Journal of Educational Controversy

Volume 4
Number 1 *The Hidden Dimensions of Poverty: Rethinking Poverty and Education*

Article 16

2009

Rethinking Eco-justice Within a Biophilic Framework: A Rejoinder

Donald J. Burgess
Western Washington University, don.burgess@wwu.edu

REJOINDER

Rethinking Eco-justice Within a Biophilic Framework: A Rejoinder

Donald J. Burgess
Western Washington University

I commend Professor Bowers for alerting us to the important role that current ecological crisis plays in the social justice issues centered on class, race and gender. Bowers' persuasive reframing of social justice issues in terms of eco-justice left me wondering if part of the problem lies in our human species' aloof disregard of nature. Many of us spend far too little time hearing, seeing and building relationships with the birds, plants and animals that share our immediate environment. Mueller's rejoinder to Bowers' rethinking of social justice helped me visualize a naturalist's keen attention to the natural world (i.e., environmental literacy) within the local ecological commons of Athens, Georgia. By first focusing on his relationship to nature and then describing his contextualized eco-justice pedagogy, Mueller elevated the importance of human/nature relationships in eco-justice arguments. Though many scholars are beginning to embrace a curriculum perspective informed by environmental literacy and eco-justice (i.e., interconnectedness of nature, economy and equity), the role of *biophilia*[1] (love of nature) in achieving ecological justice for all species remains vague among education leaders.

For example, Sloan (1993) promotes a *holistic* curricular vision that challenges the troubling extension of science and technology into every aspect of modern life (e.g., iPods and cell phones) and links environmental degradation to growing racism. Alternatively, Orr (1996) and Elder (2003) advance *ecological literacy* as central to the postmodern curriculum while Kincheloe and Pinar (1991), Slattery and Daigle (1994) and Gruenwald (2003) espouse a critical perspective and call for investigating a *curriculum of place*. Bowers (1993) identifies the need for *recovery of the ecological imperative* and emphasizes the *cultural commons* (Bowers, 2009). More recently Doll, Fleenor, Trueit and Julien (2005) explore *chaos, complexity and culture,* while Davis and Sumara (2006) describe *complexity thinking* as key to the development of an ecological relationship to curriculum. Similarly, Barab and Roth (2006) advance an *ecological theory of knowing* that emphasizes engaged participation instead of knowledge acquisition.

Almost uniformly, these scholarly analyses tend to emphasize *human ecology* and *human nature* over what I will term, *natural history* or the *natural world*. According to Tewksbury (2009), natural history is the observational, descriptive, and comparative study of the natural world. Equally important, Tewksbury suggests that natural history provides a path to nurture a fundamental human emotional connection to the non-human world. How do we include the voice of the natural world in Mueller and Bowers' eco-justice arguments? I believe both Mueller and Bowers would agree that children increasingly live in a world where nature is inaccessible (Kellert, 2002; Louv, 2006). Children are losing their sensitivity and connection to the natural world; its gentle slowness and ordinariness are being replaced by electronic stimulation and virtual experience. Our educational system often denies children the opportunity to play and explore in the natural world (Elder, 2003; Orr, 2002; Pyle, 2002).

Since natural history forms the foundation of ecology and evolutionary theory, it is key to conservation of wildlife and nature (Herman, 2002). But more important to this rejoinder, Wilson (1994) suggests that natural history helps children build a sense of place in the natural world. As children's understanding and ability to value natural systems are nurtured, Wilson suggests that their sense of biophilia can flourish. Yet in the last 75 years, we have seen a steady loss in the practice of natural history in research and education (Tewksbury, 2009). Future educational research that emphasizes biophilia will demand a consideration of what it means to include the larger biotic community in our discussion of educational reform. My dissertation research, centered on children's responses to nature during and following their participation in a residential environmental education program, indicates that biophilia can help researchers and educators focus on the vital intersection between individual, environment and action.

It is clear that humans continue to disregard the nonhuman communities that represent the vast majority of species on Earth (Orr, 2002). Our species anthropocentric bent is reflected in most curriculum theorizing, which has yet to take account of biophilia. A few theorists are beginning to adopt a more biocentric perspective. For example, Bonnes and Bonaiuto (2002) call for a context that addresses the "full ecological environment," blending human and non-human species in a biocentric outlook. Some scientists warn, that without strongly nurtured relationships between humans and nature, children may soon forget that they are part of the complex web of life on the planet (Capra, 1997, 2002; Wilson, 2005). Perhaps this is the ecological crisis that lies at the heart of Bower's moral arguments: Our love for the natural world and all its inhabitants is increasingly compromised.

The Oscar Awards recipient for Best Visual Effects (March 7, 2010) suggested carelessly that the *Natural* world is just as

important as the *Virtual* world that they created in the movie *Avatar*. While I enjoyed the luminescent splendor and colorful diversity of the Avatar's world, I offer a key distinction between virtual and natural worlds. While special cinematic effects may compel children to develop affection for the Avatar's world, these children will not develop a deep love for the creatures that inhabit the screen. Love is dependant on intimate interaction that engages the depths of their being; simply viewing cartoon characters' interacting on a high-definition screen will not create children with a naturalist's sensibilities. According to Lopez's definition (2001), a naturalist, "knows a local flora and fauna as pieces of an inscrutable mystery, increasingly deep, a unity of organisms Western culture has been trying to elevate itself above since at least Mesopotamian times. The modern naturalist, in fact, has now become a kind of emissary in this, working to re-establish good relations with all the biological components humanity has excluded from its moral universe" (p.2).

