

Handbook for Faculty Workshops on How to Introduce Cultural Commons and Ecojustice Issues into Their Courses

Reasons for Grass-Roots Initiated Educational Reforms

There is now a consensus among the world's scientists that global warming, changes in the chemistry of the world's oceans threatening the bottom of the food chain, and the degraded state of other natural systems, are beginning to reduce the prospects of survival for hundreds of millions of people—and will cause major disruptions for the entire world population.

The Bulletin of the Atomic Scientists, the Stern Review published in Great Britain, as well as many other scientific groups, warn that the evidence of life-altering changes in the Earth's ecosystems indicate that we have only a few generations, if that, to alter the cultural practices that are major contributors to the environmental crises. One of the chief culprits cited for contributing to global warming, as well as to the acidification of the world's oceans, is the carbon dioxide emissions spewing from cars, industrial plants, and other human activities. While there is constant media coverage of global warming, less attention has been given to the fact that nearly half of the carbon dioxide emitted by industrial activity over the last two centuries is being absorbed by the oceans, and the resulting changes in the chemistry of the world's oceans may have an even more devastating impact on the prospects of future generations.

The focus on reducing CO₂ emissions is prompting a rush among scientists and engineers to develop technologies that release fewer green house gases. Unfortunately, what is not being given adequate attention is the global spread of the consumer dependent lifestyle that requires the carbon emitting factories and transportation systems. As in the past, the current response to a crisis is to look for a technological solution. This limited approach ignores the more difficult challenge, which is to bring about a change in human consciousness that no longer equates consumerism with achieving greater happiness, personal convenience, and social status. The introduction of more energy efficient technologies will not, by itself, reduce the level of consumerism that has many major environmentally disruptive effects. Nor will the new technologies compensate for the loss of the intergenerational knowledge within many cultures that enable people to live in more self-sufficient ways—and thus to be less dependent upon what the industrial system produces and the expert systems that add to the dependency upon the money economy.

Scientists are warning that we are at a tipping point where, if fundamental changes are not taken within the next decade, global warming will accelerate to the point where human actions will become irrelevant. The increased acidification of the world's oceans are killing off many of the coral reefs that are home to approximately twenty-five percent of marine fish species, and the source of life at the bottom of the marine food chain (the zooplankton), is being adversely affected. The scarcity of potable water is similarly on the decline, and will accelerate with the melting of glaciers and with the continued over-pumping of aquifers. While the focus in recent months has been on global warming, the changes in the other ecosystems are already having an adverse impact on people's lives. Scientific reports generally cite the rate of change before the Industrial Revolution, and the rate of change that is now occurring. Clearly, the Industrial Revolution, and the consumer dependent lifestyle that is required for its further

expansion, continue to be major contributors to the multiple ecological crises that the world's cultures now face.

Ironically, as we learn more about how the self-renewing capacity of natural systems is being degraded, public school teachers and university professors continue to reinforce many of the same cultural assumptions (such as individualism, progress, mechanism, and so on) that are the basis of current efforts to globalize the Western economic system. Outside of the sciences, a small number of faculty are using their disciplinary perspectives for introducing students to environmental issues. Thus, students may find courses in environmental ethics, eco-criticism, history of environmental thought, religion and the environment, environmental law, and so forth. These are important efforts, but they are limited in a fundamental way that goes unnoticed by these well-intentioned faculty. The major limitation is that there are no traditional disciplines that have made the history and diversity of the cultural commons the main focus of study—including how they were enclosed in the past, as well as the modern forms of enclosure. What is being studied is on the cultural and environmental margins of what is most in need of being understood, which is how to live more intergenerationally connected and less consumer driven lives. Missing from all levels of the educational process, and even from courses that address environmental issues from a disciplinary perspective, is an understanding of the cultural traditions of knowledge, skills, relationships, activities that enable communities around the world to be more self-reliant—and thus to avoid the consumer-dependency trap that is the hallmark of modern cultures. Without this understanding students will not be aware of the local alternatives to the current market liberal efforts to globalize the West's profit-driven system of ever escalating production and consumption.

That many faculty already assume that they are contributing to a greater awareness of how to be better stewards of the environment, as well as to an understanding of the misconceptions of the past that are responsible for many of the environmental problems we now face, creates a special problem. What is now needed is for the upcoming generation to understand the complexity and cultural richness of their local cultural commons, as well how the different forms of enclosure (monetization, privatization and silences) of the cultural commons are undermining both the traditions of self-government and the security that comes from not being so heavily dependent upon a money economy that places profits above everything else. The suggestion that the cultural commons, as well as how they are being enclosed, should be the central focus of educating for a sustainable future will be met by a variety of responses from faculty—ranging from incomprehension to a sense that they are already addressing important issues.

