

The best of both worlds: a critical pedagogy of place*

David A. Gruenewald¹

Taking the position that "critical pedagogy" and "place-based education" are mutually supportive educational traditions, this author argues for a conscious synthesis that blends the two discourses into a critical pedagogy of place. An analysis of critical pedagogy is presented that emphasizes the spatial aspects of social experience. This examination also asserts the general absence of ecological thinking demonstrated in critical social analysis concerned exclusively with human relationships. Next, a discussion of ecological place-based education is offered. Finally, a critical pedagogy of place is defined. This pedagogy seeks the twin objectives of decolonization and "reinhabitation" through synthesizing critical and place-based approaches. A critical pedagogy of place challenges all educators to reflect on the relationship between the kind of education they pursue and the kind of places we inhabit and leave behind for future generations.

"Place + people = politics."—Williams (2001, p. 3)

In this article I analyze and synthesize elements of two distinct literatures, critical pedagogy and place-based education, and argue that their convergence into a critical pedagogy of place offers a much needed framework for educational theory, research, policy, and practice. Place-based pedagogies are needed so that the education of citizens might have some direct bearing on the wellbeing of the social and ecological places people actually inhabit. Critical pedagogies are needed to challenge the assumptions, practices, and outcomes taken for granted in dominant culture and in conventional education. Chief among these are the assumptions that education should mainly support individualistic and nationalistic competition in the global economy and that an educational competition of winners and losers is in the best interest of public life in a diverse society. The current educational reform era of standards and testing that began nearly 20 years ago with the publication of *A Nation at Risk* is perhaps reaching a climax in the No Child Left Behind Act of 2001. One result of new federal mandates for accountability is an increasing emphasis on standards, testing, and classroom pedagogies that "teach to the test" while denying students and teachers opportunities to experience critical or place-based education.²

Currently, educational concern for local space is overshadowed by both the discourse of accountability and by the discourse of economic competitiveness to which it is linked. Place becomes a critical construct not because it is in opposition to economic well-being (it is not), but because it focuses attention on analyzing how economic and political decisions impact particular places (Berry, 1992; Haas & Nachtigal, 1998; Orr, 1992; Theobald, 1997). Place, in other words, foregrounds a narrative of local and regional politics that is attuned to the particularities of where people actually live, and that is connected to global development trends that impact local places. Articulating a critical pedagogy of place is thus a

^{*}This paper was originally published in *Educational Researcher*, Vol. 32, No.4, pp. 3–12 and is reprinted here in full with permission from the publishers. The author has since changed his name to David A. Greenwood.

response against educational reform policies and practices that disregard places and that leave assumptions about the relationship between education and the politics of economic development unexamined.

Unlike critical pedagogy, which evolves from the well-established discourse of critical theory (Aronowitz & Giroux, 1993; Burbules & Berk, 1999; Freire, 1970/1995; Giroux, 1988; McLaren, 2003), place-based education lacks a specific theoretical tradition, though this is partly a matter of naming. Its practices and purposes can be connected to experiential learning, contextual learning, problem-based learning, constructivism, outdoor education, indigenous education, environmental and ecological education, bioregional education, democratic education, multicultural education, community-based education, critical pedagogy itself, as well as other approaches that are concerned with context and the value of learning from and nurturing specific places, communities, or regions. In recent literature, educators claiming place as a guiding construct associate a place-based approach with outdoor (Woodhouse & Knapp, 2000), environmental and ecological (Orr, 1992, 1994; Sobel, 1996; Thomashow, 1996), and rural education (Haas & Nachtigal, 1998; Theobald, 1997). One result of these primarily ecological and rural associations has been that placebased education is frequently discussed at a distance from the urban, multicultural arena, territory most often claimed by critical pedagogues. If place-based education emphasizes ecological and rural contexts, critical pedagogy—in a near mirror image—emphasizes social and urban contexts and often neglects the ecological and rural scene entirely. As leading critical pedagogues McLaren and Giroux (1990) themselves observe, this emphasis represents a "profound irony":

While critical pedagogy in its early stages largely grew out of the efforts of Paulo Freire and his literacy campaigns among peasants in rural areas of Brasil and other Third World countries, subsequent generations of North American teachers and cultural workers influenced by Freire's work have directed most of their attention to urban minority populations in major metropolitan centers. Very little writing exists that deals with critical pedagogy in the rural school classroom and community. (p. 154)

By pointing out distinctive emphases of each tradition, I do not mean to set up a false dichotomy between them or to charge either camp with a narrow vision of appropriate context. Certainly before and since McLaren and Giroux (1990) were "struck" by the irony of Freirean, rural pedagogy taking a chiefly urban turn, educators have applied constructs and approaches typically associated with critical pedagogy to examine rural education (e.g., Theobald, 1990).³ Especially with the recent growth of interest in migrant education, issues of race, class, gender, and corporate hegemony have become central to interrogating rural community life and education (Lopez, Scribner, & Mahitivanichcha, 2001; Weyer, 2002). Similarly, some place-based educators are undoubtedly Freirian "cultural workers" (Freire, 1998); these educators often embrace urban contexts and are involved in ecological projects such as redressing environmental racism, organizing community gardens, and initiating other community development activities that make urban and rural, social and ecological connections (Hart, 1997; Smith, 2002; Smith & Williams, 1999). However, despite clear areas of overlap between critical pedagogy and place-based education (such as the importance of situated context and the goal of social transformation), significant strands exist within each tradition that do not always recognize the potential contributions of the other. On the one hand, critical pedagogy often betrays a sweeping disinterest in the fact that human culture has been, is, and always will be nested in ecological systems (Bowers, 1997, 2001).⁴ In a parallel story of neglect, place-based education has developed an ecological and rural emphasis that is often insulated from the cultural conflicts inherent in dominant American

culture. Additionally, in its focus on local, ecological experience, place-based approaches are sometimes hesitant to link ecological themes with critical themes such as urbanization and the homogenization of culture under global capitalism (see, e.g., Harvey, 1996, chap. 6). In short, both critical pedagogy and place-based education have through these silences missed opportunities to strengthen each respective tradition by borrowing from the other. The point of this article is to invite theorists, researchers, and practitioners to deepen and expand their work by consciously blending approaches from these powerful traditions.

