Queen's University

Education Letter

A publication of the Faculty of Education and the Education Alumni Committee Fall/Winter 2008

MESSAGE FROM THE EDITOR

Rosa Bruno-Jofré, *Queen's University*

This issue of the Education Letter is dedicated to environmental education. The aim is to generate critical reflection on our ethical selves, a matter brilliantly addressed by Lorraine Kasprisin. In the process, we must rethink our relationships with our surroundings, cultivate new dispositions – such as respect and a sense of moral responsibility – discover new insights on ecologically exploitative practices, and explore understandings of how ecological problems are also social problems. The articles in this Letter lead to renewed views of citizenship literacy and hint at a more integrative vision of the humane, in which nature is not an external entity to be used and abused at our will.

Environmental Education

A Message From the Oceans, Heather O'Reilly, Artist

The Dislocation of the Ethical Self: The Challenge of a New Ecological Paradigm for Educators

Lorraine Kasprisin, *Western Washington University*

Education is a profoundly moral activity. Despite the recent hyper-rationalization of teaching, with its discourse of outcomes, targeted behaviors, and an objectification that establishes an I-It relationship between teacher and student, teaching and learning remains, in Martin Buber's terms, essentially an I-Thou relationship between two moral subjects. The moral self that has been conceptualized in the West, however, has been challenged on a number of fronts. Each challenge has had the effect of dislocating the ethical self, from the liberal concept of an autonomous rational chooser to a self embedded in a set of cultural relationships to now a self as an intricate part of a larger ecosystem. Each of these dislocations has implications for educators.

The western ethical paradigm that emerged from the Enlightenment posited a concept of self as a rational, autonomous self who makes moral judgments by appealing to universal principles of justice or utility. The ethical self is essentially the rational self who appeals to the kind of reasons that all rational agents would choose if they were acting rationally, a position that recognizes the universality of moral judgments. This notion of the self was traditionally connected with notions of natural rights, human dignity and equal respect for persons. These concepts and principles form the public ethic for modern liberal democracies.

While traditional liberal theory illuminates important aspects of the moral point of view like a universal concept of human rights that goes beyond the vicissitudes of specific societies, its emphasis on the self-sustaining autonomous individual as the primary social unit often does not do justice to the centrality of the cultural and social embeddedness of individual lives. This is the challenge made by communitarian views of ethics as well as feminist relational or care ethical views. These views claim that traditional liberal theory fails to recognize the self as embedded in and, to a large extent, constituted by communal commitments and values. They argue that liberalism does not account sufficiently for the web of obligations and commitments that form those relationships which go beyond the purely contractual.

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Resources of Interest

Special articles on "poverty and ecojustice" will be published in the Volume 3 Number 2 themed issue on "Thinking and Teaching about Poverty and Class" in the *Journal of Educational Controversy* scheduled to be online at the end of the year. Readers can find the journal at: http://www.wce.wwu.edu/eJournal

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While recognizing the importance of a concept of a relationally-defined self – a self embedded in community – with the commitments and relationships that constitute that community, I have argued elsewhere (1996) that some notion of moral autonomy is still important for any ethical theory. Morality implies human agency. Consequently, I attempted to construct a concept of moral autonomy that is compatible with a relationally based or care based ethical theory. Rather than conceptualizing the self as detached from community and historical narrative and assuming an impartial and objective stance, I argued for a concept of the ethical self that emerges in a dialectical relation with the community itself. Essentially, I argued for a concept of autonomy that would be analyzed as a critical perspective from within a community rather than a privileged view from outside. Central to this argument was a new understanding of the nature and role of a particular kind of moral conversation in the regeneration of community. It is the kind of conversation that allows us to enter into the world of the other in a way that brings to moral consciousness those aspects of the self that we may wish to affirm or render problematic. It is at those moments, I argued, that autonomous action, in any meaningful sense, is possible. I suggested that educators who seek to develop moral agents, must help our children to engage in authentic moral conversations.