In conducting a workshop, it is important to remember that the disciplinary perspectives of faculty will influence the initial discussion of curriculum reform. Unfortunately, the disciplinary background of faculty too often results in the exchange of views that do not take account of what others have said, and too often end with nothing really accomplished in terms of addressing the main issue—which is how to initiate educational reforms that will lead to reducing people's dependency upon consumerism while at the same time strengthening the self-reliance and local democracy of communities. One critic suggested that it was foolish to think that “ethical consumerism” would reverse global warming, while others have voiced concern that the commons were

enclosed centuries ago, and that there is no point in discussing them now. The response from some faculty I have encountered at different universities is truly amazing, with the most egregious being the criticism that I am proposing that we no longer use technologies.

These comments, and even some that relied upon scatological language to express what they think of my proposals, bring out an important issue that needs to be recognized. Although classroom teachers and most professors in non-scientific and technologically oriented disciplines will be unable to contribute to the development of the energy efficient technologies, and to the retrofitting of our culture's infrastructure, the one educational reform they can undertake, beyond the courses that now have an environmental focus, is to introduce students to the importance of conserving the linguistic diversity of the world's cultures, and to learning how these diverse approaches to the cultural commons enable people to live less consumer dependent lives. That is, the major responsibility of classroom teachers and university professors is to help students understand the non-monetary sources of wealth that accompany participation in most activities of the local cultural commons. They also have a special responsibility for ensuring that students understand the historical forces—ideologies, religious traditions of thinking, technological developments, market forces, and so forth, that are threatening the further enclosure of both the cultural and environmental commons.

Why a Workshop is Needed

My experience in promoting among faculty from different disciplines a discussion of educational reforms that address the revitalization of the cultural commons has led to the recognition that there are effective as well as totally ineffective ways of getting participants to move beyond the mind-set they bring to the discussion. Because the discussion of the nature of the cultural commons involves a different theoretical framework than most faculty are accustomed to thinking within—that is, a different understanding of language, of the nature of taken-for-granted patterns of belief and behavior, and of the nature and importance of intergenerational knowledge, it is vital that the conceptual organization of the workshop outlined here be followed—and that the person facilitating the workshop understands how to reframe the discussion so that learning about the cultural traditions that represent alternatives to a consumer-dependent lifestyle remains the central focus. Controlling the frame is not a matter of being authoritarian. Rather, it is a matter of recognizing when the discussion is drifting from the main theme, and knowing when to restate the main theme and then to help faculty recognize the connections or disconnections between their line of thinking and the main theme—which is to help students recognize the alternatives to consumer-dependent lives and to help them to develop the communicative competence necessary for resisting various forms of enclosure.

Order in Which Themes and Theory Should be Introduced

Moving from a discussion of the nature of the ecological crises, and how current cultural practices are major contributors, to a discussion of educational reforms that reduce the current level of dependency upon consumerism also requires careful attention to the starting point of the workshop. It also involves knowing when the discussion of cultural practices needs to be supplemented by the introduction of theory that explains relationships and consequences that may otherwise go unnoticed. The discussion of local

cultural practices is crucial to keeping the discussion from becoming abstract, which then makes it more difficult for participants in the workshop to recognize the changes they can introduce in their mediating role between the cultural commons and the culture of consumerism. In addition to suggesting the order of presentation of themes and theory, this handbook will include as part of the appendix short readings that summarize the relevant theory, as well as suggestions for showing videos that highlight the differences between more self-reliant and consumer-oriented cultures.

Theme #1 The Ecological Crises

Before attending the workshop the participants should read the chapter at the end of Gore's book, An Inconvenient Truth, on how to reduce consumerism. They should also be asked to read "The Darkening Sea" by Elizabeth Kolbert (The New Yorker, November 29, 2006). These two readings are especially important to framing the central issue which is how to introduce educational reforms that will reduce people's reliance on consumerism. Gore's film, An Inconvenient Truth, will lead to a wide ranging discussion of how global warming will impact different populations, habitats, species, local and national economies, and so forth. Kolbert's essay on changes in the food chain caused by the acidification of the world's oceans should also be brought into this discussion. It needs to be emphasized that these changes are not going to occur in some distant future, but are beginning to have an impact on lives, habitats and species today. It is critical that the participants do not adopt the attitude that these are problems for future generations to solve.

The next phase of discussion should focus on whether science and technological innovations will be enough to slow the process of global warming, thus enabling people to continue to their current lifestyle of consumerism. The question to be asked is: will the introduction of more energy efficient technologies be enough to slow the process of environmental change so that the rest of the world can adopt the West's level of consumerism? After a short discussion of whether other cultures have the same rights as Western cultures to a middle class consumer lifestyle, the question needs to be raised about whether Al Gore's recommendations for reducing consumerism are adequate. His recommendations need to be assessed in terms of whether the cultures in India, China, and other countries adopting the Western model of economic development should simply follow them—or if something more radical is required to slow the environmental impact of the rising level of consumerism occurring in different parts of the world. As each of these issues can lead to seemingly endless discussions, it is important that the leader of the workshop summarize the different points of view, and then move the discussion on to the next sub-theme.

