

Educating
for
Eco-Justice
and
Community

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Preface

The main thesis of this book is that the social justice issues of class, race, and gender need to be framed in terms of a more comprehensive theory of eco-justice. Unfortunately, the followers of Dewey and Freire, as well as the theorists inspired by Ilya Prigogine and Alfred North Whitehead, continue to frame their recommendations for educational reform in ways that ignore the cultural roots of the ecological crisis. The various approaches these educational theorists take in conceptualizing how educational reform can alleviate social injustices contain a double bind. Their view of social justice, which is couched in the Enlightenment language of emancipation of the individual, involves achieving equal standing in a culture that is overshooting the sustaining capacity of natural systems. The double bind is in the fact that the cultural groups most directly affected by contaminated environments and the loss of employment opportunities due to the "outsourcing" connected with a global economy are the minorities most in need of eco-justice. These marginalized cultural groups also face the loss of traditions essential to their identity and forms of community

through the cultural homogenization that accompanies a hyper-consumer culture. Reform efforts that contribute to eco-justice must address the right of future generations to inhabit an environment that has not been diminished by the greed and materialism of the current generation. The need for non-Western cultures to attain a more adequate material standard of living without being forced to adopt the Western model of development must also be considered in an eco-justice pedagogy.

The above summary involves a shift in conceptual categories that needs to be made explicit. Issues of race, class, and gender are usually examined from a sociological perspective that utilizes, as its moral norm, the idea of equality—in terms of the law and economic and educational opportunities, and in the political arena. This is an important moral norm guiding educational reform. Unfortunately, the ideal of equality, especially when framed in terms of assumptions that represent the individual as the basic social unit, does not take account of differences in cultural ways of knowing. The sociological literature has yet to address this crucial issue.

The attempt to avoid the reified and thus too easily universalized categories of sociology by adopting an anthropological perspective can lead to another set of misunderstandings—especially since the word *culture* also has a long history of distorted reifications. The dangers of adopting an essentialist way of thinking that represents the members of a culture as embracing a common set of beliefs and values that sets them off from other supposedly closed cultural systems are very real. The anthropological perspective has also led to a politics of domination. The cultural assumptions encoded in the approaches some anthropologists have taken to explain the nature of culture, as well as the reifying characteristics of the printed word and the museum setting, have contributed to a popular misunderstanding that ignores how the lived patterns encompassed by the word *culture* are dynamic in ways that involve individualized ex-

pression, taken-for-granted patterns, exogenous and endogenous sources of change, and different temporal patterns. The use of the term *hybrid culture* (Garcia Canclini 1995) represents an attempt to account for these dynamic and syncretistic characteristics. As that is an exceedingly awkward phrase, I will continue to use the word *culture* but in an inclusive way that takes account of the total range of life world experiences: shared patterns and traditions, interpretations that reflect biographically distinct and group-based experiences, movement into and between different symbolic spaces that have their own norms of behavior and thought, layers of metaphorical constructions that reproduce the thought patterns of past elite groups, tensions and continuities between empowering and destructive traditions, and the antitradition traditions of modernity as expressed in science, technology, and hyperconsumerism.

In addition, culture must be understood as encompassing the divergent ways of knowing and the value systems encoded in the languaging patterns of different cultural groups—even as their youth wear Nikes and the older people watch American television programs. One of the primary reasons why I retain the word *culture* is that it provides a basis for challenging the modern myth of the autonomous individual. To make this point another way: the use of the word *culture* is essential to challenging the proclivity of modern elites to universalize their categories of thinking—including their prescriptions for reform. It is also essential to the argument that the language of different cultural groups may encode the intergenerational knowledge of the sustainable characteristics of their bioregion. For example, when a language that previously carried forward the intergenerational knowledge of the medicinal properties of local plants ceases to be spoken by the younger generation, local practices that previously were the basis of self-sufficiency are replaced by consumerism—which creates new forms of dependencies and impoverishment. This important insight of Ivan Illich has

been largely ignored because it could not be reconciled with the modern ideal of development (which has made consumerism the ultimate virtue).

There is another possible source of confusion that needs to be addressed. At different points in my analysis I use the concept of *double bind* to explain how what appears to be a progressive development may contribute to destructive consequences that generally go unrecognized. As an example of a double bind, Gregory Bateson cites the old European test for determining if an individual was guilty of witchcraft. The suspected witch was tied to the end of a plank that was then immersed in water. The person who sank (and thus drowned) was presumed to be innocent; the person who floated was found to be guilty—and then burned at the stake (Bateson and Bateson 1987:173). The only way out of the double bind was to question the guiding assumptions—which could not be done in that atmosphere of fear and superstition. Today there are *double binds in shopping online* and at the local Wal-Mart, which is convenient for the individual but undermines the local economy and systems of mutual dependency, and in the *globalization of Western technologies*. Unlike Bateson's example, ~~the~~ which a single individual was harmed, the consequences of not being able to recognize the cultural assumptions that give rise to double bind behaviors and ways of thinking will be experienced more widely and will put more lives (indeed whole cultures) at risk.

Recognizing the double binds inherent in “progressive” educational reform proposals leads to the understanding that change is not always the manifestation of a linear form of progress. Indeed, how educational reforms contribute to strengthening ecologically problematic cultural patterns may not even be recognized. The double bind inherent in a form of material progress that undermines the viability of life-sustaining natural systems can easily be understood when stated in this explicit way, but the linguistic/

conceptual conventions that contribute to this double bind are generally taken for granted and thus not made explicit. The underlying assumptions may even be encoded in the “god-words” that cannot be challenged because of the danger of being seen as opposing social progress. In the following chapters I identify how the *metaphors of leading educational theorists are based on a view of progress that is being used to globalize an individual- and consumer-centered culture*. The irony is that many of these educational theorists represent themselves as critics of capitalism and the growing dominance of technology—which is yet another example of a double bind. *Their view of emancipation, and the deep cultural assumptions it is based on, undermines the forms of knowledge and networks of mutual support that are the basis of more self-sufficient lifestyles and communities*. I will also point out the double bind inherent in their reified political categories.