Our growing recognition of an environmental crisis facing our whole ecosystem has forced a new reexamination of

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Decipherer of Bullshit. My Planet In The Throes of Dying, Heather O'Reilly, Artist

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our ethical responsibilities and a new dislocation of the ethical self. Does liberalism or its challenges above meet this new crisis adequately or do we require a different way of understanding the self as inextricably connected to a larger eco-structure. There are two paths we can take. On the one hand, we can expand our sense of obligations to include non-human species and the earth itself in our ethical deliberations. This approach addresses new concerns but can leave the underlying assumptions about the nature of the ethical self in place. The second path would be to reconceptualize our whole way of seeing our relationship with the earth and question cultural concepts like progress, dominion, and the centrality of the self. The implications for educators would be far-reaching. First, it would require that we question our own complicity as mediators of culture who make sense of the world through these cultural assumptions. And secondly, it would require a new reconstruction of moral agency for an ethical self embedded in an ecological web. I think that is the next project we must tackle.

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Eco Controversy At the Four Corners Of The Earth, Heather O'Reilly, Artist

Important Notice

Queen's Education Alumni Homecoming Dinner has been moved to May 22nd, 2009. This is our annual celebration of alumni and distinguished educators.

Please visit
the Faculty of Education's website
http://educ.queensu.ca/alumni
for additional information.

Enacted Ecological Learning

Chris Beeman, *Queen's University*

What if ecological education were neither an attempt to transmit certain key knowledges about the environment, nor a critical reflection upon these knowledges, but an enacted practice, lying at the threshold of a particular, definable, state of being? What might be the implications of such a reconsideration of ecological education for education in general? The first of these questions mimics and amplifies a concern Neil Evernden raised in the mid-1980's. This concern was over how the relative stripling, Environmental Science, was being judged and nudged by academe as it attempted to justify itself as a discipline.

At a time when one of the many waves of ecological concern washed over contemporary Western culture, Evernden noted the environmentalists' dilemma. This dilemma resulted from the posing of a particular kind of question, which went something like this: "So you are an environmentalist? Okay, then tell us what the environment is good for."

Such a question puts the earnest environmentalist in tricky spot. A dilemma has two horns, neither of which is pleasurable to be stuck upon. On one of the two horns – let's say the one that honours an accurately complex view of ecology, filled with the unknowable, the wondrous, the emotional, a view that recognizes intrinsic worth in the more-than-human-world – it could be charged that there is no science at all. What the environment is "good for" cannot not be encapsulated, counted, nor its instrumental value established. And if the knowledge pertaining to environmental science is not discreet and testable, then it has no right to be called an academic discipline. But the other horn of the dilemma, where instrumentally-oriented reason holds sway, is an even more dangerous seat. An instrumental recounting of the uses that an environment can be put to – as though the only meaning in the more-than-human-world derives from what it can do for people – does not an ecological position make. In this dilemma, there is no good position for the sincere ecologist. She would have to either accept that what she wanted to study was not real academic learning, or make what she new to be far more varied, wonderful and complex, fit a structure that distorted it from autumn brilliance to dull, mottled grey. Evernden was concerned that it was precisely this interpretation which, because it was most familiar to academe, was becoming the discipline.

Neil Evernden prophetically delineated the divide that would occur between those from an ecological perspective and those from a use-oriented view of "natural resources," if the above dilemma went unchallenged. He argued that it is precisely an effort to understand ecology from the inside that is required for an accurately articulated ecological position. A good answer to the challenge must take the form of not simply a direct response to the question, but with a re-questioning of the questioner – one might broadly call this a critical perspective. Such a process would expose the underlying and unstated presuppositions on the part of academe of what constitutes disciplines of learning, accurate measures, and knowledge. But a response oughtn't to stop there. To do so would be to run a race, pausing a few metres short of the finish line in order to

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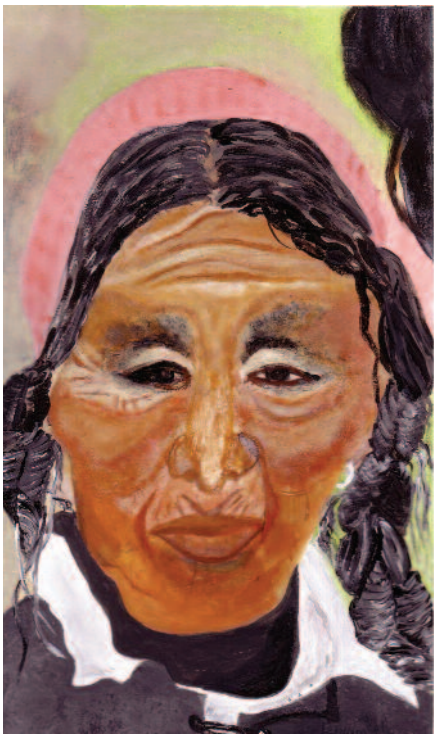

Decipherer of Bullshit. My Planet In The Throes of Dying, Heather O'Reilly, Artist

"So you are an environmentalist? Okay, then tell us what the environment is good for."