At this point in the discussion, the participants should be asked to identify the number of activities and relationships they personally participate in a single day that involve monetized relationships (that is when they are in the role of a consumer of services, advice, products, entertainment, and so on). They should also be asked to identify the different activities and relationships that were not monetized and part of the market system. This short-term ethnography will provide the basis for later discussions of the cultural commons—including why it is so difficult to be aware of how dependent the participants are upon them, why it is so difficult to be aware of when different aspects of the cultural commons are taken over (enclosed) by market and ideological forces—and to be aware of what the educational process marginalizes. It is important that these

personal ethnographies be related to Gore’s recommendations for reducing consumerism. The critical question is whether Gore is aware of how integrated into the market economy the everyday life of individuals has become. If the participants are not coached in what they should identify as examples of cultural commons activities and relationships that are part of their daily experience, their lists are likely to be short. This should be the starting point for introducing the next theme, which is the nature and ecological importance of renewing the local cultural commons—as well as resisting governmental policies that undermine the cultural and environmental commons of other cultures.

Appendix A “What Al Gore Missed: The Ecological Importance of the Cultural Commons”

Theme # 2 The Cultural and Environmental Commons

- A. The discussion of the cultural commons should begin with an explanation about why the environmental commons are not the main focus. This is because faculty in the sciences are already addressing the environmental commons. As part of the explanation it needs to be pointed out that many environmental scientists are not aware that wrongly constituted cultural beliefs and values are major contributors to the degradation of the environment. It also needs to be pointed out that Garrett Hardin’s “The Tragedy of the Commons” is widely known within the environmental science community, but that few scientists are aware that Hardin’s discussion of the enclosure of the commons is written from an ethnocentric way of thinking.
- B. Brief history of the cultural and environmental commons should next be introduced. **Key idea: The practice of the cultural and environmental commons began with the first humans.** Initially, humans shared access to forests, water, animals, etc. on a non-monetized basis. The cultural commons were also part of daily life, which included the taken-for-granted rules governing who had certain responsibilities, who told the stories, how the dead were dealt with, and so forth. It was much later in human history that the concept of the commons was made the basis of the law. The Roman Institute of Justinian formalized three forms of the commons: the commons of the individual, the commons of the state, and the commons shared by all members of the community. The Magna Carta in 1215 reaffirmed the individual’s free access to the environmental commons.
Key idea: From early times access to the environmental commons was influenced by status and class distinctions, as well as by other cultural differences in how human/nature relationships were understood.
- C. Understanding differences in cultural approaches to sustaining the commons needs to be recognized. **Key idea: What is regarded as part of the environmental commons varies from culture to culture.** In short, there is no universal commons—but different cultural perceptions of what is included in the commons. At this point it would be useful to have the participants identify what is regarded as part of the environmental commons in their communities—also have them identify differences in how the commons are understood in different parts of the country. Many of these differences can be traced to historical

developments. Examples include the establishment of water and grazing rights, introduction of technologies that enclosed (privatized the airways), etc. Just enough time should be devoted to the environmental commons to establish an understanding of key ideas about how cultural values and ways of thinking have influenced people's relationship to the environmental commons. Recent changes include the ability to patent (privatize) organic processes, including new technologies such as pesticide resistant plants, and so forth.

- D. The nature and importance of the cultural commons. Even though people have relied upon the cultural commons since the beginning of human history, and established rules and taken-for-granted ways of understanding who had access and responsibility for the intergenerational renewal of the cultural commons (or ensuring that the cultural rules governing access to the cultural commons did not change), the concept of the cultural commons is of recent origins. However, laws, status systems (including class, race, and gender), and biases and silences that can be traced back to the mythopoetic narratives of the culture have influenced access, benefits, and marginalization of the cultural commons. **Key idea: Differences in cultural traditions have been major influences on whether the cultural commons contribute to ecologically sustainable and morally coherent communities—or whether they lead to the destruction of the local ecosystems and to the exploitation of certain groups within their communities.**
- E. The cultural commons in local communities. Have participants identify what they think are examples of the cultural commons that they rely upon. It might be useful to divide the cultural commons into different categories, as this may help the participants to identify examples of the cultural commons that previously were not recognized as examples. The categories might include food, craft knowledge, language, use of technologies, narratives and ceremonies, creative forms of creative expression, moral/spiritual, and so on. **Key idea: The different expressions of the cultural commons are what have not been privatized, monetized, turned into a commodity or a service that is part of a money economy.** This criteria has to be modified at times in order to recognize that in many instances consumerism may be necessary--but limited to the point where it does not significantly reduce the development of personal skills and face-to-face relationships. As this qualification is an important one, and often a source of confusion, the group should discuss when limited consumerism is necessary in order to develop a personal interest and skill, and when consumerism limits personal development. Concrete examples of the difference between commons and consumer-centered activities should be identified, such as learning to prepare a meal according to a traditional recipe and eating at the local fast food outlet, learning to play an instrument and participating in a group musical effort versus paying to be entertained by others. In order for the participants to fully understand the differences, a number of other examples need to be identified.
- F. Introduction of theory that explains why it is so difficult to recognize the local cultural commons that people participate in. **Key idea: The following needs to be understood by classroom teachers and university professors who mediate**