I analyze aspects of each tradition that are relevant to constructing a critical pedagogy of place. This discussion will highlight the strengths of both traditions, tensions within and between them, and raise issues that cannot be neglected as educators develop critical, place-based educational theory and practice. Following this presentation, I will generalize that critical pedagogy and place-based education each make fundamental contributions to a critical pedagogy of place: specifically, while critical pedagogy offers an agenda of cultural decolonization, place-based education leads the way toward ecological "reinhabitation." The article concludes with a call to the entire educational community to reflect on how these twin agendas, and the critical, place-based traditions they represent, challenge all of our work.

Critical Pedagogy's Sociological Context

With roots in Marxist and neo-Marxist critical theory, critical pedagogy represents a transformational educational response to institutional and ideological domination, especially under capitalism. Burbules and Berk (1999) write that critical pedagogy is

an effort to work within educational institutions and other media to raise questions about inequalities of power, about the false myths of opportunity and merit for many students, and about the way belief systems become internalized to the point where individuals and groups abandon the very aspiration to question or change their lot in life. (p. 50)

The leaders of the movement, including Freire, Giroux, and McLaren, insist that education is always political, and that educators and students should become "transformative intellectuals" (Giroux, 1988), "cultural workers" (Freire, 1998) capable of identifying and redressing the injustices, inequalities, and myths of an often oppressive world. For Freire (1970/1995), critical pedagogy begins with recognizing that human beings, and learners, exist in a cultural context:

People as beings "in a situation," find themselves rooted in temporal-spatial conditions which mark them and which they also mark. They will tend to reflect on their own "situationality" to the extent that they are challenged by it to act upon it. Human beings *are* because they are in a situation. And they *will be more* the more they not only critically reflect upon their existence but critically act upon it. (p. 90)

Though Freire does not thoroughly explore the spatial aspects of "situationality," this passage from his seminal *Pedagogy of the Oppressed* demonstrates the importance of space, or place, to critical pedagogy's origins. Being in a situation has a spatial, geographical, contextual dimension. Reflecting on one's situation corresponds to reflecting on the space(s) one inhabits; acting on one's situation often corresponds to changing one's relationship to a place. Freire asserts that acting on one's situationality, what I will call *decolonization* and *reinhabitation*, makes one more human. It is this spatial dimension of situationality, and its attention to social transformation, that connects critical pedagogy with

a pedagogy of place. Both discourses are concerned with the contextual, geographical conditions that shape people and the actions people take to shape these conditions.⁵

The purpose of critical pedagogy is to engage learners in the act of what Freire calls conscientização, which has been defined as "learning to perceive social, political, and economic contradictions, and to take action against the oppressive elements of reality" (Freire, 1970/1995, p. 17). A critical pedagogy of place has the same aim, and identifies "places" as the contexts in which these situations are perceived and acted on. In order to promote conscientizacao and at the same time teach the reading and writing that are so important to it, Freire advocates, "reading the world" (1998; Freire & Macedo, 1987) as his central pedagogical strategy. Reading the world radically redefines conventional notions of print-based literacy and conventional school curriculum. For critical pedagogues, the "texts" students and teachers should "decode" are the images of their own concrete, situated experiences with the world. According to Freire, "reading the world always precedes reading the word, and reading the word implies continually reading the world" (Freire & Macedo, 1987, p. 35). In other words, reading the world is not a retreat from reading the word. Instead, the two intertwined literacies reinforce each other and are directed toward conscientizacao. Through reading the world (or the places in the world that one knows) as "political texts," teachers and students engage in reflection and action—or praxis—in order to understand, and, where necessary, to change the world (Freire, 1970/1995; McLaren, 2003). These two interrelated goals represented by Freire's notion of conscientizacao becoming more fully human through transforming the oppressive elements of reality—are at the center of critical pedagogical practice. They are also, significantly, central to placebased education, though each tradition sometimes interprets these goals and the practices they imply quite differently. I will discuss these differences, and potential territory for convergence, by first reviewing the work of one critical pedagogue explicitly interested in the construct of "place."

Critical Pedagogy and Urban, Multicultural Place

In Race, Culture, and the City: A Pedagogy for Black Urban Struggle, Haymes (1995) explores a "pedagogy of place" for the "inner city." His perspective on place-based pedagogy is especially important to the urban contexts that ecological place-based education often avoids. Haymes claims White culture equates the urban with race, and race with Blackness; accordingly, "in the context of the inner city, a pedagogy of place must be linked to black urban struggle" (p. 129). Building his pedagogy on the framework of a racialized critical geography, Haymes adopts a pedagogy of place as a way for colonized Blacks to name and transform—or decolonize—their own geographical situationality. He writes that a pedagogy of place must begin by "establishing pedagogical conditions that enable blacks in the city to critically interpret how dominant definitions and uses of urban space regulate and control how they organize their identity around territory, and the consequences of this for black urban resistance" (p. 114). Haymes' pedagogy is grounded in a spatialized critical social theory (e.g., Harvey, 1996; Massey, 1994; Soja, 1989) that recognizes how relationships of power and domination are inscribed in material spaces. That is, places are social constructions filled with ideologies, and the experience of places, such as the Black inner city or the White suburbs, shapes cultural identities. With other critical theorists interested in the relationship between place and oppression (e.g., hooks, 1990; McLaren, 1997), Haymes seeks a pedagogy where "territory" and "marginality" can be construed so that resistance to and transformation of oppression becomes possible. Connecting his vision to the multicultural pedagogy of McLaren and Giroux (1990), Haymes advocates "critical narratology" and "critical multiculturalism" as a means for urban Blacks to reflect and act on their situationality. These expressions of critical pedagogy focus on the importance of people telling their own stories (reading the world) in a place where people may be both affirmed and challenged to see how individual stories are connected in communities to larger patterns of domination and resistance in a multicultural, global society. Like other critical pedagogues, Haymes seeks a "language of possibility" (Giroux, 1988) through which relations of domination and colonization are transformed.

Similar to other place-based educators who write from a White, rural perspective (e.g., Haas & Nachtigal, 1998; Theobald, 1997), Haymes worries that (Black, urban) community life is being undermined by capitalistic development patterns (e.g., gentrification) that work against the creation of public spaces where communities can analyze, envision, and construct the meaning of development for themselves. Haymes' (1995) pedagogy of place aims to identify and create development patterns that build up Black communities; he specifically rejects what he calls "assimilationist" and "Afrocentric" models of "black capitalism," which may reproduce the colonizing tendencies of White consumer culture. Citing bell hooks, Haymes charges that the culture of individualistic consumption in Black life "undermines our capacity to experience community" (p. 127). In sum, Haymes promotes a pedagogy of place as the means through which Black communities can evaluate their own situations and build solidarity in the struggle for racial, economic, and political democracy.