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quaff a latté and theorize with the punters. A response ought not merely to reveal the hidden expectations of the questioner, but to propose a viable alternative. Evernden's The Natural Alien does this. I would also like to add to Evernden's eloquent response that in the case of this particular subject at least, which is about the world that contains the theory that considers it, then what one does in this world, and certainly how teaching about this world occurs, is of prime importance.

Searching For The Sea Art Installation, Heather O'Reilly, Artist

Perhaps teaching must change when it addresses issues that are only possible to comprehend in a different state of being.

I think the answer to Evernden's idea of speaking from an ecological position, may come from both engaging with a rough grouping of knowledges, concepts, ideas, theories and also through direct and immediate interaction with the world that contains them, in such a way that intellectual consideration itself does not destroy what is being considered. One does not discover time by dismantling a clock. This only leads to a mess on the kitchen table.

Let me add to this another perspective. When I asked Bob Lovelace whether he would consider speaking about the proposed uranium mining in his people's land to the Program in Outdoor and Experiential Education last year, he responded, "Let them come and do a sweat lodge; then they will be in the right position to understand the ideas." I took it from his response that, given a choice between the two, one's position for understanding ideas was either more significant, or harder to come by, than the ideas I hoped to discuss. Or perhaps more interestingly, that a position suited to the proposed learning was a necessary prerequisite.

In conclusion, other aspects of education might feel the influence of this argument. Perhaps teaching must change when it addresses issues that are only possible to comprehend in a different state of being. This moves beyond transmission, construction and critical consideration of knowledge to the territory of engaged action in the world. In the case discussed here, involvement in the world must take a certain ecologically balanced form. It is possible that engagement with other cases, if these exist, will take a different form.

Ecological Literacy

Diane Lawrence, *Queen's University*

With "significant amounts" of time for language instruction in the elementary grades now recommended by the Ministry of Education to Boards of Education across the province, there is no mistaking the focus on literacy in Ontario schools these days. To be literate in anything is a reflection upon knowledge. When we are literate, we have embraced the information at hand and can demonstrate understand understanding of it. We have a command of the vocabulary, we 'know the names' and by that very act we have a personal investment and are empowered.

I have been thinking a great deal about this lately, since the notion of 'ecological literacy' has become a popular term. It is listed, for example, as one of the criteria, along with 'energy conservation', 'waste reduction', and 'school yard naturalization', in the Eco-Schools program, an initiative that is growing exponentially in Ontario schools.

If literacy does reflect knowledge and create the venue for empowerment, there is indeed the urgent need for 'ecological literacy'; this implies more than saying words, it involves understanding them, since knowledgeable, literate people make informed decisions and that's what we need for environmental health. In his article Green Tsunami Rising: Environmental Education's Third Wave, Mike Weilbacher (2008) gives us a reminder that our society's recent concerns about the environment are not our first wakeup call. The term 'ecological literacy' just seems to be the latest way to describe our need to make all citizens aware of the interconnectedness of life. As 'the third wave' implies, we have heard the words for years, and have popularized them (e.g., 'Save the Panda', 'Don't be a litter bug'), yet the average citizen understands so little about the impact humans have upon our planet. Researchers have determined that people in developed countries spend on average 95% of their time indoors. Not surprisingly, the belief is that our artificial environments' separation from the natural world has not only shaped our perceptions of nature, it has led to environmental and social problems which are seldom found in societies who live closer culturally and physically to the natural environment (Cohen 1991).

Researchers have determined that people in developed countries spend on average 95% of their time indoors.

So the question becomes not the need for ecological literacy, which is a given, but rather, how do we create it? I would like to offer three suggestions on this matter.