(make explicit and clarify) the students' experiences in the two cultures—the students' local cultural commons and the culture of consumerism and environmental degradation that they are increasingly becoming dependent upon. The theory (explanation of relationships) should always be related to examples that the participants can relate to on a personal level.

**** taken-for-granted beliefs and practices.** The question that should have come up in earlier discussions is: why is it so difficult for students (and faculty for that matter) to be explicitly aware of the cultural patterns of behavior, thinking, and value judgments that are part of their everyday life? The point that needs to be made, and supported with many examples, is that most of our cultural knowledge, practices, values, etc., are learned at a pre-conscious level of awareness. Others who share the same taken-for-granted patterns are part of an ecology of collective reinforcement. **Key idea: One of the reasons that taken-for-granted cultural patterns are not easily recognized, aside from the way they are reinforced by others, is that our culture places special emphasis on thinking that knowledge, values and behaviors are rationally based, and thus are explicit.**

There is a double bind that classroom teachers and professors face when they take-for-granted the patterns that they should be helping students to become explicitly aware of. Examples include reinforcing gender and racial stereotypes in the past that should have been made explicit, the equating of change with progress, thinking of organisms as having the same properties as machines, and so forth. **Key idea: Nearly every aspect of the cultural commons is taken-for-granted, which is why they go largely unrecognized.** When aspects of the cultural commons are taken-for-granted, they can be enclosed (integrated into the market system or lost to memory) without questions being raised and without resistance—especially when the market liberal ideology that represents progress as the expansion of markets is taken-for-granted. In order for workshop participants to get an idea of how much of their culture is taken-for-granted they should examine textbooks as well as other curriculum materials, such as educational software and films.

**** how language reproduces past ways of thinking, marginalizes, and empowers.** **Key idea: If the different aspects of the cultural commons are not named it is more likely that they will be experienced as part of the students' taken-for-granted world.** Have the participants test this idea by naming the different patterns of meta-communication (e.g., the use of body language to communicate about relationships), and check with them about whether they become more aware of these patterns after they have been named. A second example would be to ask them who they identify as conservatives: environmentalists or corporations? Does the use of these political labels, specially the use of “conservative” generally ignore what they want to conserve? **Key idea: The inability to name aspects of the cultural commons that are otherwise taken-for-granted, or have been totally marginalized, reduces the students' communicative competence and thus their ability to protect the cultural commons from being enclosed by market and ideological forces.** Examples that can be used to make this point include the inability to recognize

when habeas corpus, which was part of our cultural commons, was lost as a result of recent political decisions, or the number of people who supported the loss of privacy (thus ignoring a long-held tradition of our cultural commons) in order to be protected from the threat of terrorism that has been increased by governmental policies. Other examples include how consumerism replaces the development of personal skills and mutually supportive relationships. If the students cannot name the personal qualities associated with craft knowledge and performance they will be less likely to see what is lost when they become dependent upon the money economy, and upon what is produced in other countries. Another example is that if students have never learned about the history of social justice movements, such as what the labor movement struggled to achieve, students will be more likely to accept the working conditions dictated by their employer. Decisions about what should be included in the curriculum relating to various aspects of the cultural commons need to take account of aspects of the cultural commons that are under pressure by market and ideological forces. The key point here is that enabling students to become less dependent upon consumerism and on the form of society where basic human rights are being taken away by government, reduces the human impact on natural systems—and may contribute to slowing global warming.

