Editorial

Charting New Geographies in Environmental Education Research

The editors of *Volume 1* launched this journal with an aim to broaden ideas about what counts as legitimate research in environmental education. With that came a task of vigorously looking for unrepresented or underrepresented methodologies. A particularly exciting encounter occurred at an American Educational Research Association conference a number of years ago in a session about "fiction as research." And, why not? If research was really about "re-searching," or finding new ways to search out, engage with, and reflect upon, the world, art and literature are rich with illuminating possibilities. Rishma Dunlop, one of the presenters in that session, has since become a long-time friend of this journal—as an advisor, a reviewer, and contributor. During this time, conversations with Rishma have naturally evolved from fiction, to poetry, and to art as research. Environmental education has been a thread running through these conversations, and we have often talked about devoting a volume to art. We are happy to say that this is the year that these conversations become a reality.

Volume 13 has, in fact, become two issues. This issue, *13(1)*, includes three papers that will open up conversations about art in environmental education. Its companion issue, *13(2)*, is guest edited by Rishma Dunlop and takes form as an "ecopoetics reader" about "art, literature, and place." Necessarily, these issues must be more than just about art, they need to be art too. This is emphatically demonstrated on the covers of both issues. Portions of poetry by Rishma are united with artistic representations by her long-time collaborator, Suzanne Northcott, to evoke geographies of Naramata Road. And, this issue begins with Rishma's complete poem and a recounting of their collaborations. Rishma's more comprehensive editorial about "art, literature, and place" opens *Volume 13(2)*.

Volume 13(1) presents a diverse range of contributions that advocate and represent creative forms of expression, deep investigation of moral and ethical impulses, and critical consideration of the discourses and counter-narratives emerging from science and environmental education. It's clear from this collection that a variety of approaches are being taken to thinking about, and engaging with, environmental education. At the same time, a common thread tying the articles together is the authors' consideration of what might be needed for a more inclusive, democratic, and/or effective environmental education to flourish. From arts-based education to working with "messy" data in science classrooms to a revisiting of Leopold's land ethic, many ideas are proposed by the authors, providing directions to guide the field. We open with Heather Annis's environmental autobiography, a creative and bifurcated text where prose and theory share the pages. The left-hand pages tell a metaphorical story of a turtledove, an endangered bird known for its patterns of migration and ability to find "home." The turtledove's story mirrors Annis's own narrative, in which she traces significant childhood memories to tell a story of connection, separation, and reconnection with the land/scape. Her prose is complemented on the right-hand pages by words and teachings from Aboriginal and environmental educators from whom she has taken inspiration.

The theme of artistic representation continues in the second piece, Hilary Inwood's discussion of a sensory approach to environmental education that sits at the crossroads of art and place-based education. Inwood's model of *place-based art education* blends strengths from both disciplines: it enables learners to connect their minds with their hearts and hands through art education, and to foster community bonds and ecological literacy through place-based education. The examples she discusses of place-based art projects show how educators can enact this model in a variety of contexts, resulting in experiential, memorable, and "real-world" learning.

Laura Reinsborough furthers the discussion of the potential of fusing community and the arts with her critical reflections on *The Black Creek Storytelling Parade*, a community arts education initiative she co-developed. The project aimed to draw attention to the presence of Black Creek, an ecologically significant part of her campus. A need for decolonizing methodologies became clear to her when issues of accountability and ownership came up in the project—the creek, she began to realize, was a cultural divider between the privileged academic community and stigmatized and racialized nearby communities. She discusses the important lessons gained from working within a social justice framework and interrogating perspectives that reinforce colonial notions of art-making.

The authors of the next two articles consider the role of ethics in environmental education. Johan Öhman and Leif Östman ask: how do ethics and morals appear in educational practice? Employing a Wittgenstein-inspired approach and considering examples of relationships between humans and the natural environment, they examine how educators can approach moral reactions in education to avoid indoctrination and promote pluralism. As sustainable development increasingly becomes a framework through which environmental education is understood, they stress that a clarification of the ethical tendency in education is more important than ever.

The dominance of education for sustainability, often associated with land use and resource allocation, is discussed by Barry Kentish and Ian Robottom. They ask whether such an approach is at odds with an ethical appreciation of land, or what Aldo Leopold referred to as a "land ethic." Considering the varied relationships Australians have with their land—rooted in a colonial history where attempts were made to "tame" the land into an economically viable commodity—they suggest a central challenge for environmental educators today is to encourage a relationship *with* land that is ethically, as opposed to economically, oriented. A revitalization of Leopold's land ethic is particularly timely, they argue, in an age of education for sustainability.

The next three articles explore discourses governing science and environmental education, and ideas for resisting or reframing them. G. Michael Bowen and Valerie Rodger open this discussion, looking at how global warming is debated in online media forums. In particular, they consider the rhetorical strategies enacted by "persistent deniers"—individuals who argue against global warming existing and/or being anthropogenic in nature. As they discuss in their analysis, misunderstandings of global warming may hinge less on a lack of understanding of climatologists' claims, and more on a lack of an appropriate interpretive framework for making sense of knowledge held by the scientific community. Science education has a key role to play, they suggest, in helping students (and future citizens) understand how scientific knowledge develops.

Joan Chambers next considers the human/nature discourse presented in elementary science education texts. Her analysis of written and visual language in texts produced by the provincial government, a school district, and a non-governmental organization examines how human-nature relationships around forest ecosystems are portrayed in the curricular documents. As the perspectives presented contribute to shaping students' personal relationships with nature and environmental consciousness, her article draws attention to the need for an ongoing critical appraisal of school resources and interrogation of their underlying ideologies.

In the next article, Paul Kolenick explores the educational aims of those at a provincial power corporation entrusted with educating people about the environment and energy industry. His research shows how public environmental education in this context is often conceived as a one-way process of disseminating information, with the goal of giving the public an "educated" perspective that leads to consensus. An application of Foucault's understandings of discourse, power, and knowledge uncovers an alternative perspective toward environmental education—one that allows for a critical reflection to take shape.

The final article in Volume *13(1)* moves us toward the geography of utopianism. Heila Lotz-Sisitka draws on three illustrative research cases, involving youth in South Africa, to examine how we might productively engage with utopian ideals such as democracy, sustainability, and social justice. As these ideals are put forward in policy literature associated with the United Nations Decade of Education for Sustainable Development, she stresses the need for a reflexive examination of them in discourse and practice.

We are excited by the work presented in *Volume 13 (1)* and (2). It has been a pleasure to work with Rishma Dunlop, Suzanne Northcott, artists, authors, reviewers, and the exceptionally talented folks at Aasman Designs in Whitehorse to create these issues. We hope that the combined efforts will entice readers in to explore new geographies of research in environmental education.

Jan Oakley, Bob Jickling, & Connie Russell