First, ecological literacy needs to be looked at holistically in every subject area and in every avenue of society. At present, environmental concerns are looked at first and foremost from a scientific perspective. While the connections are obvious, important, and not to be dismissed, leaving environmental matters to the realm of science tars them with the same brush for, unfortunately, the connotation amongst school children is that science is

Source: Zab MacEachren

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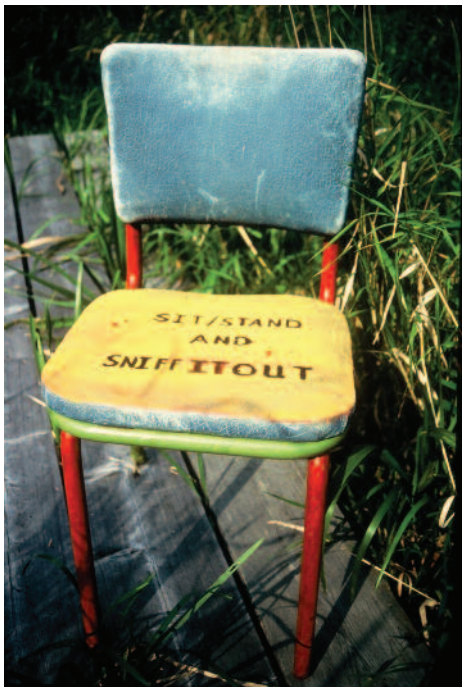
difficult and somehow unobtainable. If we strive for ecological literacy for our future citizens, not only do we need teachers who are confident and enthusiastic science instructors, we also need to embrace our natural world in a manner that is interdisciplinary and cross-cultural. Perhaps, by creating a 'teachable moment,' we can open the door to ecological interest and cultivate 'the need to know.' Perhaps, it will happen when studying 'then and now' maps in geography class, or by examining the palette of colours Tom Thompson used in his paintings. The secret to becoming literate begins with cultivating an interest for the pursuit of knowledge. Celebrate the frost on the window pane, or the feel of a caterpillar's tickly feet with a youngster and lifelong doors begin to open. Provide an adolescent with meaningful tasks, or with the opportunity to interact with the natural environment in a manner that builds self-confidence. In this way, new perspectives are formed for life.



Sniff it Out Art Installation, Heather O'Reilly, Artist

The connection between children and the environment has long been recognized. The words of naturalist and early environmentalist Rachel Carson in her early work A Sense of Wonder in 1956 is a testament to this. The saying "wake up and smell the coffee" is most applied to older folks, but I would say that no age is too late to take advantage of the power of our affective and emotional connection to the environment. This can lead to care and concern for the development of ecological literacy, but also to informed decision making and action.

Now, in reference to our approach to science, contemplating stories that I have heard repeated many times in pre-service elementary classes that I have taught, it becomes evident that many students recall learning experiences in science as being "hard" and, therefore, not understandable. Science becomes a mere spiral of formulas and difficult to pronounce terms. If our goal is ecological literacy, we must push for mandatory environmental education courses and in-service programs for teachers so they may become confident and knowledgeable before they reach their student. In this way, educators can come to understand that ecological literacy needs a cross-curricular approach.

Perhaps the most powerful suggestion that I can offer is also the simplest. The single best thing teachers, as well as parents and grandparents can do to set both children and themselves on the road to ecological literacy is to provide experiences for them to be

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The solution to developing ecological literacy appears simple: take every opportunity to take students outside. We are in an age of technology, which, often, keeps us inside.

Resources of Interest

Lou, Richard. 2005. *Last child in the woods: Saving our children from nature-deficit disorder*. Algonquin Books of Chapel Hill: Chapel Hill N.C.

Sobel, David. 1996. *Beyond Ecophobia: Reclaiming the heart in nature education*. The Orion Society: Great Barrington MA

Nature Literacy Series. 1998. *Stories in the land: A place-based environmental education anthology*. The Orion Society: Great Barrington MA

Children and Nature Network

www.childrenandnature.org

Robert Bateman's Get to Know your Wild Neighbours Program

www.gettoknow.ca

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outside and experience nature. Too often, teachers are stopped by their own lack of confidence regarding knowledge of terms, particularly when outdoors, and do not realize that a powerful first step for ecological literacy involves experiences with the natural world. Teachers can use their skills to help children experience and question. It was Benjamin Franklin who once said: "What signifies knowing the names, if we know not the nature of things?"

If we give students the opportunity to get to know and to become interested in their natural world, the desire to know more will be cultivated and become more meaningful. A personal experience, which creates appreciation and wonder can make us want to know more.
We are apt to remember, to be more mindful, and more caring of the natural world in the future.

Landmark studies beginning in Great Britain in 1992 involved researchers contacting environmentalists and asking them to provide autobiographical statements of life experiences and of formative influences contributing to their life's direction; the single most important influence reported involved, simply, being in the outdoors. Childhood experiences were the most frequent ones reported (Palmer and Neal 1994).