**** understanding how the languaging process reproduces many of the thought patterns, including misconceptions, from the past.** The metaphorical nature of language needs to be thoroughly understood if classroom teachers and professors are going to help students recognize how language is reproducing the patterns of thinking that were and still are the basis of promoting economic globalization. This is the most important double bind that educators at all levels face—and are generally unaware of because they have been socialized to think of language as a conduit in a sender/receiver process of communication. Learning the language and thus the thought patterns and values held by members of the language community is the most basic example of learning at a taken-for-granted level of awareness. **Key idea: Patterns of thinking are influenced by the root metaphors (interpretative frameworks) that were constituted in the culture's distant past.** These root metaphors, such as patriarchy, anthropocentrism, mechanism, individualism, economism, progress, and now evolution, had different origins ranging from the culture's mythopoetic narratives to powerful evocative experiences such as the invention of the mechanical clock. Root metaphors are culturally specific, and have over hundreds, even thousands of years, provided the taken-for-granted conceptual/moral schema for understanding new phenomena, and for reproducing today the patterns of thinking taken-for-granted in the past. Most of these root metaphors were constituted before there was an understanding of environmental limits, and how modern market forces, including the market-liberal ideology cause more people to become dependent upon consumerism. After presenting the example of how the root metaphor was constituted by Isaac Newton and Johannes Kepler, and relied upon by political theorists, scientists, and educators over the centuries, the participants should then be asked to identify the cultural influence of several other root metaphors such as individualism and progress. Have them identify

how at different periods in recent history each root metaphor has been used as the taken-for-granted interpretative and moral framework for understanding a wide range of cultural practices. Among the insights that should emerge include: why some root metaphors tend not to be challenged and reconstituted by succeeding generations, and why others such as patriarchy and progress are challenged. This exercise will bring out the importance of the teachers/professors mediating role of clarifying how language reproduces the misconceptions of the past as well as how some examples of language that have been lost now need to be recovered,

Appendix B Overhead that presents how the mechanistic root metaphor has influenced thinking in a variety of fields over hundreds of years.

**** understanding why the root metaphors underlying modern consciousness make it so difficult to be aware of the local cultural commons that are part of everyday experience.** Language illuminates and hides, and words often encode and thus carry forward the misunderstandings and prejudices of past generations. What needs to be brought out in the group discussion is how the root metaphors of *individualism, progress, mechanism, evolution, economism*, (and a conduit view of language—which is not a root metaphor), influence what people are aware of—even when the root metaphor leads to ignoring the complexity of interactions and interdependencies. What people tend not to be aware of, given the way that root metaphors influence what aspects of experience will be recognized, also needs to be discussed. Two examples that can be used to clarify how language, particularly its formulaic use, frames awareness in ways that do not challenge the taken-for-granted root metaphors are: how the taken-for-granted status of the root metaphor of progress marginalizes awareness of traditions (including the traditions that progress is built upon); and how the root metaphor of individualism marginalizes awareness of how individuals are always in a complex set of relationships—with others, the environment, and with the languaging systems that we know as culture. **Key idea: The layered nature of metaphorical thinking that provided the cognitive and moral schemata that gave rise to the industrial revolution is still being reinforced in public schools and universities—and these schemata are major impediments to recognizing the cultural commons that are part of everyday experience.** At this point there should be a discussion of what classroom teachers and professors should help students understand about how language reproduces the patterns of thinking and moral values constituted in the distant past. There should also be a discussion of how different curriculum materials can be used to help students recognize how language frames how they think; as well as a discussion of the language that needs to be reclaimed in order to understand the nature and ecological importance of the cultural commons. As an example, can students take seriously the importance of the cultural commons, and the intergenerational knowledge that is at the core of the commons, if the word tradition continues to be understood as an impediment to progress and to the self-realization of individuals? **Key idea: The language of modernity, progress, and the market**

can be used to point out that not all aspects of the cultural commons contribute to social justice, ecological sustainability, and local democracy

Appendix C Chapter 3, “Toward a Culturally Grounded Theory of Learning”
from The False Promises of Constructivist Theories of Learning, 2005

- G. Summary of Important Features of the cultural commons.** The cultural commons include the following characteristics:
- a. They exist in every community—rural, urban, suburban, and in every culture.
 - b. They represent the daily practices that are largely (but not entirely) carried on outside of the money economy.
 - c. They are based on intergenerational knowledge, skills, and values that are largely mutually supportive, contribute to greater self-sufficiency of individuals and communities—and thus have a smaller ecological impact.
 - d. The cultural commons include the whole range of what might be called cultural traditions that range from a cultural sense of design, music, food, healing practices, narratives, moral norms governing human and human/nature relationships, and ways of understanding the nature of wisdom and socially destructive behaviors.
 - e. Not all aspects of the cultural commons, in our culture as well as others, should be viewed as morally just and ecologically sound. Racism, gender bias, stigmatizing of social groups may be reinforced by the language and institutional practices that are part of the cultural commons.
 - f. The cultural commons are difficult for individuals to be aware of, especially in a culture that emphasizes change, individualism, economism, and is driven by a messianic market-liberal ideology.
 - g. Public schools and universities, while beginning to incorporate environmental issues into the courses of different disciplines, continue to ignore the importance of helping students recognize how participating in the local cultural commons reduces their dependency upon a money economy, and reduces their impact on the natural systems already being rapidly degraded.

