one another's excitement.

Seeding Empowerment in Despair

The Buddhist scholar and activist Joanna Macy has for more than two decades been leading workshops that focus on the relationship between despair and empowerment. Macy's work began as a response to the threat of nuclear warfare. As the social and environmental consequences of what she calls industrial growth societies began to manifest themselves in the 1980s and 1990s, she shifted her focus to these concerns. She now speaks of the "great turning" she believes human beings must embrace in coming decades if future generations are to inherit a planet capable of supporting their lives. Her work points to both the difficulties and possibilities of opening up discussions about the topic of sustainability.

Grappling with the changes that now seem to be demanded of human beings can be overwhelming and disheartening—a true cause for despair. But avoiding that despair will leave us ill prepared to deal with the challenges that currently face our and, in fact, all species. At the same time, despair can become immobilizing if not counterbalanced with a belief that people have the capacity to respond with compassion, intelligence, and skill to these challenges. I have sought to incorporate these two poles of experience in my design of this course about sustainability, seeing them as closely linked rather than divided. As with a heart attack victim, by understanding the depth of the change needed to restore health and wholeness both environmentally and socially, it may be possible for humanity to embrace the transformation in behavior and expectations now required of us all.

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