The intellectual pathway I have taken in recent years has been influenced by graduate students at the University of Oregon and Portland State University, by colleagues in different parts of the world who shared their ideas and pointed me toward scholarly sources that I had overlooked, and by the writings of educational theorists who have ignored the ecological crisis. Indeed, I have probably learned the most from the latter group—but it has not been the form of learning that has turned me into a follower. As in the case of past books, I must also acknowledge the many sources of encouragement and suggestions for improving the clarity of my writing given by Mary Katharine Bowers.

Introduction

Over the last decades of the twentieth century a number of writers explained how public schools and universities contribute to the patterns of inequality in society. They even suggested broad reforms in curriculum and pedagogy that were more the embodiment of their own deep desire for social justice than a realistic assessment of the interest or ability of educators to use the classroom to effect radical changes in American society. Indeed, the call for public schools and universities to become catalysts for social change is a dominant characteristic of what can be called the “messianic” tradition in American education. Many of these proposals for harnessing the nation’s educational institutions to the task of achieving social justice for all citizens were not adequately grounded in an understanding of the structural characteristics of society. That is, no matter how effective the teachers and no matter how empowering the curriculum, the educational process lacked the political means necessary to transform the controlling political and economic interests. Other proposals, in spite of the good intentions they embodied, did not take into account most

educators' reluctance to question the prevailing assumptions and values that make it so easy to give lip-service to the ideals of social justice while reinforcing the patterns of thinking that perpetuate the problem.

This book faces the same challenges that undermined the efforts of previous advocates of using the classroom to "build a new social order"—to borrow the visionary statement of an earlier progressive thinker. It too may fail to convince public school teachers and university professors of the seriousness of the structural and conceptual/moral problems we face as a society and as citizens of the Earth's ecosystems. It will certainly lack the political and economic muscle that multinational corporations and national governments possess and use to dictate changes that serve their interests. Nevertheless, the difference between this book and earlier efforts to promote educational reform may be great enough to warrant withholding any comparison with the largely failed efforts of the past.

As I explain in the following chapters, social justice advocates such as John Dewey and Paulo Freire, as well as more contemporary theorists, base their analyses and educational recommendations on a view of society that fails to acknowledge a crucial point: at the deep symbolic level, not all cultural groups in American society share the modern understanding of the Enlightenment ideals of progress and individual freedom. Their analyses also fail to take account of the scale and rate of changes occurring in the Earth's ecosystems. While the current pattern of framing social justice issues in terms of the categories of race, gender, and class is highly useful for some analyses, the arguments for what constitutes a morally just society are still being framed in terms of the Western, high-status way of thinking that represents the individual as the basic social unit. Indeed, at the core of these analyses is an interlocking set of culturally specific assumptions that have gone largely

unquestioned. Also unnoticed is that as the individual members of marginalized groups—women, ethnic minorities, the underemployed, and the working class—overcome social barriers and thus achieve greater parity in the economic and political life of the community, they most often *join* rather than alter the dominant pathway of cultural development. That is, they become participants in the consumer- and technology-oriented society. While I am not arguing that anyone should be denied the materialistic opportunities that the members of mainstream culture take for granted, it is important to note that the achievement of a greater measure of social justice in the spheres of education, the marketplace, and the political arena can contribute to other forms of social injustice.

For example, advocates of educational reform fail to recognize that any definition of social justice that does not take account of how human demands on the natural environment are affecting the lives of future generations is fundamentally flawed. Indeed, it seems incomprehensible to write about social justice for women, minorities, and the economic underclass without considering the ways in which the Earth's ecosystems are being rapidly degraded. Nor should any discussion of social justice be framed in a way that ignores how achieving greater access to the material standard of living that is today's measure of personal success depends on market forces that are appropriating the resources of non-Western cultures and displacing their traditional forms of knowledge. Unlike ecofeminist writers, the educational proponents of empowering marginalized groups have also ignored the fact that the scale of chemical changes in natural systems resulting from modern technologies is undermining the physical health and shortening the life spans of many people. This fact has not, however, been lost on members of minority communities who have been organizing themselves to resist the chemical contamination of their local environments. An extensive body of research shows that the victims of

long-standing patterns of marginalization are the most adversely affected by the toxic by-products of consumer society. As these findings are often reported in the popular media, it is difficult to understand why the concern with the declining viability of the Earth's ecosystems has not been recognized as an essential aspect of any educational theorist's discussion of social justice.

My own experience of being labeled a reactionary thinker by educational theorists who want social justice issues framed *only* in terms of the categories of race, gender, and class serves as a constant reminder that the theorists who view themselves as agents of radical social change are themselves reproducing the conceptual patterns of the past. Because they use traditional ways of framing social justice issues, they fail to recognize that addressing the cultural basis of the deepening ecological crisis is fundamental to any vision of social justice. The combined myths of anthropocentrism and the linear view of progress, which are still part of the mythopoetic basis of current thinking about emancipating subjugated groups, have led generations of progressive reformers to ignore the growing evidence of environmental degradation. Educational theorists who write today about social justice issues in ways that ignore the long-term implications of the ecological crisis are simply carrying forward this tradition of double bind thinking.

The argument that educational reform should be based on an understanding of what constitutes eco-justice should not be interpreted to mean that the poverty and limited opportunity for self and community development now experienced on a disproportionate scale by certain groups in American society should be ignored or downgraded in importance. Rather, reform should be viewed within a more inclusive category of analysis, one that makes visible both the double binds and the possibilities that educators have ignored in the past. An eco-justice-based approach also takes account of fundamental realities that cannot be dismissed as mere

social constructions or matters of individual interpretation. The extreme weather patterns that accompany global warming are undeniably real. As is a global economic system that is based on fossil fuels and synthetic chemicals that are changing the biology of life, increasing illness and premature death in humans, and contributing to the extinction of more than ten thousand species a year (a conservative estimate). As people dependent on once abundant fisheries can attest, the degraded state of the marine ecosystems is leading not only to the loss of jobs but also to the loss of a vital source of food. The loss of topsoil (estimated at twenty-four billion tons annually, or what amounts over a ten-year period to 7 percent of the Earth's most productive agricultural land) becomes an especially significant "reality" when viewed in light of the rapid increase in the world population. The concurrent globalization of technologies that are narrowing the genetic basis of the food supply puts the world's population even further at risk. Similarly, we need to take into account the pattern of thinking that leads to disposing of toxic wastes in regions of the world where the interests of local populations are being ignored.