The solution to developing ecological literacy appears simple: take every opportunity to take students outside. We are in an age of technology, which, often, keeps us inside. Marvelous video clips and webcasts are available that show life from lands outside of our lived experiences and from microscopic perspectives that we shall personally never perceive. Celebrate these technologies, but begin by taking students out of the school building so that they can begin to make more personal connections to the Earth. Such experiences will scaffold the development of ecological literacy in all its forms and give it opportunities to take root.

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Heather B. O'Reilly
Mixed-media Art Installation, Painter, Arts Educator

Heather is a practicing arts educator, activist artist, social justice advocate and environmentalist. A graduate of Concordia University Fine Arts Program, Heather studied painting, costume and set design and continues to combine these three mediums. She believes strongly in speaking out through art and does so continually through her paintings and art installations. Heather has a Bachelor of Education from Queen's Faculty of Education and is a graduate of the Artist-in-Community Program. She began her career teaching Visual Art and Drama at the Secondary School level. Currently, she is completing her Master in Education at the Faculty of Education, Queen's University and teaches a focus course in Social Justice. Her philosophy is that through education change can occur. Heather recently completed The Climate Project training program, led by Nobel Laureate Al Gore. She is spreading the message about the challenges of and solutions to the climate crisis. Heather is presently painting a series of works on canvas with an environmental theme.

Environmental Science: A Political Adventure

Joan Jardin, *Bayridge Seconday School,* and John Olson, *Queen's University*

Science is said to be objective. The scientific method ensures that experiments are valid, reliable, and reproducible. It appears that subjectivity is removed when studying or performing science. While the scientific method may work to become objective, the same cannot be said for the study and teaching of science. What gets researched just like what gets studied is human-driven and so is, by definition, subjective.

The allocation of funding drives what is researched. Science is expensive and time consuming. It cannot be performed in a vacuum. The government and/or corporations provide funds based on their own criteria – criteria that involve human decision-making. The study of science is also dependant on human decision-making. In the elementary and secondary school system in Ontario, the curriculum is designed by educators but is directed by the government. There should be ideals that are transmitted regardless of the ideology of the presiding political party.

After the 1998 revision of the Ontario curriculum, environmental science courses were no longer offered. The exception was Grade 12 Earth and Space Science with its emphasis on the physical science of geology and structure. Ecology was to be incorporated as a topic in the already full grade ten science and biology courses. This placement left few opportunities to investigate and internalize the important and intricate balance that is our biosphere.

Each strand in the science curriculum includes a section relating science to technology, society, and the environment. This strand is meant to support the investigation of careers and to provide access to technical jobs and the 'knowledge economy'. For example, students are to be told to note the value of science in the economy and the contribution science will make to health and prosperity, especially such undertakings of big science and technology as the human genome project or nuclear power. What else is the student to note about science and technology and the environment?

The Pan-Canadian curriculum protocol – an influential document in provincial curriculum planning – notes that the role of technology is to develop "optimal" solutions that represent a balance of costs and benefits to society, the economy, and the environment'. This statement, however, begs the question of the nature of those "optimal" solutions. Who decides the costs and benefits? What kind of a framework is at work in assessing those issues? Where do politics enter this process? Do technologists work in isolation as a kind of technical parliament representing the interests of citizens through delegation? Where and in what ways do citizens get into the act?

Such questions underscore the need for citizens to understand the environmental problems that confront them. Al Gore stated in the movie An Inconvenient Truth, that choosing between gold (economic prosperity) and the world (environmental responsibility) is a false choice. Not only do we know that without a healthy environment we cannot exist but also that investing in new technologies is an ecological necessity and would be financially rewarding due to this necessity.

So what should Environmental Science look like? Simply put, it should be introduced

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Topics and terminology can be introduced at a young age as they are easily understood and the connections are relatively tangible.