Haymes' pedagogy is central to this analysis because it emerges from a context that other place-based educators often avoid: radical multiculturalism. Though Haymes focuses on Black urban struggle, the multiculturalism he advances is also a response against Whiteness as a hegemonic power that oppresses for any reason of difference or otherness (hooks, 1990; Marable, 1996). Critical pedagogy's emphasis on the dynamics of race, power, and place, as exemplified by Haymes, can challenge other place-based approaches not to neglect these critical, multicultural, urban themes.

The Critical Ecological Challenge

Haymes (1995) makes a valuable contribution to a critical pedagogy of place by examining the socio-political significance of urban space in the project of decolonizing Black urban experience. Like other critical theorists focused on recreating the urban landscape, however, Haymes is silent about the connection between cities and the ecological contexts in which all human, and non-human, communities are rooted. The ecological challenge to critical pedagogy is to expand its socio-cultural analyses and agendas for transformation to include an examination of the interactions between cultures and ecosystems. Just as critical pedagogy draws its moral authority from the imperative to transform systems of human oppression, critical ecological educators posit that an ecological crisis necessitates the transformation of education and a corresponding alignment of cultural patterns with the sustaining capacities of natural systems (Bowers, 1993; O'Sullivan, 1999; Orr, 1992).

For well over the last decade, Bowers (1993, 1995, 1997, 2001) has been the leading theorist critiquing the absence of concern for ecological matters in education and in the critical tradition led by Freire, McLaren, and Giroux. Bowers claims that critical pedagogy can work to reinforce cultural beliefs, or "root metaphors," that underlie ecological problems and that are reproduced throughout conventional education: namely, individualism, the belief in the progressive nature of change, and anthropocentrism. Bowers further repudiates critical pedagogues for their tendency to "represent themselves as the only group concerned with issues of gender, race, and economic poverty" (Bowers, 1993, p. 111) and challenges these emancipatory educators to broaden their cultural critique to include an analysis of

ecological systems and the problems of promoting an ever expanding consumer economy. Bowers even questions the privileged status critical pedagogues attach to their own and students' voices, claiming that the Freirean act of "naming the world" anew can contribute to individualistic, anti-ecological thinking. For Bowers, the emancipation that transformative intellectuals seek runs the risk of turning its back on traditional cultural knowledge (e.g., indigenous knowledge, elder knowledge, ethnic knowledge, and local knowledge) as a form of moral authority. Critically embracing such knowledge, Bowers insists, is essential to conserving and creating cultural patterns that do not overshoot the sustaining capacities of natural systems (Bowers, 2001; see Daly, 1996, for an ecological analysis of the growth economy).

Although leading proponents of education for equity and social justice commonly neglect the ecological dimension of a deep cultural analysis, Bowers' latest work attempts to articulate an educational theory that is responsive to the interconnectedness of cultural and ecological life. Now claiming to agree with the critical pedagogues on most social iustice issues (Bowers, 2001, p. 33), Bowers advocates "eco-justice" as a critical framework for educational theory and practice. Eco-justice has four main focuses: (a) understanding the relationships between ecological and cultural systems, specifically, between the domination of nature and the domination of oppressed groups; (b) addressing environmental racism, including the geographical dimension of social injustice and environmental pollution; (c) revitalizing the non-commodified traditions of different racial and ethnic groups and communities, especially those traditions that support ecological sustainability; and (d) reconceiving and adapting our lifestyles in ways that will not jeopardize the environment for future generations.⁶ Like critical pedagogy, eco-justice is centrally concerned with the links between racial and economic oppression. Yet its critique explicitly recognizes that the subjugation of people—urban or rural—is further linked in the global economy to the subjugation of lands, resources, and ecosystems. The ambitious aim of eco-justice is to develop an ethic of social and ecological justice where issues of race, class, gender, language, politics, and economics must be worked out in terms of people's relationship to their total environments, human and non-human.

In his formulation of eco-justice, Bowers lays groundwork for an approach to education that is responsive to the "dissident" ecological traditions (Gruenewald, in press-a) of environmental justice (Bullard, 1993), ecofeminism (Warren, 2000), social ecology (Luke, 1999), and the traditional ecological knowledge of indigenous groups (Cajete, 1994; Esteva & Prakash, 1998). Embracing these traditions is essential to the development of a critical pedagogy of place because of their dual, if sometimes uneven, commitments to social justice and ecological concerns. Bullard (1993) speaks to the fundamental difference between these traditions and the mainstream environmental movement:

The crux of the problem is that the mainstream environmental movement has not sufficiently addressed the fact that social inequality and imbalances of power are at the heart of environmental degradation, resource depletion, pollution and even overpopulation. The environmental crisis can simply not be solved effectively without social justice. (p. 23)

Taken together, the insights of dissident ecological traditions help provide a critical pedagogy of place with a challenging socioecological framework, a framework focused on cultural conflict in a multicultural, global society and attuned to the political assaults on both human and biotic diversity in particular local places. Informing a critical pedagogy of place with the insights of these traditions responds to Bowers' (1993) challenge for a critical pedagogy that is "radical enough" (p. 115) to entertain ecological analysis.

Educational theory that synthesizes ecological and social justice concerns is, however, still in an early stage of development. Significant tensions between socially critical positions like Haymes' (1995) and ecologically critical positions like Bowers' (2001) remain unresolved. If, for example, the environmental crisis cannot be solved without social justice, then ecological educators and critical pedagogues must build an educational framework that interrogates the intersection between urbanization, racism, classism, sexism, environmentalism, global economics, and other political themes. What makes this so difficult is that diverse social experiences produce diverse and sometimes divergent perspectives toward cultural and ecological politics. Geographical location, race, gender, class—permutations of these and other cultural locations mean social and ecological problems are often perceived and prioritized differently by different groups. For example, around Earth Day in 1970, while White middle-class radicals were denouncing resource depletion and waste and while environmentalism was being promoted as a "non-class issue," urban African-American families were focused instead on "lack of jobs, poor housing, racial discrimination, crumbling cities, [and claimed that] their main environmental problem was Richard Nixon" (Harvey, 1996, p. 117). This does not mean to suggest that African Americans are not concerned with resource depletion and waste but to demonstrate that the locus of environmental care may shift depending on one's social and geographical position. Thus the need for a critical pedagogy of place: People must be challenged to reflect on their own concrete situationality in a way that explores the complex interrelationships between cultural and ecological environments.