As a naturalist and educator, I have often observed children attending to the subtle nuances and interactions within biotic communities, embracing the natural world deeply as one might a cherished friend. Scholars in both the biological sciences and education conjecture that once we love and understand natural systems, we may more easily extend environmental ethics to the diverse, individual species that comprise the complex land organism (Gould, 1991; Leopold, 1949; Orr, 2004; Pyle, 2002; Wilson, 2006). Many environmental educators share this conservation assumption. Thus, biophilia provides a salient conceptual framework to explore education reform that starts by listening to children's ideas about nature. And while we are attending to our children and students, let's spend time immersed in loving nature ourselves.

References

Barab, S. A., & Roth, W. M. (2006). Curriculum-Based Ecosystems: Supporting Knowing From an Ecological Perspective. *Educational Researcher, 35*(5), 3.

Bonnes, M., & Bonaiuto, M. (2002). Environmental psychology: From spatial-physical environment to sustainable development. In R. B. Bechtel & A. Churchman (Eds.), *Handbook of environmental psychology* (pp. 28-54). New York: Wiley.

Bowers, C. A. (1993). *Critical essays on education, modernity, and the recovery of the ecological imperative*. New York, NY: Teachers College Press.

Bowers, C. A. (2009). Rethinking Social Justice Issues Within an Eco-Justice Conceptual and Moral Framework. *Journal of Educational Controversy, 4*(1). Retrieved February 20, from http://www.wce.wwu.edu/Resources/CEP/eJournal/v004n001/a006.shtml

Capra, F. (1997). *The web of life: A new scientific understanding of living systems*. New York, NY: Anchor.

Capra, F. (2002). *The hidden connection: A science for sustainable living*. New York, NY: Random House.

Davis, B., & Sumara, D. (2006). *Complexity and education: Inquires into learning, teaching and research*. Mahwah, NJ: Lawrence Earlbaum Associates and Publishers.

Doll, J., William C., Fleenor, J. M., Trueit, D., & Julien, J. S. (Eds.). (2005). *Chaos, complexity, curriculum and culture*. New York: Peter Lang Inc.

Elder, J. L. (2003). *A field guide to environmental literacy: Making strategic investments in environmental education*. Rock Spring, Georgia: North American Association for Environmental Education.

Gould, S. J. (1991). Enchanted evening. *Natural History, 100*, 4–14.

Gruenwald, D. (2003). The best of both worlds: A critical pedagogy of place. . *Educational Researcher, 32*(4), 3-12.

Herman, S. (2002). Wildlife biology and natural history: time for a reunion. *The Journal of Wildlife Management*, 933-946.

Kellert, S. R. (2002). Experiencing nature: Affective, cognitive, and evaluative development in children. In P. H. Kahn & S. R. Kellert (Eds.), *Children and nature: Psychological , sociocultural, and evolutionary investigations* (pp. 117-152). Cambridge, MA: MIT Press.

Kincheloe, J. L., & Pinar, W. (1991). *Curriculum As Social Psychoanalysis: The Significance of Place*. Albany, NY: State

Univiversity of New York

Leopold, A. (1949). *A sand county almanac*. New York, NY: Oxford University Press.

Lopez, B. (2001). The Naturalist. *Orion: People and Nature, 20*(4), 39-43.

Louv, R. (2006). Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder. *Children, Youth and Environments, 16*(1).

Orr, D. W. (1996). *Ecological literacy: Education and the transition to a post modern world*. Albany, NY: State University Press.

Orr, D. W. (2002). Political ecology and the ecology of childhood. In P. H. Kahn & S. R. Kellert (Eds.), *Children and Nature*. Cambridge, MA: MIT Press.

Orr, D. W. (2004). *Patriotism, politics and the environment*. Washington D.C.: Island Press.

Pyle, R. (2002). Eden in the vacant lot: Special places, species and kids in the neighborhood of life. In P. H. K. Jr. & S. R. Kellert (Eds.), *Children and Nature*. Cambridge, MA: MIT Press.

Slattery, P., & Daigle, K. (1994). Curriculum as a Place of Turmoil: Deconstructing the Anguish in Walker Percy's Feliciana and Ernest Gaines' Pointe Coupee. *Curriculum Inquiry, 24*(4), 437-461.

Sloan, D. (1993). Forward. In R. Miller (Ed.), *The renewal of meaning in education* (pp. 1-5). Brandon, VT: Holistic Education Press.

Soule, M. E. (1992). Biophilia: unanswered questions'. *The biophilia hypothesis. Island Press, Washington, DC*, 441-455.

Tewksbury, J. (2009). Natural History: The basis for ecological understanding and the global sustainable society (Organized Oral Session at the Ecological Society of America Annual Meeting). *Ecological Society of America Annual Meeting (Organized Oral Session)* Retrieved April 2, 2009, from http://naturalhistorynetwork.org/projects.shtml

Wilson, E. O. (1984). *Biophilia*. Cambridge, MA: Harvard University Press.

Wilson, E. O. (1994). *The Naturalist*. Washington, D.C.: Island Press.

Wilson, E. O. (2005). Biophilia and the conservation ethic. *Evolutionary Perspectives on Environmental Problems*, 249.

Wilson, E. O. (2006). *The creation*. New York, NY: W. W. Norton and Company, Inc.

Notes

[1] Strictly speaking, biophilia is the love of life or living nature (Soule, 1992). E.O. Wilson describes biophilia as the "innate tendency to focus on life and lifelike processes" (Wilson, 1984, p. 1).