The downward trend in the viability of ecological systems is being disregarded by a public that wants to believe in the media and in shopping mall images of plentitude rather than consider the ecological consequences of their consumer lifestyle and their complicity in supporting the myths surrounding its globalization. Also ignored are the forms of knowledge being lost in different regions of the world—knowledge built up over generations of learning about the possibilities and limits of local ecosystems. The knowledge of cultural groups anchored in an intergenerational experience of place is being undermined through the introduction of Western media and other symbols of modernization. Multinational corporations are beginning to claim patent rights on local people's knowledge of biodiversity—thus further commodifying Nature

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and forcing local populations to become increasingly dependent on the marketplace to meet basic needs. Included in the loss of cultural diversity are the codes of moral reciprocity that served to limit human impact on natural systems. Traditional skills, customs, and codes of moral reciprocity that enable cultural groups to keep market relationships from becoming the dominant characteristic of community life are also disappearing under the pressure of modernization and economic development. The decline in the self-sufficiency of traditional communities, however, has not always been accompanied by the disappearance of cultural practices that are viewed as morally reprehensible in the West.

An eco-justice pedagogy must be based on a vocabulary that is able to represent the strengths and limitations of these traditional cultures as well as articulate what modern, urban cultural groups can learn from them (*which is profoundly different from borrowing from them*). It must also clarify the double binds that characterize how many educational theorists have framed social justice issues—particularly the deep cultural assumptions that provided conceptual and moral legitimation for the Industrial Revolution. That individuals need to become emancipated from the hold of tradition is one of these assumptions. Ironically, this assumption is common to the thinking of Dewey and his contemporary followers, as well as to advocates of cyberbase communities such as Bill Gates, Sherry Turkle, and Esther Dyson. Other cultural assumptions that have influenced how educational theorists understand social justice issues include thinking of life processes (including the development of cultures) as evolutionary in nature—that is, moving from simple and primitive to complex and better adapted; anthropocentrism—which shows up in thinking about human possibilities in ways that do not recognize the dependence of humans on the viability of the environment; and viewing the individual as the basic social unit

and thus the center of subjective decision making about what is of immediate interest.

The spread of the Industrial Revolution depended on the acceptance of these assumptions; indeed, they continue to be the basis of a modern and progressive lifestyle. The Industrial Revolution, that juggernaut of commodifying energy, would not now be entering its digital phase of development if the face-to-face traditions of community had not first been undermined by a modern ideology that combines the myths of individualism and linear social progress. The new technologies that allow elites to extend the commodification process make it all the more imperative that the double binds still present in the thinking of many educational reformers not be incorporated into how we think about the nature of an eco-justice pedagogy.

The presence of these conceptual and moral double binds is more than a matter of perpetuating the deep cultural patterns of thought that are the basis of deadly economic and technological practices. These double binds also limit the educator's ability to reform the curriculum in ways that lead to a regeneration of the traditions of interdependence within different communities—including their awareness of environmental limits. An eco-justice pedagogy should have as its main focus the recovery of the capacity of different cultural groups to sustain traditions that contribute to self-sufficiency, mutual support, and symbolic expression. In short, it should stress relationships and skills that make dependence on consumerism less necessary. What must be reversed is the way basic needs in health, nurturing, education, entertainment, leisure, work, community relationships, and so forth are increasingly defined and met by the purveyors of commodities and expert systems. Traditionally, many cultural groups were able to meet these needs in ways that did not damage the environment. Today, products and services are

designed to create a continued state of dependency on the marketplace. The commodification of children's play is one example of this transformation. Instead of children using personal imagination, exploring the possibilities of the local environment, and learning from their interactions with older children, play today is largely dictated by the design departments of major corporations that connect toys to brand-name images appearing in television commercials and megamovies such as *Star Wars* and *Jurassic Park*. In effect, toys have become the early stage of socialization to a state of dependency as well as the fantasy narratives and environments that support it.

With the exception of ethnic minorities who consciously strive to keep their traditions alive (even when they live within mainstream society), most modern communities have been reduced to anomic individuals and remnants of the nuclear family that are increasingly focused on meeting the rising cost of buying what previously was attained through personal skill and mutual effort within the household. The majority of social interactions now occur within the workplace, in consumer-related behavior, and in front of the television set—which is industry's pipeline for sending its consciousness-shaping messages and images. There are efforts within some communities to reverse this trend through non-commodified service organizations, youth sports programs, and public school and church-related activities. In addition, mentoring, community theater and other forms of artistic performance, and intergenerational sharing of skills and knowledge relating to a wide range of interests and needs represent just a few of the efforts being made to resist the growing pressure to become dependent on technology, consumerism, and outside experts.

The elements of community that continue to be undermined by consumer society's relentless efforts to expand the need to purchase goods and services is put in historical perspective in Kirkpatrick

Sale's study of the Luddites' resistance to the early phase of the Industrial Revolution. Of particular interest is his summary of the aspects of community that had to be transformed in order to expand markets and thus keep the production lines running at full tilt:

All that "community" implies—self-sufficiency, mutual aid, morality in the marketplace, stubborn tradition, regulation by custom, organic knowledge instead of mechanistic science—had to be steadily and systematically disrupted and displaced. *All the practices that kept the individual from becoming a consumer had to be done away with so that the cogs and wheels of an unfettered machine called "the economy" could operate without interference, influenced merely by invisible hands and inevitable balances and all the rest of the benevolent free-market system.* (Sale 1995:38; italics added)

To paraphrase Sale in a way that illuminates how this process operates today: all the traditions that enable individuals, educational institutions, social organizations, and small businesses to keep from becoming dependent on the computer industry have to be represented in the public mind as outmoded, backward, and inefficient—with the most emphasis on the last metaphor, which now stands for a social pathology.