Ecological Place-Based Education

Critical place-based pedagogy cannot be only about struggles with human oppression. It also must embrace the experience of being human in connection with the others and with the world of nature, and the responsibility to conserve and restore our shared environments for future generations. Some socially critical thinkers might dismiss as "essentialist" or "homogenizing" the idea that connections with the natural world are an important part of being human. Place-based educators embrace this connection for a variety of spiritual, political, economic, ecological, and pedagogical reasons. Though the ecologically grounded emphasis of these place-based educators differs from the socially grounded emphasis of critical pedagogy, taken together, a critical pedagogy of place aims to evaluate the appropriateness of our relationships to each other, and to our *socio-ecological* places. Moreover, a critical pedagogy of place ultimately encourages teachers and students to reinhabit their places, that is, to pursue the kind of social action that improves the social and ecological life of places, near and far, now and in the future.

In their survey of literature on what I term ecological placebased education, Woodhouse and Knapp (2000) describe several distinctive characteristics to this developing field of practice: (a) it emerges from the particular attributes of place, (b) it is inherently multidisciplinary, (c) it is inherently experiential, (d) it is reflective of an educational philosophy that is broader than "learning to earn", and (e) it connects place with self and community. Perhaps the most revolutionary characteristic of place-based education— one that connects it to the Freirean tradition of critical pedagogy—is that it emerges from the particular attributes of place. This idea is radical because current educational discourses seek to standardize the experience of students from diverse geographical and cultural places so that they may compete in the global economy. Such a goal essentially dismisses the idea of place as a primary experiential or educational context, displaces it with traditional disciplinary content and technological skills, and abandons places to the workings of the global market.

Place-based educators do not dismiss the importance of content and skills, but argue that the study of places can help increase student engagement and understanding through multidisciplinary, experiential, and intergenerational learning that is not only relevant but potentially contributes to the well-being of community life (Gruenewald, 2002; Haas & Nachtigal, 1998; Smith, 2002; Theobald & Curtiss, 2000).

By promoting a pedagogy for student engagement in community life, place-based educators embrace aims beyond preparing students for market competition. This generalization about place-based education signals both similarity to and difference from critical pedagogy. First, like critical pedagogues, place-based educators advocate for a pedagogy that relates directly to student experience of the world, and that improves the quality of life for people and communities. However, unlike critical pedagogues, not all place-based educators foreground the study of place as political praxis for social transformation. Indeed, Woodhouse and Knapp (2000) call place-based education "a recent trend in the broad field of outdoor education" (p. 1) and locate it as a cousin of environmental education. However, recognizing that place-based education can benefit from the socio-cultural perspectives central to critical pedagogy, Woodhouse and Knapp call Haymes' (1995) place-based, urban pedagogy "a much needed complement to more conventional outdoor/environmental curriculum and instruction" (Woodhouse & Knapp, 2000, p. 2). Human communities, or places, are politicized, social constructions that often marginalize individuals, groups, as well as ecosystems. If place-based educators seek to connect place with self and community, they must identify and confront the ways that power works through places to limit the possibilities for human and non-human others. Their place-based pedagogy must, in other words, be critical.

Compared to critical pedagogy, the rhetoric of place-based education is not nearly so oppositional, "messianic" (Bowers, 2001), or stridently political. However, this does not mean that placebased pedagogy is less devoted to social change than critical pedagogy. Ecological place-based educators, for example, are committed to fostering ecological literacy (Orr, 1992; Smith & Williams, 1999; Thomashow, 1996) in a citizenry capable of acting for ecological sustainability, a goal that ultimately entails monumental changes in lifestyle, politics, and economics (see Huckle & Sterling, 1996). However, some ecological placebased educators have learned that over-politicizing pedagogy can be a strategic mistake: If political perspectives are introduced at the wrong time, for example, they can create anxiety, fear, and hopelessness in learners that makes them less capable of taking socially or ecologically appropriate action. In Beyond Ecophobia, Sobel (1996) warns against the "premature abstraction" often used to address out-of-reach global crises such as exotic species extinction, rainforest destruction, acid rain, and global warming. The idea here is not that educators should avoid the realities of these human-created crises, but that we should pursue pedagogical strategies that honor a learner's developmental readiness for engaging with complex ecological themes. Through analyzing a variety of research and practice in the development of environmental values, Sobel concludes, "what's important is that children have an opportunity to bond with the natural world, to learn to love it, before being asked to heal its wounds" (p. 10).

Though Sobel focuses on the ecological education of children, the research he uses to support this conclusion looks at the development of environmental values in adults. Sobel (1996) writes,

Most environmentalists attributed their [political] commitment to a combination of two sources: "many hours spent outdoors in a keenly remembered wild or semi-wild place in child-hood or adolescence, and an adult who taught respect for nature" [Chawla, 1988]. Not one of

the conservationists surveyed explained his or her dedication as a reaction against exposure to an ugly environment. (p. 10)

The implication here is that the values of ecologically literate and politically motivated adults are shaped by significant life experiences that foster connection—in this case connection with the natural world. The idea that people need to develop mutually enhancing relationships with nature before they will act on its behalf is not a new idea. However, many educators still rush to inform students of the latest ecological, and social, catastrophes. In fact, one could argue that the environmental movement itself has attempted to educate citizens mainly by focusing on tragedy, malfeasance, and ignorance. In response, Sobel wants to "reclaim the heart" in place-based education, to create experiences where people can build relationships of care for places close to home. This focus on experience with place is a response against both a "gloom and doom" approach to environmental education and a conventional education that keeps students indoors and thinking about outdoor places only in the abstract. In his classic essay "The Land Ethic," Leopold (1949/1968) reflects on the need in education for the kind of bonding with the land that Sobel and others urge:

It is inconceivable to me that an ethical relationship to land can exist without love, respect, and admiration for the land, and a high regard for its value. ... The most serious obstacle impeding the evolution of a land ethic is the fact that our educational and economic system is headed away from, rather than toward, an intense consciousness of land. (p. 223)

Empathy, Exploration, and Social Action in Places. In order to develop an intense consciousness of places that can lead to ecological understanding and informed political action, place-based educators insist that teachers and children must regularly spend time out-of-doors building long-term relationships with familiar, everyday places. The kinds of educative experiences students and teachers pursue depends on the distinctive characteristics of the places they inhabit, as well as on what learning objectives and strategies they employ. Sobel (1996) describes a developmental framework for place-based curriculum that begins with fostering empathy for the familiar, moves out toward exploration of the home range, and leads to social action and reinhabitation. Though designed for ecological contexts, Sobel's framework might also apply to the problematic social environments that are typically the concern of critical pedagogues. Where in a community, for example, might students and teachers witness and develop forms of empathetic connection with other human beings? How might these connections lead to exploration, inquiry, and social action?