Theme #3 The Many Faces of Enclosure (or how to destroy the cultural commons in the name of progress)

Appendix D Show the video by Helena Norberg-Hodge, Ancient Futures: Learning from Ladakh

- A. A basic definition of enclosure.** Enclosure has been practiced from the beginning of human history whenever a powerful group or individual was able to claim exclusive access and use of what previously was shared in common by the rest of the community. Enclosure, to most people with a knowledge of English history, refers to abolishing the peasant’s communal rights to the use of the local pasture and woodlots, which eventually led to their being forced

off the land entirely. This resulted in them becoming landless wage earners in the newly emerging industrial system. These key characteristics, even in modern forms of enclosure still hold. Namely, the aspects of the cultural and environmental commons that are shared among members of the community on a non-monetized basis are enclosed when what was freely available to all members of the community becomes privately owned, is transformed into a commodity, and where use and access requires participating in a money economy.

- B. Brief history of enclosure.** The communal right to participate in the cultural commons varied from culture to culture—as status systems emerged, and as prejudices and economic exploitation of the weak took different forms of cultural expression. The concept of the commons was given legal status in the Roman Institutes of Justinian. The law established the distinction between what was privately owned (*res privatae*), what was owned and thus the responsibility of the state (*res publicae*), and what represented the natural world common to all (*res communes*). In 1215, the English Magna Carta re-affirmed the Roman understanding of *res-communes*—but went further by establishing an important tradition of the cultural commons. This was the tradition of habeas corpus that we still rely upon today, but is now under threat (enclosure) by government. The important point is that this and many other aspects of the cultural commons that have been part of everyday life in different cultures from the beginning of human history was not referred to as the cultural commons. This phrase has a more recent origin.
- C. New forms of enclosure that have a similar impact on the self-sufficiency and local democracy of communities.** Enclosure may result from the introduction of new technologies that make craft skills and knowledge obsolete, prejudice toward intergenerational knowledge that leads to ignoring traditions that are empowering, loss or failure to develop the vocabulary for naming different aspects of the cultural commons, an emphasis in education on progress, patenting of ideas and other forms of human expression such as works of art, private ownership, market liberal ideology that emphasizes new technologies and markets—thus undermining traditions of intergenerational knowledge, promoting ideas and values that emphasize individualism and progress, reliance on technologies such as computers that marginalize face-to-face communication and the spoken word, government policies that promote support for eliminating habeas corpus and a check and balance system of government, and the capture of the attention of youth by the media and the allure of new technologies.

Key idea: The enclosure of the various aspects of the cultural commons creates greater dependency upon the market system that is overshooting the sustaining capacity of nature systems. It undermines community patterns of mutual support and local democracy.

- D. Some forms of enclosure are necessary to achieve greater social and ecojustice.** Cultural patterns of discrimination and economic exploitation, that are encoded in institutional practices and in the narratives of the culture may be enclosed by actions of the federal government that force changes that bring

local traditions in line with civil rights recognized by the larger society. Exposure by the press, social critics, and now blogs may lead to the enclosure (that is the local community is no longer free to engage in the practices) of these traditions. The enclosure of the institutional, legal, and narrative/linguistic traditions that perpetuate gender discrimination is an example of the positive uses of enclosure. **Key idea: Enclosure may be deepening the ecological crises as well as creating greater poverty and a sense of hopeless dependency on institutions that are under the influence of the market liberal “survival of the fittest” ideology.**

- E How to make the local cultural commons and the various forms of enclosure part of the same process of learning. **Key idea: Just as north only makes sense when there is an understanding of the south, experience and the conceptual understanding of the cultural commons always has as its primary reference point the forces of enclosure.** The examples of how to integrate an understanding of the tension between the cultural commons and the forces of enclosure, as shown in Appendix E, which is from chapter 4 of the online book, Transforming Environmental Education, demonstrates the essential elements of inquiry—whether it is in the early grades where students are learning to recognize the experiential differences between the spoken word and print-based communication or at the graduate level where students are learning how an ideology contributes to undermining ecologically sustainable local traditions of self-sufficiency.

Key idea: As most university courses reproduce the silences and prejudices toward the intergenerational knowledge, skills, and relationships that do not fit the current orthodoxy for advancing the high-status knowledge that the market system of production and consumption depends upon, it is important to develop the habit of describing the patterns of experience (that is naming them in a way that makes them explicit) that are part of the commons and how they differ from experiences that are part of the industrial consumer-dependent culture. Classroom teachers and professors need to encourage students to develop their own ethnographies of lived experience in the cultural commons as well as those in culture of industrial production and consumption. The descriptive accounts should then be used as the basis for discussing how experience in the two cultures influences relationships, the development of skills, the different forms of dependency, and their respective impacts on natural systems. **Key Idea: The question that needs to be kept in the forefront of the discussion is: What are the practices and relationships that have a smaller ecological impact while at the same time contributing to a more socially just society.**

Theme #4 The role of classroom teachers and professors as mediators between the cultural commons and the industrial/consumer culture.