While the use of technology and other consumer items cannot be judged in dichotomous categories of good and bad, unnecessary dependence on meeting needs through products and services that can be purchased has disruptive consequences that weaken the viability of the family, community, and environment. Products and services require turning the environment into resources and then, at the end of the production-use cycle, returning degraded material and toxic wastes to the environment. The more that needs are met through the self-reliant capacities of individuals, families, and communities, the fewer the adverse impacts on the environment. There is another destructive cycle that accompanies the increasing reliance on con-

sumerism. The more people rely on consumerism, the more they have to work in order to pay for their expanding dependencies: food preparation, entertainment, transportation, clothes, leisure time, health care, and so forth. And the more people have to work, the less time they have for parenting and involvement in activities that strengthen the reciprocal networks within the community.

Taking seriously the traditions within communities (which will vary among cultural groups, of course) that make their members less dependent on the marketplace brings into question educational theorists' practice of framing social justice issues within the conceptual and moral framework of liberalism—an "antitradition tradition" that coevolved with the Industrial Revolution. While the liberal animus toward all traditions and the simultaneous embrace of the myth of progress are celebrated in our educational institutions as the deepest expressions of contemporary wisdom, they contribute to an inability to discriminate between constructive, vital traditions and traditions that are destructive and the sources of injustice.

There is another dimension to an eco-justice pedagogy that has implications for curriculum reform at all levels of education. While I personally think that the current disparity in the distribution of wealth in American society, and between the North and the South, equals the ecological crisis in importance, I doubt that the educational process can have a direct ameliorative effect. Classroom discussions of the complicity of multinational corporations in the ecology of rich and poor may influence, down the road, how legislation is framed. But the ability of wealth to distort the democratic process in ways that favor the interests of the multinational corporations and other elite groups is too overwhelming for the educational process to have much real influence. In fact, such discussions are likely to leave many students with a feeling of utter powerlessness, and thus disinclined to become involved in the political pro-

cess. While students need to understand the political behavior of Exxon, Dow Chemical, Microsoft, and other megacorporations, class discussions of poverty at the local level are more likely to have a direct effect. That is, an eco-justice pedagogy should address the causes of poverty and the creation of wealth at the community level, which requires an understanding of how to regenerate the sense of local responsibility and mutual support that has been undermined by national and international market forces.

Wendell Berry's essay "Conserving Communities" lists seven-teen suggestions for improving the economic well-being and self-sufficiency of local communities. His guidelines can be used as a starting point for understanding how an eco-justice pedagogy can have a direct impact that goes beyond classroom discussions that too often have little lasting influence.

1. Always ask of any proposed change or innovation: What will this do to our community? How will this affect our common wealth?
2. Always include local nature—the land, the water, the air, the native creatures—within the membership of the community.
3. Always ask how local needs might be supplied from local sources, including the mutual help of neighbors.
4. Always supply local needs first (and only then think of exporting products—first to nearby cities, then to others).
5. Understand the ultimate unsoundness of the industrial doctrine of "labor saving" if that implies poor work, unemployment, or any kind of pollution or contamination.
6. Develop properly scaled value-adding industries for local products to ensure that the community does not become merely a colony of the national or global economy.
7. Develop small-scale industries and businesses to support the local farm and/or forest economy.

8. Strive to produce as much of the community's own energy as possible.
9. Strive to increase earnings (in whatever form) within the community for as long as possible before they are paid out.
10. Make sure that money paid into the local economy circulates within the community and decrease expenditures outside the community.
11. Make the community able to invest in itself by maintaining its properties, keeping itself clean (without dirtying some other place), caring for its old people, and teaching its children.
12. See that the old and the young take care of one another. The young must learn from the old, not necessarily and not always in school. There must be no institutionalized child care and no homes for the aged. The community knows and remembers itself by the association of old and young.
13. Account for costs now conventionally hidden or externalized. Whenever possible, these must be debited against monetary income.
14. Look into the possible uses of local currency, community-funded loan programs, systems of barter, and ~~the~~ like.
15. Always be aware of the economic value of neighborly acts. In our time, the costs of living are greatly increased by the loss of neighborhood, which leaves people to face their calamities alone.
16. A rural community should always be acquainted and interconnected with community-minded people in nearby towns and cities.
17. A sustainable rural community will depend on urban consumers loyal to local products. Therefore, we are talking about an economy that will always be more cooperative than competitive. (Berry 1996:413–415)

While Berry tends to think of the local community in terms of rural environments, many of his suggestions have both direct and indi-

rect implications for urban settings. In fact, many ethnically conscious communities in urban areas have, partly out of necessity and partly as an expression of cultural tradition, been pursuing Berry's guidelines. The failure to include them as part of the public school and university curricula represents one of the ways in which our educational institutions perpetuate the further creation of wealth at the top rather than nurturing at the grassroots level both material and social forms of wealth.

An eco-justice pedagogy that addresses the curricular implications of Berry's guidelines for greater community self-reliance and economic well-being must also address another social justice issue: namely, the marginalization of the talent and skills of people who do not undertake some form of higher education. Equating higher education with the forms of knowledge needed to advance the national and global economy makes it more difficult for people to earn an income from their natural talents and communally acquired skills. Just as the wisdom of communal and environmental relationships is undermined by the expert knowledge learned in universities, the forms of knowledge and skill valued by corporations ~~and~~ undermine the knowledge and skills vital to the nonmodified aspects of local communities. Read the educational goals that corporations and legislatures are now setting for public schools and universities to assess the truth of this generalization. Spokespersons for corporations want students to learn problem solving and how to think and write clearly; they want them to be mathematically literate and able to engage in group processes. Noticeably absent from their list of educational goals are the skills and knowledge needed for leading less commodified lives.

My emphasis on eco-justice as the inclusive conceptual and moral framework for guiding educational and, by extension, social reform is supported by the growing involvement of minority communities in addressing environmental issues. Ethnic and working-class communities are becoming increasingly active in the Citizen's

Clearinghouse for Hazardous Wastes, a network of more than 7,500 grassroots groups in or near communities where toxic waste-producing industries such as Union Carbide and Georgia-Pacific most often locate. Poor, marginalized, and politically weak communities are seen as offering less resistance to the environmental destruction and human suffering that accompanies such manufacturing facilities. This perception, which is strengthened by the “not-in-my-backyard” attitude of the more affluent and politically potent middle class, is also shared by the members of state legislatures and local bureaucrats who grant the siting permits to corporations.