Curriculum geared toward exploring places can deepen empathetic connections and expand the possibilities for learning outward. Sobel (1996) explains, "[place-based] curriculum can mirror the expanding scope of the child's [or adult's] significant world, focusing first on the home and school, then the neighborhood, the community, the region, and beyond" (p. 19). Such explorations amount to a guided, ecological approach to a Freirean reading of the world. For Sobel, however, providing guided experiences that allow learners to connect, explore, and discover takes precedence, at least for a time, over representing and processing experience through critical dialogue for the purpose of social action. Sobel (1993) is particularly interested in the role of "children's special places," such as forts and dens—or any place that children care to make their own—to the development of identity and a commitment to places in middle childhood. He also advocates mapping as a learning activity that helps learners develop multiple perspectives and broaden their view of the world (Sobel, 1998). In sum, empathy and exploration are pursued because they are valued

learning experiences in themselves and because the connections they nurture lead to inquiry, action, and knowledge about places that are grounded in firsthand, shared experience of the home range.

Like critical pedagogy, place-based education aims to empower people to act on their own situationality. Sobel's (1996) comment on this point, however, is worth noting as it shifts the emphasis from a discourse of revolutionary change (i.e., critical pedagogy) to a discourse of rooted, empathetic experience (i.e., place-based education): "If we want children to flourish, to become truly empowered, then let us allow them to love the earth before we ask them to save it" (p. 39). From the perspective of a critical pedagogy of place, the point is not that these aims should be seen separately, but that the call to transform oppressive conditions that is so important to critical pedagogy must be balanced with experiencing an empathetic connection to others, human and non-human. Ecological place-based educators urge all educators to ask themselves whether their curricula allow for this kind of connection and suggest that anyone might begin looking for and creating nearby places to experience it.

With standards and testing dominating today's educational discourse, the suggestion that educators should create curricula designed to foster empathy and allow for the exploration of local places challenges current policy and practice—especially when the suggestion is for regular, coordinated K–12 experiences. Such a goal is usually not part of a teacher's job description nor do teacher education programs prepare teachers to teach this way. In place of actual experience with the phenomenal world, educators are handed, and largely accept, the mandates of a standardized, "placeless" curriculum and settle for the abstractions and simulations of classroom learning. Though it is true that much significant and beneficial learning can happen here, what is most striking about the classroom as a learning technology is how much it limits, devalues, and distorts local geographical experience. Place-based education challenges all educators to think about how the exploration of places can become part of how curriculum is organized and conceived. It further challenges educators to consider that if education everywhere does not explicitly promote the well-being of places, then what is education for (Orr, 1992)?

A Critical Pedagogy of Place: Decolonization and Reinhabitation

At the most general level ... a critical pedagogy must be a pedagogy of place, that is, it must address the specificities of the experiences, problems, languages, and histories that communities rely upon to construct a narrative of collective identity and possible transformation. (McLaren & Giroux, 1990, p. 263)

Given critical pedagogy's sociological focus and place-based education's ecological emphasis, it needs to be stressed that each discourse carefully attends to concepts and goals that are fundamental to the other. Perhaps the two most significant intersections between these traditions are place-based education's call for localized social action and critical pedagogy's recognition that experience, or Freire's (1970/1995) "situationality," has a geographical dimension. Acknowledging that experience has a geographical context opens the way to admitting critical social and ecological concerns into one's understanding of place, and the role of places in education. This is the goal of a critical pedagogy of place. One of my purposes for naming this convergence is that place-based education, in its diverse incarnations, is currently less a pedagogy per se and more an alternative methodology that lacks a coherent theoretical framework. In other words, the goal here is to ground place-based education in a pedagogy that is socially and ecologically critical.

Pedagogy is a term used loosely in educational discourse. Simon (1987) writes that "talk about pedagogy is simultaneously talk about the details of what students and others might do together and the cultural politics such practices support. In this perspective, we cannot talk about teaching practices without talking about politics" (cited in McLaren, 2003, p. 187). A critical pedagogy of place embraces the link between the classroom and cultural politics, and further, it explicitly makes the limits and simulations of the classroom problematic. It insists that students and teachers actually experience and interrogate the places outside of school—as part of the school curriculum—that are the local context of shared cultural politics. Of course, critical pedagogy has always aimed to address the educative impact of experience with culture in places outside the school building. The challenge posed by place-based educators is to expand school experience to foster connection, exploration, and action in socioecological places "just beyond the classroom" (Knapp, 1996).

Decolonization and Reinhabitation

A critical pedagogy of place, moreover, proposes two broad and interrelated objectives for the purpose of linking school and place-based experience to the larger landscape of cultural and ecological politics: decolonization and reinhabitation. These goals broadly mirror the thematic emphases of critical pedagogy and ecological place-based education, respectively. They are presented here separately (and in no hierarchical order) for the purpose of articulating the twin social and ecological objectives of a critical pedagogy of place. One should keep in mind, however, that they are really two dimensions of the same task. Reinhabitation is a major focus in ecological place-based education, especially in its expression as bioregionalism (McGinnis, 1999; Sale, 1985; Traina & Darley-Hill, 1995). Bioregionalist pioneers Berg and Dasmann (1990) define reinhabitation as "learning to live-in-place in an area that has been disrupted and injured through past exploitation" (p. 35). Similarly, Orr (1992) writes, "The study of place ... has a significance in reeducating people in the art of living well where they are" (p. 130). Of course, the meaning of "living well" differs geographically and culturally. A politicized, multicultural, critical place-based education would explore how humanity's diverse cultures attempt to live well in the age of globalization, and what cultural patterns should be conserved or transformed to promote more ecologically sustainable communities (Bowers, 2001). Orr elaborates a bioregionalist meaning of living well by drawing a distinction between inhabiting and residing in a place:

A resident is a temporary occupant, putting down few roots and investing little, knowing little, and perhaps caring little for the immediate locale beyond its ability to gratify. As both a cause and effect of displacement, the resident lives in an indoor world of office building and shopping mall, automobile, apartment, and suburban house and watches as much as four hours of television each day. The inhabitant, in contrast, "dwells" ... in an intimate, organic, and mutually nurturing relationship with a place. Good inhabitance is an art requiring detailed knowledge of a place, the capacity for observation, and a sense of care and rootedness. (p. 130)

While Orr derides residency for requiring only "cash and a map" (p. 130), the "good inhabitance" he advocates may also require economic and political resources, and even revolutionary social change, especially for those living in urban environments or in many kinds of poverty, or for those whose "dwelling" and cultural way of being is under threat from global economic development. However, acquiring detailed knowledge of a place is certainly an appropriate beginning for those wishing to develop mutually enhancing relationships with their environments. Wherever one lives, reinhabitation will depend on identifying, affirming,

conserving, and creating those forms of cultural knowledge that nurture and protect people and ecosystems (Bowers, 2001).