- A. The role of the teacher/professor as mediator between cultures. As so much of what is learned in public school and university classrooms is dependent upon the printed word on a computer screen, in a textbook, and the spoken word of the classroom teacher/professor who is “sharing” what she/he thinks is

important (and what is largely dictated by the orthodoxies within the discipline), little attention is given to the cultural patterns that students re-enact as they move in daily life between the cultural commons and the modern industrial culture—with its workplaces, big-box stores, roads, and constant media messages of what needs to be purchased in order to be individually happy, healthy, and successful. The amount of advertising on buses, television, buildings, clothes, computers, and so forth, is an inescapable form of enclosure of the senses that might otherwise connect the individual to the natural, non-commercialized world. **Key Idea: The focus of the actual cultural patterns that are experienced as students move between these two cultures will involve a level of complexity and questioning that requires classroom teachers and professors to adopt the role of mediator between the two cultures.** Mediating is different from imposing the answers on the students, and giving them a limited vocabulary where only the abstractions are sanctioned as more real than the on-the-ground experiences of students. As pointed out earlier there are aspects of the local cultural commons that may be environmentally destructive, such as dumping garbage on land that is seen as not having economic value—and that may be the source of social injustices, such as gender and racial discrimination. But there are many aspects of the cultural commons, even in these environmentally destructive communities, that should be made explicit and strengthened, such as supporting neighbors in times of need. The same mix of constructive and destructive traditions in the industrial consumer oriented culture also exist. **Key Idea: The role of the mediator is to help students recognize the cultural patterns in both cultures (which often are not clearly separated), to name them, and then to identify the sustainable and unsustainable characteristics of each.** Again, the main criteria should be what contributes to an ecologically sustainable future, and a morally coherent community that does not diminish the prospects of future generations. This means that blanket indictments of the industrial consumer culture represent a form of indoctrination, just as romanticizing the cultural commons is also a form of indoctrination that does not add to the students' communicative competence that is necessary for understanding what needs to be renewed and what needs to be changed.

- B. What every teaching/learning situation requires: The ability to name aspects of both the cultural commons and the industrial/consumer culture that would otherwise be part of taken-for-granted experience is an essential requirement for the exercise of communicative competence and democratic participation in deciding what needs to be intergenerationally conserved and what needs to be changed. As stated before, if the person cannot name it, she/he cannot conserve it or change it. This was demonstrated by feminists who first had to name, and thus make explicit, the different ways they were marginalized and silenced. Over time, their oppressors began to recognize how their own taken-for-granted cultural patterns were complicit. As the rate of environmental change is occurring so rapidly, we do not have hundreds or even decades to sort out what needs to be intergenerationally conserved and what needs to be changed. Thus, there is a need to make explicit (that is, to name) more aspects

of daily life that are ecologically sustainable, as well as what undermines both community and the environment, as the students move between the two cultures. And there is a need to avoid what can only be called ideological closed-mindedness and categorical judgments where thinking in terms of labels is substituted for a more culturally and ecologically grounded approach to understanding—and to political action. Whenever possible, the process of cultural mediation should involve the following elements:

- a. Giving words to what is being experienced in some activity that is part of the cultural commons—and giving words to the experience of a similar activity within the industrial/consumer culture. That is, encouraging students to make explicit what they would otherwise ignore because of its taken-for-granted status—and about which no one has encouraged them to articulate their feelings, thoughts, insights, and questions. This is part of the process of verbal mapping of the territory of taken-for-granted beliefs and daily practices, and it can be supplemented by a more deliberate mapping of the visual aspects of the cultural commons and the industrial culture of production and consumption. This visual mapping can be done at different levels in the educational process, and focus on different cultural themes and practices. For example, mapping can include how the physical layout of the community influences how people interact with each other, and how people may be separated from important commons strengthening activities. Perhaps the easiest way to map the extent of skills, practices, and patterns of intergenerational knowledge that are part of the cultural commons of the community is to have students attend the local country fair where a variety of non-industrial produced items will be on display, to the local court house where the legal traditions are still carried on, and to the various groups in the community engaged in the various creative arts. The range of activities and skills that are expressions of the cultural commons should also become the focus for addressing the question of whether they have the same adverse impact on natural systems and on colonizing other cultures as what is produced by the industrial system.