Resources of Interest

Hulme, Mike, *Amid the Financial Storm: Redirecting Climate Change*, November 1, 2008, www.opendemocracy.net/article/amid-the-financial-storm-redirecting-climate-change

An Inconvenient Truth, Davis Guggenheim, Paramount Classics and Participants Productions, 2006

Council of Ministers of Education, Canada, *Common Framework of Science Learning Outcomes*, 1997

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early, integrated as a theme in a variety of courses, including business, and revisited in a manner that parallels the intellectual and personal maturity of the student. Developing a literacy for citizenship requires that science and technology should be seen in terms of their educationally-defining social and moral contexts. Educators cannot take science out of its social or technological context without diminishing its curriculum potential. Science, in effect, has a subordinate role to play; the issues students must grapple with lie above and beyond science. One of the problems students encounter in schools and society is the idea science is an encompassing way of understanding the world and that superior thinking skills said to result from studying science. Environmental studies provide a launching ground for the study of science and also act as a sophisticated overview of all the scientific processes working together.

Topics and terminology can be introduced at a young age as they are easily understood and the connections are relatively tangible. Young elementary students can grasp concepts like predator-prey relationships, herbivore, carnivore, omnivore, and feeding levels. However, applying these concepts to personal lifestyle and consumer choices requires maturity and a developed sense of empathy. This maturity can be seen manifesting itself in students around grade 12. Between grade 6 and grade 11, students are more interested and distracted with their own place in the world. It is as if they move from seeing how the world can serve them (when they are very young) to how the world affects them personally (particularly their own changing bodies) and then finally, to how they can interact with, and contribute to, the world around them.

For these reasons, it seems puzzling that the main study of ecology is in grade ten. We insist on trying to develop empathetic people from naturally self-centered students. This age, fourteen to sixteen, is when they are at their most inward looking. Demanding that they demonstrate empathy and social advocacy is like planting seeds in arid soil. Only the rare seed will germinate - the sowing should have been delayed until the rainy season.

Scientific literacy involves the social and moral context of science and technology and greater consideration given to the larger framework of decision-making. Scientific literacy must be coupled with essential resources including teachers practiced in critical analysis. What is needed, in short, is citizenship literacy. Students have to think about what is good for society and how scientific literacy within the framework of citizenship serves that good. To do otherwise is to court disaster. "Human beings have the means to destroy the planet by using machines to harvest nature. It is an uneven fight. Trees in western North America, for example, and fish in the east and the north and the south, are sucked up by machines without heed for the future."

Time has run out for us to think that we can separate ourselves from our environment. Each of our actions has an effect. These effects need to be recognized, named and alternatives adopted. Environmental Science is more than a subject to be taught in school, it must lead to the development of environmentally responsible and innovative citizens of the Earth.

Blackboots Bullshit and Rhetoric of Power. My Planet in, Heather O'Reilly, Artist

Scientific literacy must be coupled with essential resources including teachers practiced in critical analysis.

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Many Terms, Much Confusion: Where is the Oneness?

Zabe MacEachren, *Queen's University*

The list of terms we link today to education and ecology seems endless, as we struggle to address the declining quality of the land we live on, including: outdoor, environmental, ecological, sustainable development, sustainability, bioregional, green, and nature-based pedagogy. Outdoor Education is the oldest form of education, having evolved well before shelters and buildings called schools were erected. As outdoor education became associated with the popular ideas of adventure and challenge education, new terms like environmental education came along in the 60s and 70s to address the growing awareness of pollution in our society.

An awareness of the environment encourages the question: where is the boundary between urban, rural and wilderness today? On a more specific level, the question focuses upon the divide, if any at all exists, between what is deemed human and what is considered natural. If humans are natural, is the pollution we create natural? Many academics have written extensively on the problems associated with understanding the concepts associated with self and nature or human and ecology (Fawcett 2005, Evernden 1992, Livingston 1981).

Einstein refers to the double bind as trying to solve a problem with the same thinking that created it (Petersen 2001). If humans truly considered themselves part of nature, would they continue to pollute themselves? Perceiving ourselves as natural beings is difficult to achieve in our daily lives, when technology makes life so easy, yet hides the impact of each tool we touch. It can be forgotten that every human, conscious decision made has some effect upon earth. Environmental educator David Orr (1994) summarizes the relevance of these effects well in his statement that "all education is environmental education" (p. 12). Who among us recognizes that perhaps our educational system may be as polluted as the land we live upon?

There are indeed many terms to be sifted through and much confusion that follows. It should be remembered that no one person can guide educators through all the complex networks that make ecology so important to education. No single technique or solution can make sense of all the confusion and solve all lingering questions. I frequently tell students that education is the very thing that got us into the environmental mess we are contemplating, and that education will be the very thing will allow us to approach it.