In many ways decolonization describes the underside of reinhabitation; it may not be possible without decolonization. If reinhabitation involves learning to live well socially and ecologically in places that have been disrupted and injured, decolonization involves learning to recognize disruption and injury and to address their causes. From an educational perspective, it means unlearning much of what dominant culture and schooling teaches, and learning more socially just and ecologically sustainable ways of being in the world. In their essay on the spatialized vocabulary of cultural politics, Smith and Katz (1993) write, "Decolonization becomes a metaphor for the process of recognizing and dislodging dominant ideas, assumptions and ideologies as externally imposed" (p. 71). Similarly, hooks (1992) defines decolonization as a "process of cultural and historical liberation; an act of confrontation with a dominant system of thought" (p. 1). However, as Bowers (2001) points out, decolonization as an act of resistance must not be limited to rejecting and transforming dominant ideas; it also depends on recovering and renewing traditional, non-commodified cultural patterns such as mentoring and intergenerational relationships. In other words, reinhabitation and decolonization depend on each other. A critical pedagogy of place aims to (a) identify, recover, and create material spaces and places that teach us how to live well in our total environments (reinhabitation); and (b) identify and change ways of thinking that injure and exploit other people and places (decolonization).

As mentioned previously, these two goals can be associated with place-based education and critical pedagogy, respectively. These two educational traditions offer additional metaphors that help clarify the distinctive, socio-ecological emphasis of a critical pedagogy of place: transformation and conservation. Posed in terms of questions, critical pedagogues insist on asking, What about situationality, both in terms of the lived experience of people and the often oppressive social structures that shape experience, needs to be transformed? Place-based educators, on the other hand, often ask, What about local places, both in terms of ecologically sustainable cultural patterns and human and biotic diversity, needs to be conserved? Of course, this reduction of complex discourses is problematic and one could point to examples in place-based education and in critical pedagogy where attention is given to both transforming and conserving cultural practices. The point of the comparison is to show the broad range of inquiry posed by place-based and critical pedagogies. Because of critical pedagogy's strong emphasis on transformation, the question of what needs to be conserved takes on special significance to a critical pedagogy of place. This question does not imply political and ideological alignment with those typically labeled "conservatives." Instead, it makes this political category problematic by challenging everyone, from radicals to reactionaries, to specifically name those aspects of cultural, ecological, and community life that should be conserved, renewed, or revitalized (Bowers, 2001).

Identifying what needs to be conserved requires the kind of deep critical reflection and dialogue that form the foundation of critical pedagogy. Only now, critical thought is employed to name and recover those aspects of community life that truly contribute to the well-being of all people and the places they inhabit. Should, for example, the genetic diversity in ecosystems and agriculture be conserved in the era of mass extinctions and biotechnology? Should constitutional rights be conserved as governments and corporations devise new methods of surveillance and manipulation? Should public places be conserved and restored as the landscape increasingly falls under elite private ownership and control? Should face-to-face, intergenerational human contact be renewed as schools and dominant culture continue to idolize technology and marginalize and segregate both youth and elders?

Critical pedagogues might respond that conserving and renewing cultural practices that contribute to the well-being of people and places may often require transforming existing practices. Race, gender, and class oppression, as well as ecologically damaging cultural patterns, need to be transformed in the face of those people and structures that would conserve them. Still, deciding what should be conserved suggests a trajectory for critical inquiry that may be missed when transformation is pedagogy's paramount goal (C. A. Bowers, personal communication, September 18, 2002). The critical synthesis posed by a critical pedagogy of place posits that the questions of what needs to be transformed and what needs to be conserved are equally critical and necessary, that cultural and ecological contexts are always two parts of the same whole, that decolonization and reinhabitation are mutually supportive objectives, that outrage toward injustice must be balanced with renewing relationships of care for others—human and non-human—and that the shared experience of everyday places promotes the critical dialogue and reflection that is essential to identifying and creating community well-being.

Conclusion

A critical pedagogy of place aims to contribute to the production of educational discourses and practices that explicitly examine the place-specific nexus between environment, culture, and education. It is a pedagogy linked to cultural and ecological politics, a pedagogy informed by an ethic of eco-justice (Bowers, 2001), and other socio-ecological traditions that interrogate the intersection between cultures and ecosystems.

The chief implication of a critical pedagogy of place to educational research is the challenge it poses to all educators to expand the scope of their theory, inquiry, and practice to include the social and ecological contexts of our own, and others', inhabitance. Classroombased research on teaching and learning that focuses on teacher skills and student performances and takes for granted the legitimacy of a standards-based paradigm of accountability is inadequate to the larger tasks of cultural and ecological analysis that reinhabitation and decolonization demand. Further, the heavy emphasis in educational research on school and classroom practices reinforces institutional practices that keep teachers and students isolated from places outside of schools. Critical approaches to educational research, such as critical ethnography, discourse analysis, and other deconstructive approaches are needed, yet these methodologies must provide a theoretical rationale to connect schools with the social and ecological dimensions of places. Research in service learning, community-based action research, and school-community collaboration can offer direction, but the partnerships these approaches imply need to be conceived not as tangential to core school curriculum, but as structures and practices that help rethink the classroom as the fundamental site of teaching and learning. Educational research that evaluates the efficacy of critical, place-based approaches to education also need to be developed, though the meaning of successful practice must challenge conventional notions of achievement; definitions of school achievement must begin to take account of the social and ecological quality of community life. Developing a critical pedagogy of place means challenging each other to read the texts of our own lives and to ask constantly what needs to be transformed and what needs to be conserved. In short, it means making a place for the cultural, political, economic, and ecological dynamics of places whenever we talk about the purpose and practice of learning.