The “not-in-my-backyard” attitude is now also growing within minority communities, however. It is based on living with the consequences of toxic wastes moving from the manufacturing facility into the local water supply, the food chain, and the air that people breathe. Thus, minorities’ concern with environmental justice goes beyond issues of equal access to educational and employment opportunities and equal representation of their cultural achievements. Environmental justice, for them, has to do with not being overrepresented in the statistics on cancer deaths, birth deformities, and debilitating illnesses that lead to even deeper levels of poverty.

The arguments these minority groups are making for environmental justice are similar to the argument I have made over the years that environmental issues must have primacy in thinking about educational reform. The way *environment* was defined by the delegates to the First Nation of People of Color Environmental Leadership Summit, held in 1991 in Washington, D.C., and which continues to meet annually, makes this point even more cogently. The three hundred delegates, representing African, Native American, Latino, and Asian American communities, defined the environment as the “totality of life conditions in our communities—air and water, safe jobs for all at decent wages, housing, education,

health care, humane prisons, equity, justice” (Szasz 1994:151–152). The last of the Principles of Environmental Justice the delegates defined in their preamble concludes with the statement that “environmental justice requires that we, as individuals, make personal and consumer choices to consume as little of Mother Earth’s resources and to produce as little waste as possible; and make the conscious decision to challenge and re-prioritize our lifestyles to insure the health of the natural world for present and future generations” (Schwab 1994:443; see Appendix). How to transform this principle into the realities of individual, family, and community practices should be the primary concern of educators.

Why educators writing on social justice have ignored grassroots efforts to reverse the environmental damage experienced by poor and marginalized communities is a question that deserves serious consideration. Individuals who mobilize their communities to challenge environmental hazards are usually also skilled in attracting media attention—often at the national level. Efforts to shut down the Union Carbide pesticide plant in Institute, West Virginia, and to block the U.S. Department of Energy’s plan to locate high-level radioactive waste dumps on Indian reservations, for example, were widely publicized. One possible explanation for this oversight on the part of educational theorists is their tendency to frame social justice issues in terms of the ideals of individual emancipation and economic advancement—which are among the liberal ideas and values they share with the corporate world. And like acrimonious members of a dysfunctional family who often do not recognize what they share in common, liberal educational theorists seem unable to base their thinking on radically different assumptions. To reiterate the point Sale makes, the industrial form of culture that is changing the chemistry of the environment in ways that disproportionately affect minorities and the poor depends on a society of individuals who have been emancipated from the authority of com-

munal traditions and view change as the expression of progress. And since the technological innovations of a science-based industrial culture will be seen as the source of change, science will also be seen as the primary source of progress. Both of these ideas—freeing individuals from the influence of tradition and viewing change in ideas, values, and personal identity as the expression of progress—are also basic aspects of the deep cultural schemata that educational theorists have taken for granted in framing social justice issues. The cultural lenses of these theorists, in effect, enable them to put important issues connected with economic deprivation in focus, but the calibration of the lenses prevents them from recognizing community efforts to reverse the patterns of environmental racism.

It is possible, too, that educational theorists continue to frame the discussion of social justice in ways that exclude environmental issues because they write from a largely urban perspective. For urban dwellers everywhere, the humanly constructed environment of pavement and buildings and the accompanying forms of pollution are a taken-for-granted aspect of daily life. Trees and the occasional open space communicate the same sense of human design that is communicated by the facades of upscale shops and avenues. Food and water are encountered as the end products of a complex infrastructure that also recycles or transports the waste products to outlying areas. In effect, the humanly constructed environment forms the backdrop for the daily conveniences and irritations of city life. Even the artificial nature of the city's many facades of sufficiency obscures the complex ecosystems on which its survival depends.

The source of water, the condition of the soil that yields the fruits and vegetables, the ecosystems and human communities displaced or degraded by the technologies that provide the city's energy are out of sight, and thus largely out of mind. Disruptions in the patterns of daily life are seen as the responsibility of city bureaucrats and engineers, and of the business community and labor

unions. Without an everyday awareness of the complex relationships between ecosystems and the political economy of transforming Nature into goods and services, the average urban dweller's perception of reality depends largely on images designed to promote consumerism. As office-based work further strengthens the illusions and commodified relationships that are the chief characteristics of urban life, educational theorists readily follow the traditional script and focus on what is corrupt, duplicitous, and exploitative in human relationships. This means framing the social justice mission of education in terms of gender, race, and class. It also means using a postmodern interpretive framework that contrasts sharply with the substantive traditions of the ordinary people who are to be emancipated.

As I later discuss the deep cultural assumptions that leading educational theorists share with the elites they criticize, here I will identify briefly the environmental problems facing the marginalized groups that the radical educational theorists are ignoring. The hazards faced by ethnic minorities and the poor in Detroit are in many ways representative of those found in urban areas across the nation. Paul Mohai and Bunyan Bryant found that the majority of people living closest to commercial hazardous waste facilities (that is, within a one-mile radius) were either members of a minority group or nonminorities living below the poverty line. Following their review of fifteen other studies of the relationship between minority groups, economic status, and environmental hazards (which range from air pollution, exposure to toxins from solid wastes, and toxic fish contamination to the risk of being bitten by rats), Mohai and Bryant concluded that their results and those of the other studies indicate

both a class and racial bias. Furthermore, that the racial bias is not simply a function of poverty alone also appears to be borne out by the data. All but one of the 11 studies which have examined the distribu-

tion of environmental hazards by race have found a significant bias.

In addition, in 5 of the 8 studies where it was possible to assess the relative importance of race with income, racial biases have been found to be more significant. Noteworthy also is the fact that all 3 studies which have been national in scope and which have provided both income and race information have found race to be more importantly related to the distribution of environmental hazards than income. (Mohai and Bunyan 1995:10–23)

In some instances, environmentally hazardous facilities were built before minorities and other low-income families moved into the surrounding neighborhoods. In many others, these groups were deliberately made victims of environmental racism. The indifference of city officials to the fifty-year-long operation of a lead smelter in a predominantly African American west Dallas neighborhood is a case in point. The years of delay that occurred between the discovery that there was a 36 percent increase of lead in the blood level of children and the closing of the smelter would not have been tolerated if the children had been from white, middle-class families. Similar examples of environmental racism can be found throughout the country, with the most extreme cases falling in the corridor stretching from Baton Rouge to New Orleans and along the Texas border with Mexico.