Source: Zabe MacEachren

I have yet to hear of one perfect summative term that encapsulates the many educational terms that reside in the field and, for lack of a better term, I loosely use the idea oneness education. This involves learning to sense the oneness of the interconnection between all things (including the non-human world) really

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Resources of Interest

Tar sands: Dirty oil and the future of a continent. Andrew Nikiforuk 2008 Vancouver Greystone Books.

It gives insight into how government, industry NGOs interact in monitoring/ evaluating the ecological impact of mega projects.

It would be a useful resource in an STS focused course in high school.

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seems to be at the root of the disparity concerning the environment.

Ursula Franklin (2006) the well-known Canadian physicist, tried to articulate that we should not only rely on science (a thinking-based process) or technology (the result of much of our scientific thinking) to solve our problems. She suggests that we need to learn to feel again or to know in other ways. Educators' emphasis on developing an ethic of care, for not only others but for a place, is starting to arise in the new terms associated with environmentally focused programs. Integrated programs have met with great success across the province, and they allow teachers to integrate learning from different subjects and create holistic learning experiences. The stress on school boards to develop interdisciplinary credit programs also encourages new ways of looking at school curricula. More recently, "bioregional learning" or "place-based education" has also become popular (Sobel 2004, Fawcett 2005).

In the Outdoor and Experiential Education Program at the Faculty of Education, many terms are explored and examined through a critical lens to explore what is working and what should be readdressed in order to give a sense of direction to educators. Helping teacher educators to understand all the subtle distinctions between the many terms that exist and to pursue their own educational aims are crucial components to the Program. I offer the following metaphor of a blanket toss activity as being a potentially useful one:

In the far north on a flat landscape, it was important for Inuit hunters to find a way to elevate them selves so that they might be able to see game off in the distance. Height was achieved by having one person climb onto a large seal hide that others had gathered around the edge and could hold off the ground. Everyone held the hide and worked together to toss one hunter up so they could see further into the distance. In this process of seeing further, or perceiving the land in a new way, the tossed hunter also experiences joy. This experience of joy when seeing things in a new way is the aim of education. Their role as educators, parents or community members is to encourage others to get on the seal skin, to try something new, to open their senses to a new way of knowing something. Educators cannot control what others see while being tossed, but they can encourage them in many ways to take chances and look out into the world in new ways. The joy of embracing new ways of knowing may also bring an awareness of what needs to be done or undone in order to make the land vital. Experiencing this new awareness can only be achieved with the support of others holding onto the edge of the seal skin.

The blanket toss metaphor acts like gift-wrapping does. The gift that is unwrapped when a person is furled from the blanket represents the sense of joy achieved from understanding things in a new way and cultivating the sense of oneness that we perceive with everything around us. Education is the wrapping paper surrounding a gift, which resembles the perception of oneness with the land and everything else on earth.

The stress on school boards to develop interdisciplinary credit programs also encourages new ways of looking at school curricula. More recently, "bioregional learning" or "place-based education" has also become popular

(Sobel 2004, Fawcett 2005)

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A Place of Their Own

Cam Collyer, *Director, Learning Grounds*

What should drive the design of the outdoor learning environments at our schools? The response to this question might lead us to consider the possibilities for hands-on learning, the promotion of children's health, the construction of positive social environments, opportunities to connect with nature, or the provision of spaces facilitating diversity of play? On a recent trip to visit children's play environments in Europe, I was struck by how many leading designers have made private spaces for children a top priority.

Typically, these private places are pathways, or pockets, separated from busy areas by trees and shrubs. At The Coombes School in England (thecoombes.com), a great number of the pathways are almost impassable for adults, who are forced to bend low and lift branches in order to pass through. Inevitably, the branches are a wild tangle. Sue Humphries, former headmaster commented on the design in this way: "The thing that's hardest to reproduce is the sense that you are in the wood. A real wild wood. If you do too much cutting and too much manicuring, you destroy that sense that you're among wild things that have a pattern of their own."

It seems to me that Humphries' point is a crucial one to emphasize. In those moments when we realize that nature has a life and structure of its own independent of the human hand, we are struck with a sense of wonder that begs further inquiry and exploration. It promotes interest in learning and a desire to know the natural world better. In our age, where childhood is predominately lived indoors, we need to carefully consider the design and programmes enabling children's play. It is necessary that these environments inspire and nourish an appetite for the natural and for the outdoors.