In his recent article, "Place-Based Education: Learning To Be Where We Are," Smith (2002) writes, "Because place-based education is by its nature specific to particular locales, generic curricular models are inappropriate" (p. 587). Smith does, however, offer five approaches to place-based learning that can focus educational research into place-based

practices: (a) local cultural studies, (b) local nature studies, (c) community issue-investigation and problem-solving, (d) local internships and entrepreneurial opportunities, and (e) induction into community decision making. As Smith observes, when students and teachers become curriculum creators in any of these areas, "the wall between the school and the community becomes much more permeable and is crossed with frequency. . . . The primary value of placebase education lies in the way that it serves to strengthen children's [and adults'] connections to others and to the regions in which they live" (pp. 593–594). Informed by critical, placebased pedagogies, educational research can likewise help to strengthen these connections and help communities of learners conserve and transform their living environments.

No doubt, Smith's (2002) description of the purposes and practices of place-based education represents a huge challenge to many educators' assumptions about the way teachers and students should conduct teaching and learning. A critical pedagogy of place deepens the challenge by bringing cultural and ecological politics into the center of place-based discourse. It would be difficult to underestimate the messy complexity of these politics. Interrogating the links between environment, culture, and education is an intellectual challenge that few educational theorists have undertaken (e.g., Bowers, 2001; O'Sullivan, 1999). From the standpoint of educational research and practice, this work is further complicated by the uniqueness and diversity of cultural and ecological interactions as they are produced and experienced in particular places. However, the traditions of critical pedagogy and place-based education provide researchers and practitioners with intellectual tools ready for practical application anywhere.

Given the cultural complexity of decolonizing and reinhabiting places, especially in an educational climate that is increasingly focused on quantitative, paper-and-pencil outcomes at the expense of any conversation about what it means to live well in a place, developing a movement for critical, place-based educational practices is a difficult proposition. Yet critical, place-based pedagogies can help to reframe and ground today's tiresome debates over standards in the lived experience of people and the actual social and ecological contexts of our lives. This does not mean replacing all of conventional education with critical, placebased pedagogy. The question is whether we will embrace place at all—What happened here? What will happen here?—as a critical construct in educational theory, research, and practice.

Notes

The author wishes to thank the editors, two anonymous reviewers, and Chet Bowers for their insights in revising this article.

- 1. For a critique of this assumption, see, for example, Apple (2001), Burbules and Torres (2000), McLaren (2003), McNeil (2000), Labaree (1997), Popkewitz (1991), and Spring (1998).
- 2. As Pinar (1991) suggests, the interest in place to curriculum theory is in part a response against the development of a context-free, homogenizing curriculum of standards and testing that claims to be applicable "anytime and anywhere" (p. 165).
- The ERIC Clearinghouses for Rural Education and Small Schools and for Migrant Education collect many resources addressing issues of race, class, gender, and economic development. See http://www.ael.org/eric.
- 4. While this is true in the Freire, Giroux, and McLaren tradition in the United States, it is not true of the critical traditions in Great Britain, Australia, and Canada (see, e.g., Fien, 1993; Huckle & Sterling, 1996; O'Sullivan, 1999; Salleh, 1997).
- 5. See Soja (1989) and Gruenewald (in press-b) for a discussion of the reciprocal nature of the person and place relationship.
- 6. An upcoming special issue of the journal *Educational Studies*, which Kate Wayne and I are coediting, will feature articles and reviews that explore these dimensions of eco-justice. See the *Educational Studies* website at http://www3.uakron.edu/aesa/publications/ej.html.

- 7. As Harvey (1996) observes, such traditions emphasize that "the 'environmental issue' necessarily means such different things to different people, that in aggregate it encompasses quite literally everything there is" (p. 117). Please see http://www.hensonscales.com/erlinks.htm, regarding environmental justice, and http://www.ecofem.org, on ecofeminism, for two extensive bibliographies. What is significant here is that though socio-ecological traditions such as these have a significant literature base, there have been few comprehensive efforts to develop educational theory that is responsive to their analyses. Along with Bowers (2001), compare also O'Sullivan (1999).
- 8. See Gruenewald (in press-a) for a critique of environmental education, its failure to problematize conventional education, and for its lack of attention to issues of social justice.
- 9. The influence of positive significant life experiences was so important to researchers in environmental education that in 1998 a special volume of *Environmental Education Research* (Tanner, 1998), the field's leading research journal, was devoted to the theme.

References

Apple, M. 2001. Markets, standards, teaching, and teacher education. *Journal of Teacher Education* 52, 182–196.

Aronowitz, S., and H. Giroux. 1993. *Education still under siege*. Westport, CT: Bergin and Garvey. Berg, P., and R. Dassman. 1990. Reinhabiting California. In *Home! A bioregional reader*, eds. V. Andruss et al., 35–38). Philadelphia: New Society Publishers.

Berry, W. 1992. Sex, economy, freedom and community. New York: Pantheon Books.

Bowers, C.A. 1993. Education, cultural myths, and the ecological crisis. Albany: State University of New York Press.

Bowers, C.A. 1995. Educating for an ecologically sustainable culture: Rethinking moral education, creativity, intelligence, and other modern orthodoxies. Albany: State University of New York Press.

Bowers, C.A. 1997. The culture of denial. Albany: State University of New York Press.

Bowers, C.A. 2001. Educating for eco-justice and community. Athens: The University of Georgia Press.

Bullard, R. ed. 1993. Confronting environmental racism: Voices from the grassrooots. Boston: South End Press.

Burbules, N., and R. Berk. 1999. Critical thinking and critical pedagogy: Relations, differences, and limits. In *Critical theories in education*. eds. T. Popkewitz and L. Fendler. New York: Routledge.

Burbules, N., and C. Torres. eds. 2000. *Globalization and education: Critical perspectives*. New York: Routledge.

Cajete, G. 1994. Look to the mountain: An ecology of indigenous education. Durango, CO: Kivaki Press.

Daly, H. 1996. Beyond growth. Boston: Beacon Press.

Esteva, G., and M. Prakash. 1998. Grass roots' postmodernism: Remaking the soil of cultures. London: Zed Books.

Fien, J., ed. 1993. Environmental education: A pathway to sustainability. Geelong, Australia: Deakin University.