If the creation of social and material wealth at the community level is one of the responsibilities of an eco-justice pedagogy, understanding the forms of environmental contamination and the political processes necessary for eliminating them should be equally important. An eco-justice pedagogy that addresses these issues will have a more immediate influence on the quality of daily life than a pedagogy that denounces “white terror” and teaches the language of emancipation, which colonizes even as it pretends to decolonize. There are additional dimensions of an eco-justice pedagogy that

need to be taken into account. The following guidelines will help theorists avoid the contradictions inherent in the progressive vision of social justice that now characterizes current thinking about educational reform.

1. An eco-justice pedagogy must be based on a recognition of the fundamental differences between high- and low-status forms of knowledge and the value systems that accompany them. The current distinction is one that universities created as interpreters and custodians of the Enlightenment vision of a rationally ordered world. They continue to maintain it through their increasingly close collaboration with corporations and government in the creation of new technologies and expert systems. None of the educational metaphors used to legitimize the autonomous, rational, self-directed individual that is supposed to result from a university education have any connection with the personal attributes necessary for participation in the kind of community that Sale describes. As the metaphors encode the ideals envisioned by Western political philosophers as a universal moral framework, it is difficult to criticize them—especially if one takes for granted the modern form of consciousness and ignores how it is contributing to environmental degradation. As the high-status knowledge of universities converges with the symbolic skills needed by corporations, the legitimizing metaphors are beginning to sound dated—although that has not diminished their use within conservative, liberal, and even radical circles. The list of metaphors includes *individual freedom*, *empowerment*, *critical reflection*, *progress*, and *democracy* (the latter is always understood as advancing individual freedom and a progressive form of change). If we can keep a sense of distance from the god-word status of these metaphors, it becomes easier to recognize that they do not represent the knowledge, skills, and values associated with membership in the kind of interdependent community Sale describes. These metaphors, along with those used by radical edu-

actors (e.g., *resistance, difference, critical pedagogy, predatory culture, and revolutionary multiculturalism*), frame the purpose of education in terms of emancipating the individual from all forms of communal authority and responsibility. Generally unrecognized is how both groups of educational metaphors reflect an idealized image of individualism that fits more the needs of a market-dominated culture than the view of community held by Gandhi, Wendell Berry, and the Luddites. It is also important to recognize that these metaphors do not lead to forms of individualism that would be at home in the majority of the world's cultures. Ironically, this Western type of individual can be found in every part of the world playing the role of salesperson for a multinational corporation, engineer, or scientist collecting patentable genetic material.

To summarize the main point: the knowledge, skills, and patterns of social interaction that contribute to participation in inter-generationally connected and morally responsible communities are not learned in public school and university classrooms. In short, the ideal promoted by the educational and corporate world is the individual who possesses the ability to live anywhere, solve problems in ways that integrate technologies into a worldwide system, and keep pace with the learning curve set by the need for new technologies and markets.

2. An eco-justice pedagogy requires shifting from a global perspective to one that recognizes the multiplicity of cultures. One of the characteristics of high-status knowledge that perpetuates the decontextualized thinking of Western philosophers and social theorists is thinking in terms of universals. As Alvin Gouldner describes it: "Its ideal is: 'one word, one meaning,' for everyone and forever" (1979:28). Metaphors such as *democracy, development, justice*, and *individual freedom* encode a long history of Western experiences and rational debate. In spite of their cultural rootedness, they have been treated as representing universal aspirations—even for

cultures that are not based on Western assumptions and values. In *Grassroots Post-modernism: Remaking the Soil of Cultures* (1998), Gustavo Esteva and Madhu Suri Prakash argue that making the Western ideal of human rights the universal yardstick for the world's cultures is itself an expression of cultural "recolonization" (110–146). In their view, the Western legal system, which is often represented as protecting the rights of the individual, destroys the capacity of local cultures to resolve problems through their own networks of mutual support. Many of their examples of how human rights activists disrupt the capacity of indigenous cultures to rely on their long-standing traditions for dealing with individuals and groups that violate the moral norms of the community are convincing, yet their arguments appear one-sided and thus overly simplistic. While claiming not to be moral relativists, they nevertheless take the position that injustices are best handled according to the local customs of the community. And in many instances, what Westerners perceive as injustice may not violate the moral norms and patterns of local communities.

Esteva and Prakash's arguments for recognizing the resourcefulness of indigenous cultures and the destructive results of Western efforts to impose various universal systems on them need to be considered in any formulation of an eco-justice pedagogy. Some cultural practices not mentioned in their book, such as female circumcision; killing of young women to restore family honor, or *sharaf* (a centuries-old tradition in some Islamic cultures); exploitation of child labor; caste systems; and sectarian-based violence also need to be considered. The Taliban law preventing Afghan women from working outside the household and from pursuing an education is a particularly tragic violation of what Western cultures regard as basic human rights. As religious custom also prevents male physicians from treating female patients, the women of Afghanistan no longer have access to medical treatment. In

effect, the arguments in *Grassroots Post-modernism* misrepresent the complexity that surrounds the problem of reform by focusing on indigenous cultures (such as the Indian people of Oaxaca and such renowned cultural figures as Gandhi) that have successfully managed their own moral and social ecologies. Nevertheless, this book, along with others such as *The Development Dictionary: A Guide to Knowledge as Powers*, edited by Wolfgang Sachs (1992), and Frédérique Apffel-Marglin's *Spirit of Regeneration: Andean Culture Confronting Western Notions of Development* (1998) that highlight cultural differences in the individual's relationship to the larger community, are especially important to avoiding formulaic and messianic forms of progressive thinking that would make schools sites for developing an individual-centered egalitarian society. Literature written from an indigenous perspective puts into focus the destructive consequences that often arise from imposing universal prescriptions on other cultures such as the need for a global economy, universal human rights, individual freedom, the Information Age, and a Western form of higher education. Indigenous literature also describes the varied ways in which local cultures have adapted to the limits and possibilities of their ecosystems and have developed complex symbolic systems that sustain communal patterns of interdependence in work, entertainment, healing, and ceremonies. But most important, this literature brings out the many forms of cultural intelligence that have developed as alternatives to a consumer- and technology-dependent form of culture. These different forms of cultural intelligence, expressed in the traditions and practices of moral reciprocity of such diverse groups as the Hopi, Latinos, and the Amish, can be understood only from an insider's perspective. Without this in-depth understanding, an eco-justice pedagogy will become simply another form of cultural imposition—even as it proclaims itself to be in the service of emancipatory ideals. The use of cultural lenses that highlight

examples of race, class, and gender abuses is as problematic as the use of cultural lenses that highlight only the positive attributes of a cultural group.