In terms of the verbal mapping of experiences in the two cultures, examples could include the experiential differences between oral and print (computer) based communication, between food they prepare and industrial prepared food, between volunteering in a community project and working in a highly structured job, between developing their own creative talents and purchasing a commercially produced artistic creation, between the experience of being free of constant surveillance and being under constant surveillance, between the experience of being innocent until proven guilty and the possibility that because of an mistake in identity one might be imprisoned without legal recourse.

- b. Acquiring the ability to articulate the issues, insights, feelings, questions about the differences between the two cultures, should be followed by considering which aspects of the two cultures contributes

to social and ecojustice—and thus to a sustainable future. The industrial/consumer culture has made definite contributions to the quality of everyday life, here and abroad. It has also had a destructive impact on people's lives, communities, cultures, and the environment. Mediating requires identifying both the positive and negative aspects of the industrial/consumer culture as well as those of the local cultural commons. Mediating may also take the form of comparing the Western assumptions about individualism, freedom, progress, and mechanism, (which are part of the taken-for-granted experience of most middle class American students) with the cultural assumptions that are the basis of everyday life in non-Western cultures. Which assumptions strengthen community, contribute to a more ecologically sustainable future, enable the members of the community to participate more fully in mutually supportive and morally coherent aspects of the local cultural commons?

- c. Whatever the mediating focus, it is important to encourage students to understand the historical forces that influence the practices and values they encounter as they move between the two cultures. For example, what cultural developments in the past are responsible for the Western prejudice that gives higher status to print-based communication over that of oral communication? What are the origins of the idea that technology is neutral? Examining how interacting with different technologies affects the students' experience—e.g., relationships with others, what they are able to think about, what skills and forms of self-expression are allowed, etc.—will bring out that it is not neutral. How has the dominance of market values influenced how art is judged, and how students experience it in daily life? What influences contributed to today's practice of referring to market liberals as conservatives? More generally, as clarifying how language influences what the students experience and think, nearly every aspect of language—ranging from image words (iconic metaphors), to how the process of analogic thinking is framed by the prevailing root metaphors—has a history that needs to be understood. While this task will only be partially carried out under the best of circumstances, the minimum expectation is to have students acquire an understanding that words have a history, and that past misconceptions are often reproduced in current ways of thinking.
- d. The fourth aspect of cultural mediating should involve asking questions about how different aspects of the two cultures they move between impact the traditions of non-Western cultures. One of the problems with public schools and universities in America is that even though lip-service is given to multiculturalism, most of the disciplines—from the sciences, social sciences and humanities, to the professional schools—reinforce ethnocentric thinking. As mediating begins with encouraging students to give voice (names) to their experiences and questions as they move between the local cultural commons and the

culture of the market place, it is important that the voices of other cultures, as well as the deep assumptions about reality these cultures are based upon, be taken into account. A strong case can be made that the imposition of the West's economic system, in addition to being driven by a desire for profits and power, is a result of ethnocentrism—which can also be seen in the imperialistic foreign policies that are always justified on the basis of winning these cultures over to our basic assumptions and values. The voices of other cultures may take the form of what their members have written about their traditions of mutual support, community/environmental relationships, religious traditions and human values, and so forth.

The global nature of the ecological crises—including global warming, changes in the chemistry of the world's oceans, shortage of potable water, among other rapidly degraded ecosystems—is inextricably bound to the degree humans become more dependent upon consumerism. The greater dependence upon consumerism translates into more toxic waste, more release of green house gases, more exploitation of aquifers and other sources of water, and more destruction of habitats and loss of species. Dependence upon consumerism also leads to a loss of intergenerational knowledge of how to be more self-sufficient as a social unit—as an individual, family, community. As mentioned earlier, developing new energy efficient technologies will address only part of the problem. Unfortunately, gains made in this area will be overwhelmed as billions of people reject their own traditions of the cultural commons in order to pursue the false promises of the West's consumer lifestyle. Mediating between the local cultural commons and the industrial/consumer culture that is spreading around the world needs to become the dominant pedagogy if we are to have any hope of a sustainable future

Appendix E Read pages 103-133 from The False Promises of Constructivist Theories of Learning (2005) and pages 82-92 from the online book, Critical Essays on the Enclosure of the Cultural Commons (2006)

Appendix A through E, as well as guides that incorporate the different elements of cultural mediation at different levels of the educational process, will appear separately on the website\

C. A. Bowers has written 19 books on the cultural roots of the ecological crises, and has given special attention to how public schools and universities reinforce the patterns of thinking that underlie the industrial/consumer oriented culture that is

exceeding ecological limits. His most recent books focus on the role of education in regenerating the local cultural commons as alternative to the growing dependency upon consumerism. His books, including online books, can be found by going to <http://cabowers.net/>, or to Google and then to the C. A. Bowers HomePage.