Another moment provoking critical reflection during my European trip came in Berlin, where I visited 16 sites inspiring awe. In contrast with Canadian school grounds, the sites were well-vegetated and provided abundant seating space, places to hide and play, diversity of colour, and variety of texture via the balancing of hard and soft surfaces. 90% of the play structures that I saw were custom-built and the wood was rough-hewn. One of the designers I spent time with spoke of the importance of diversity in terms of vegetation, materials used, and height of seating spaces. There was often not a single straight line to be found, which added to the distinct character of each site. Sue Humphries summed up this point well when she said "those special places mean that the child develops a sense of geography, a sense of place, that a certain tree being a certain shape in a particular area of the grounds. It's not just representing itself as a

Source: Zabe MacEachren

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birch or a beech or a hornbeam, it is something more than that."

Furthermore, sustainability was a key concern in Germany. This was best exemplified at a high school in Potsdam, a city nearly three quarters of an hour outside Berlin. A large area of asphalt had been torn up in order to create a space with more vegetation and natural, soft surfacing. Most of the asphalt that was extracted got cut into slabs that was later stacked to form tiered perimeter seating resembling that which can be found in an amphitheatre. The creative use of materials that were on site for recreative ends is a product of the emphasis placed on sustainability in that context.

In Canada, the concern for greening school grounds is strong and ever progressing. Evergreen's Toyota Evergreen Learning Grounds Program (TELG) alone has supported efforts at over 2500 schools. We have done this by providing: expert assistance from specialized landscape designers in ten cities, publishing a suite of how-to documents and lesson plans, providing start up grants, training teachers, designers and grounds staff, and undertaking research. Some of the most exciting news emerges from the understanding that it is not merely individual schools that are showing leadership in this domain. TELG is now working closely with 11 school boards across the country to shape a new vision for school grounds as well as to provide support for much of the practical work of bringing that vision to life.

One of TELG's most recent projects has involved close cooperation with the Toronto Catholic District School Board to establish school ground design guidelines that will

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Source: Cam Collyer

Queen's Education Letter

Queen's Education Letter is a thematic bi-annual publication of the Education Alumni Steering Committee and Queen's Faculty of Education.

Subscription
Queen's Education Letter is currently offered free-of-charge in PDF format at www.educ.queensu.ca/alumni and will be delivered in bulk, free of charge, to select locations. The *Queen's Education Letter* is supported by annually pledged donations from alumni and friends as well as matching funds from the Office of the Dean of Education.
ISBN # 978155339147-0

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advise architects and landscape architects working on a series of new school additions. The guidelines will be partially informed by the green development standards (in draft form since 2006 with expected adoption in September 2009) that have been introduced by the City of Toronto. It is an encouraging to see a school board and the municipal government work together to promote and further green design in education.

If you are looking for tangible ideas for your local school ground, take a moment to conjure memories from some of the special places you remember from your own childhood. Often, this exercise will remind you of how small landscape features can become entire worlds and how seemingly modest pockets of nature can offer expansive palettes for play involving opportunity to manipulate and interact with elements in the natural environment (water, sand, leaves, sticks, mud…).

Our challenge today is recognizing that those few hours of unstructured, unsupervised play for which we make provision are scant for today's children. Increasingly, the role that school environments play in these experiences is critical. For inspiration and ideas relating to school ground greening, I encourage you to browse the site www.evergreen.ca.

Johnny Biosphere Environmental Education Fund

The Johnny Biosphere Environmental Education Fund was established in March 2008 by the family of Dr. John Vallentyne, who was a Queen's University professor, prominent research scientist, and lifelong environmental activist. In his persona of Johnny Biosphere, Dr Vallentyne appeared before thousands of school children, teachers and environmental groups all over the world. His message was simple and direct: What we do affects the Earth; what the Earth does affects us. The Johnny Biosphere Environmental Education Fund has been established in his memory to promote environmental awareness among children.

Teacher candidates (BEd students), graduate students, and faculty of Queen's University are eligible to apply for funding.
You are invited to visit this website: **http://educ.queensu.ca/bachelor/current/awards/Johnny_B.pdf** for complete information, including funding criteria.

Red Bark, Angela Costello, Artist

Fern Dance, Angela Costello, Artist

Correction
In the Spring/Summer 2008 Education Letter, Fern Dance, Angela Costello, Artist, and Red Bark, Angela Costello, Artist, was cut off and not represented in its entirety.

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