The shift in focus from the abstract and universal to a careful consideration of local cultural patterns needs a reference point that is not grounded in the shifting sands of cultural relativism. This grounding, as I have suggested elsewhere, lies in the assessment of the impact that indigenous cultures have on the ecosystems on which they and future generations depend. Whether cultural practices lead to living within the sustaining capacity of local ecosystems or result in degrading the local environment as well as that of other cultural groups becomes critical to the curricular content of an eco-justice pedagogy. Whether the cultural patterns support morally coherent communities or create distortions that privilege certain groups over others is also an important consideration.

In effect, an eco-justice pedagogy that accepts the ability of minority cultures to renew and even revise their traditions in light of internal and external changes cannot avoid continually reformulating itself. However, this does not mean that it should serve the interests of local elites or ignore forms of dehumanization that may be accepted within a particular culture. There is still a need for advocates of human rights, just as there is a need for an educational process that promotes deep cultural transformation. An eco-justice pedagogy should avoid the sense of certainty that comes with the reification of Western ideas and values—particularly those that evolved with the Industrial Revolution—and balance the insider's cultural traditions with what is understood about environmental and intercultural changes that represent destructive worldwide trends.

3. An eco-justice pedagogy must distinguish between the deep cultural assumptions underlying the last hundred years of emancipatory theories of education in North America and those on

which minority cultures and the non-Western cultures that comprise the majority of the world's population are based. Key Western assumptions about the progressive nature of change, the individual being the basic social unit, the ability of critical reflection to establish what has conceptual and moral authority, and the corresponding rejection of tradition as an oppressive impediment to progress are noticeably absent from the ways of thinking of the oldest and most populated cultures in the non-Western world.

Esteva and Prakash state this basic difference between Western and non-Western cultures in the following way: "For the 'social minorities,' the vast chasm that separates organic from industrial memory is not sensed. In their other worlds, still separate from the monoculture of modernity, the 'social majorities' depend only on organic memory. Like their dead, they have escaped the growing dependence of the 'social minorities' on industrial memory" (1998:67). "Organic memories" encompass the narratives, ceremonies, customs, and practices of moral reciprocity, everyday patterns reinforced through face-to-face relationships. Like the cells of an organism, these traditions are continually renewed—with change reflecting the communal response to internal and external processes.

The tension between organic memory and industrial memory (which erases the past in order to focus on future progress) is brought out even more clearly in the following observation by Gerald Berthoud:

Development, beyond the obvious need to produce ever more goods and services, is a process through which must emerge a new kind of human being and corresponding institutions. What must be universalized through development is a cultural complex centered around the notion that human life, if it is to be fully lived, cannot be constrained by limits of any kind. To produce such a result in traditional societies, for whom the supposedly primordial principle of boundless expansion

sion in the technological and economic domains is generally alien, presupposed overcoming symbolic and moral "obstacles," that is, ridding these societies of various inhibiting ideas and practices such as myths, ceremonies, rituals, mutual aid, networks of solidarity, and the like. (1992:72)

In short, the traditions of the community must be eliminated, with the modern "antitradition traditions" becoming the basis of a society of consumer-dependent individuals.

Stated in the contemporary political vocabulary, an eco-justice pedagogy must combine a responsibility for contributing to social justice (in the domains of both culture and natural ecology) while at the same time helping to conserve traditions essential to communities that retain the mutuality and moral reciprocity of the commons. Conserving living traditions does not mean maintaining the status quo, nor does it involve supporting reactionary interests. But it may involve helping regenerate traditions of noncommodified relationships and skills that have been largely marginalized by the modern forces of production and consumption—and by the forms of knowledge promoted in public schools and universities. The task of conserving what contributes to the recovery of the ecological and cultural commons, in turn, requires an understanding of local interests, needs, and traditions. This understanding needs to be framed within the larger context of worldwide ecological trends such as global warming and the toxic contamination of the environment.

Many competing theories address educational reform. In order to understand the fundamental difference between an eco-justice pedagogy based on a deep cultural and ecological way of thinking and theories of educational reform still based on the assumptions that underlie modern culture, it is necessary to examine the latter in some depth. The tendency of current educational theorists to repre-

sent Dewey as providing a conceptual framework for addressing the educational aspects of the environmental crisis serves as an example of the conceptual confusion that continues to exist. Making minor modifications in a theoretical framework in order to accommodate newly recognized issues and challenges too often means giving lip-service to their importance while carrying on the educational practices that contributed to the problem in the first place. The following chapters clarify why an eco-justice pedagogy needs to be based on a radical reconceptualization of basic assumptions rather than on the assimilation of an eco-justice vocabulary into existing progressive theories of educational reform. They also explain why the most popular theorists of educational reform are unable to articulate the role of education in reestablishing the balance between cultural practices and the regenerating capacity of natural systems.

Chapter 1 examines how the contradictions and silences in progressive theories of education lead to an assimilation approach to social justice issues. The theories of John Dewey and Paulo Freire are still considered as providing curricular and pedagogical guidelines for ameliorating the causes of the inequality and oppression faced by marginalized groups. Thus, a very serious approach to rectifying the conceptual and moral foundations of an eco-justice pedagogy must begin with an analysis of their theories. A second major focus of the chapter is on the more contemporary educational theorists who have synthesized the ideas of Dewey, Freire, Marx, and the Frankfurt School of Critical Sociology. Their writings on race, class, gender, and multiculturalism are viewed by many of the more socially conscious professors of education as providing the essential guidelines for using the classroom to reform American society. The position that Peter McLaren shares with other “radical” educational theorists, whom he calls “progressive left-liberal multiculturalists,” suggests a growing awareness that differences in cultures need to be

taken into account in both the analysis of how schools contribute to cultural domination and in prescriptions for social reform. The use of a “progressive left-liberal” set of assumptions as the basis for understanding non-Western cultural groups is symptomatic, however, of the double binds in their writings that continue to go unrecognized.