Freire, P. 1995. *Pedagogy of the oppressed*. New York: Continuum. (Original work published 1970) Freire, P. 1998. *Teachers as cultural workers*. Boulder, CO: Westview Press.

Freire, P., and D. Macedo. 1987. *Literacy: Reading the word and the world.* Westport, CT: Bergin & Garvey.

Giroux, H. 1988. *Teachers as intellectuals: Toward a critical pedagogy of learning.* South Hadley, MA: Bergin Garvey.

Gruenewald, D. 2002. Teaching and learning with Thoreau: Honoring critique, experimentation, wholeness, and the places where we live. *Harvard Educational Review* 72, no. 4: 515–541.

Gruenewald, D. (in press-a). A Foucauldian analysis of environmental education: Toward the socio-ecological challenge of the Earth Charter. *Curriculum Inquiry*.

Gruenewald, D. (in press-b). Foundations of place: A multidisciplinary framework for place-conscious education. *American Educational Research Journal*.

Haas, T., and P. Nachtigal. 1998. Place value. Charleston, WV: ERIC Press.

Hart, R. 1997. Children's participation: The theory and practice of involving young citizens in community development and environmental care. London: Earthscan, Unicef.

Harvey, D. 1996. Justice, nature, and the geography of difference. Malden, MA: Blackwell.

Haymes, S. 1995. *Race, culture and the city: A pedagogy for Black urban struggle.* Albany: State University of New York Press.

hooks, b. 1990. Yearning: Race, gender, and cultural politics. Boston: South End Press.

hooks, b. 1992. Black looks: Race and representation. Boston: South End Press.

Huckle, J., and S. Sterling. eds. 1996. Education for sustainability. London: Earthscan.

Knapp, C. 1996. Just beyond the classroom. Charleston, WV: ERIC Press.

Labaree, D. 1997. How to succeed in school without really learning. New Haven, CT: Yale University

Leopold, A. 1968. *A sand county almanac*. Oxford, UK: Oxford University Press. (Original work published 1949)

Lopez, G., J. Scribner, and K. Mahitivanichcha. 2001. Redefining parent involvement: Lessons from high-performing migrant-impacted schools. American Education Research Journal 38, 253–288.

Luke, T. 1999. Capitalism, democracy, and ecology: Departing from Marx. Urbana: University of Illinois Press.

Marable, M. 1996. Speaking truth to power: Essays on race, resistance, and radicalism. Boulder, CO: Westview Press.

Massey, D. 1994. Space, place, and gender. Minneapolis: University of Minnesota Press.

McGinnis, V., ed. 1999. Bioregionalism. New York: Routledge.

McLaren, P. 1997. Revolutionary multiculturalism: Pedagogies of dissent for the new millennium. Boulder, CO: Westview Press.

McLaren, P. 2003. Life in schools (4th ed.). New York: Allyn and Bacon.

McLaren, P., and H. Giroux. 1990. Critical pedagogy and rural education: A challenge from Poland. *Peabody Journal of Education* 67, no. 4: 154–165.

McNeil, L. 2000. Contradictions of school reform: Educational costs of standardized testing. New York: Routledge.

O'Sullivan, E. 1999. *Transformative learning: Educational vision for the 21st century*. London: Zed Books.

Orr, D. 1992. Ecological literacy. Albany: State University of New York Press.

Orr. D. 1994. Earth in mind. Washington, DC: Island Press.

Pinar, W. 1991. Curriculum as social psychoanalysis: On the significance of place. In *Curriculum as social psychoanalysis*, eds. J. Kincheloe and W. Pinar 65–186. Albany: State University of New York Press.

Popkewitz, T. 1991. A political sociology of educational reform. New York: Teachers College Press.

Sale, K. 1985. Dwellers in the land: The bioregional vision. San Francisco: Sierra Club Books.

Salleh, A. 1997. Ecofeminism as politics: Nature, Marx and the postmodern. London: Zed Books.

Simon, R. 1987. Empowerment as a pedagogy of possibility. Language Arts 64, no. 4: 370.

Smith, G. 2002. Place-based education: Learning to be where we are. *Phi Delta Kappan* 83, 584–594. Smith, G., and D. Williams. 1999. *Ecological education in action: On weaving education, culture, and the environment.* Albany: State University of New York Press.

Smith, N., and C. Katz. 1993. Grounding metaphor: Toward a spatialized politics. In *Place and the politics of identity*, eds. M. Keith and S. Pile 67–83. London: Routledge.

Spring, J. 1998. Education and the rise of the global economy. Mahwah, NJ: Lawrence Erlbaum Associates.

Sobel, D. 1993. *Children's special places*. Tuscon, AZ: Zephyr Press.

Sobel, D. 1996. *Beyond ecophobia: Reclaiming the heart in nature education.* Great Barrington, MA: The Orion Society and The Myrin Institute.

Sobel, D. 1998. Mapmaking with children. Portsmouth, NH: Heinemann.

Soja, E. 1989. Postmodern geographies: The reassertion of space in critical social theory. London: Verso.

Tanner, T., ed. 1998. Significant life experiences [Special issue]. *Environmental Education Research* 4, no. 4.

Theobald, P., ed. 1990. A look at rural education in the United States. *Peabody Journal of Education* 67, no. 4.

Theobald, P. 1997. *Teaching the commons: Place, pride, and the renewal of community.* Boulder, CO: Westview Press.

Theobald, P., and J. Curtiss. 2000. Communities as curricula. Forum for applied research and public policy 15, no. 1: 106–111.

- Thomashow, M. 1996. Ecological identity. Cambridge, MA: MIT Press.
- Traina, F., and S. Darley-Hill., eds. 1995. Perspectives in bioregional education. Troy, OH: NAAEE.
- Warren, K. 2000. Ecofeminist philosophy: A western perspective on what it is and why it matters. Lanham, MD: Rowman & Littlefield.
- Weyer, H. (Producer/Director) 2000. Escuela. [Film]. New York: Women Make Movies.
- Williams, T. 2001. Red: Passion and patience in the desert. New York: Pantheon Books.
- Woodhouse, J., and C. Knapp. 2000. Place-based curriculum and instruction. (ERIC Document Reproduction Service No. EDO-RC- 00-6.)

Copyright of Environmental Education Research is the property of Routledge and its content may not be copied or emailed to multiple sites or posted to a listsery without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.

Copyright of Environmental Education Research is the property of Routledge and its content may not be copied or emailed to multiple sites or posted to a listsery without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.