Chapter 2 focuses on educational theories that are based on extrapolations from recent developments in science. The basic question that frames the analysis is: Can science provide the conceptual and moral framework for an eco-justice pedagogy? Educational theorists are attempting to turn recent developments in the physical and biological sciences into full-blown social theories that can be used to guide educational reform. Developments in the field of neuroscience, for example, are being translated into a series of recommendations for matching curricular and pedagogical practices with stages of brain development. This area of scientific research has particularly important implications that may set back by decades recent educational gains in achieving a more equitable society.

Some educational theorists view the physical sciences as engaged in a paradigm shift that has immense implications for how we think about education. Systems theory and the complexity sciences provide a different way of understanding natural processes—one that recognizes the self-organizing characteristics of open, nonlinear systems. While it is understandable that educational theorists would urge the abandonment of educational practices based on the mechanistic model derived from Newtonian science, the “process” approach to education now being interpreted as consistent with the characteristics of dissipative structures raises serious questions.

The “science envy” that characterizes the thinking of several educational theorists has other disturbing implications that need to be considered in the context of an eco-justice pedagogy. Borrowing from science a conceptual and moral framework for reforming

education opens the door for the reemergence of the racist thinking that was part of the legacy of nineteenth-century science. The new metanarrative being constructed by proponents of evolutionary biology such as Richard Dawkins, E. O. Wilson, and Daniel C. Dennett is having an impact on many academic disciplines. It is only a matter of time before educational theorists who view science as the primary source of intellectual authority come under the influence of evolutionary theory. Their challenge will be to reconcile liberal values with the theory that explains how better-adapted individuals and cultural groups are more likely to pass on their genes and cultural patterns.

Chapter 3 addresses the arguments that making computers available in classrooms on a more equitable basis will help rectify the causes of social inequality. Computer literacy, in this view, is essential both to entrance into the workforce and to equal citizenship in the emerging global culture of cyberspace. These arguments are compelling, but they do not take account of the culture-mediating characteristics of computer technology. Chapter 3 examines two fundamental sets of relationships ignored by those who advocate preparing students to participate in the digital culture. The first has to do with the connections between the cultural patterns of thought, values, and community reinforced by the mediating characteristics of computers and the ecological crisis. The connections between computers and economic globalization are generally recognized, but the proclivity to think of computers as the latest expression of progress has prevented computer advocates from recognizing that computers reinforce the very cultural patterns that have a long history of exploiting and degrading the environment. The second set of fundamental relationships relates to how computer-mediated thought and communication undermine cultural diversity. The often amazing capabilities of computers have diverted attention from the many forms of cultural knowledge that

they cannot communicate. These marginalized cultural patterns—mythopoetic narratives that are the basis of a cultural group's moral codes, systems of intergenerational communication and responsibility, face-to-face activities that represent alternatives to monetized relationships, and so forth—are basic to the self-identity of many cultural groups in North America. The eco-justice implications of losing these forms of knowledge and interdependencies are thus the main focus of this chapter.

Chapter 4 identifies the main themes of an eco-justice curriculum that are essential to democratize decisions that are now being made by experts who have been educated to link cultural convergence with progress. Themes such as the nature of commodification, tradition, technology, science, and language can be introduced in the early grades and examined in later grades in relation to different ideologies and cultural traditions. The chapter also addresses how these themes enable students to address eco-justice issues in their own communities. I argue that students should learn about how the deep assumptions of different cultural groups in North America lead to different interpretations of the themes that should be at the core of an eco-justice curriculum. This chapter thus clarifies one of the fundamental differences between an eco-justice pedagogy and the reform proposals that uphold different modes of inquiry but never specify which aspects of the dominant and minority cultures should be included in the curriculum.

Chapter 5 addresses the need for consistency between pedagogy and curriculum in a culturally diverse and ecologically problematic world and examines the differences between an eco-justice pedagogy and the pedagogy advocated by educational theorists following in the footsteps of John Dewey, Paulo Freire, Alfred North Whitehead, and Ilya Prigogine. The teacher's mediating role in the process of primary socialization—which requires a deep understanding of the connections between a cultural way of knowing,

language, and communicative competence—is also given extended consideration. The way primary socialization is carried out has lasting effects on students' ability to make implicit cultural patterns explicit, and thus to recognize how thought and behavior reproduce earlier forms of thinking passed along through the metaphorical constructions in the language of the curriculum. Finally, I consider the importance of an eco-justice pedagogy being based on an understanding of cultural differences in metacommunication. The teacher must understand the nature of primary socialization in a culturally diverse classroom and the miscommunication that results when cultural differences in metacommunication patterns are not understood if the core themes of an eco-justice curriculum are to become an empowering educational experience.

I Emancipatory Theories of Education

The Enlightenment vision of societies based on reason and on the progressive emancipation of individuals, as interpreted by modern American educational theorists, continues to ignore the destructive impact that the tools of rationality have had on the environment. Nature writers such as Henry David Thoreau, John Muir, and Richard Jeffries questioned the ravaged condition of the industrial landscape, but their writings failed to slow the juggernaut of industrial development and the spread of consumerism. Indeed, it was not until the appearance of Aldo Leopold's *A Sand County Almanac* (1947) and Rachel Carson's *Silent Spring* (1962) that an awareness of the need for a land ethic began to inch its way into the public consciousness. Ironically, many indigenous cultures that did not share the assumptions of past and present Enlightenment thinkers had already encoded a land ethic into their ceremonies, technologies, and patterns of community life well before European adventurers arrived in search of riches. The assumptions underlying Enlightenment thinking shaped language, and thus thought processes, in ways that prevented earlier generations of