

Exploring New Genres of Inquiry in Environmental Education Research

Constance L. Russell, Lakehead University & Paul Hart, University of Regina, Canada

We have a field rich with researchers from a variety of disciplines looking at questions in environmental education in diverse ways, yet academic journals in our field mostly contain reports on research that use standard quantitative and/or qualitative approaches. While there have been notable exceptions, an aspiring researcher could be tempted to gravitate in traditional directions. Our intent, however, was not to produce a simple “recipe book” for new researchers intrigued by emerging genres of inquiry. Indeed, the two of us are nervous about our field’s tendency towards prescription and thereby reification.

Instead, we wanted to compile a series of papers which offered insights into a wide variety of emerging genres of inquiry in environmental education and which could provide a foundation for discussion and debate about methodology and method. With increasing openness to new ways of thinking about what counts as legitimate within educational and social science inquiry, we felt it was important to provide a space for environmental educators to explicitly attend to the philosophical underpinnings of their research.

While it is unrealistic to expect comprehensive coverage of even the most significant research issues that have arisen as we learn how to embrace, critique, and play within multiple genres, we must begin somewhere. And we feel that this issue of the *Canadian Journal of Environmental Education* offers a fine beginning indeed. Each theme paper contributes in its own way to our thinking about how environmental education researchers approach, or hope to approach, their work. Offering more than descriptive background, we hope that each theme paper invites readers to think critically about some of the key premises not only of the respective genre being addressed, but also the ontological and epistemological assumptions of environmental education research generally. Indeed, explicit or implicit in each theme paper are a critique of the status quo in environmental education research and an illumination of possibilities. As well, some papers, notably those by Annette Gough and Hilary Whitehouse, Noel and Annette Gough, Anne Bell, Phillip Payne, and Liz Newbery, experiment with form, directly engaging with issues of (re)presentation.

Kicking off the theme papers, Alan Reid asks important questions about the ontological and epistemological assumptions in environmental education discourse influenced by both environmental research and educational research. Drawing on insights from poststructuralist and critical theories, he

is particularly interested in issues of interpretation and quality. Annette Gough and Hilary Whitehouse also interrogate assumptions, working at the intersection of feminist, poststructuralist, and ecological movements and theories. Incorporating personal narratives, they note the dearth of gender analysis in environmental education research and discuss the implications of binary thinking and practices, fragmented identities, and habits of language and discourse. On a quite different tack, Noel and Annette Gough, with the assistance of Peter and Sophia Appelbaum, Mary Aswell Doll, and Warren Sellers, invite us to Camp Wilde, an imaginative intellectual space wherein the heteronormativity of environmental education research becomes more apparent. Moving out of their own comfort zone, and likely that of some readers, they offer a performative piece which not only contains critique but also points to intriguing possibilities.

The next two theme papers tackle issues of racism and ethnocentrism in environmental education research. Kathy James critiques the exclusion of voices outside dominant culture. She describes how the types of questions we ask and the data collection techniques we use serve to silence particular voices, and she offers practical suggestions for bringing these voices more to the fore. Likewise, Julian Agyeman identifies the tendency within environmental education research to silence particular racial and ethnic groups. He advocates making culture explicit and central to the research process, pointing to the potential of ethnic modeling in qualitative research, culturing environmental education research, and community-based participatory research.

Interest in narrative inquiry has been growing in environmental education research and Anne Bell discusses the ways in which this genre influenced her own research on schoolyard restoration. She begins by clarifying key conceptual metaphors and goes on to describe the specific methods she used and their ontological and epistemological assumptions. She shares her struggle to find a way to disrupt her own monologue and to offer a more polyphonic report, thoughtfully reflecting on issues of interpretation, representation, and writing.

The next two papers explore participatory research. Ian Robottom and Lucie Sauvé reflect on their experiences with two research projects focused on teacher education and curriculum development. Describing their guiding principles, processes and outcomes, they identify key issues in participatory research which necessitate explicitly questioning whose research agenda is being served, the building of partnerships, participants' preconceptions about research, issues of rigor, and the colonizing desire to export prepackaged materials to other contexts. They conclude by noting the huge challenge facing participatory research given the technological rationality of most school-based and community-based environmental education programs. Chris Gayford discusses participatory approaches used with teachers of science education and education for sustainability. He asserts participatory research ought to focus on the development of knowledge and action useful

to the participants themselves, the facilitation of collaborative processes, and the creation of space for critical reflection. Through three examples, he identifies the typical participatory research process in which he has been involved, offers concrete tips, and identifies potential pitfalls and limitations of this approach.

The remaining three theme papers have particular philosophical bents. Janet Pivnick, inspired by ecophilosophy, asks what research could look like if it was grounded in an “ecological worldview.” Offering a description of her own attempts to play with that question as she worked with teachers and students engaged in similar explorations, she recounts how she found herself adopting a naturalist’s approach of attunement and attentiveness, noting the similarities of coming to know a place and a topic. Ali Sammel invites us to join her as she applies Gadamerian philosophy and hermeneutic phenomenology, with a feminist, poststructuralist twist, to her own research with five teachers attempting to practice critical environmental education. For her, what comes to the fore is the importance of lived experience, multiple interpretations, dialogue, and the co-creation of knowledge and meaning. Phillip Payne advocates for an approach he calls critical post-phenomenological inquiry. Noting the continued lack of emphasis on ontological considerations in environmental education research, he offers a number of intriguing examples which help us explore the various embodied relations of self and environment/nature.

In addition to the theme papers, we also have five general papers in this issue. Sandy Steen critiques the mechanistic structures and dynamics of schooling which constrain holistic and ecological possibilities, and recommends environmental educators engage more seriously with the deschooling movement. Liz Newbery, using insights from disability theories and feminist theories of the body and her own personal narratives of working as a canoe guide, outdoor educator, and university professor, questions meanings of self, ability, gender, and class produced during canoe trips. Tom Puk and Dustin Behm critique the removal of Environmental Science courses from the Ontario secondary school curriculum and the Ministry of Education’s attempt to infuse ecological concepts into other courses; their study demonstrates that this move has led, in the end, to less time spent teaching ecological concepts. Tarah Wright reports on the implementation (or lack thereof) of the Halifax Declaration which encouraged universities to take a leadership role in environmental education; she points to key constraints on its implementation and makes recommendations to help remedy the problem. Finally, Maria Daskolia and Evgenia Flogaitis offer a description of what teachers’ competence in environmental education might look like, based on a literature review and survey of Greek secondary school teachers.

As is to be expected, there are silences or, at best, muffled conversations in this issue. While hinted at in some of our theme papers, we have heard little about the possibilities and constraints of research methods influenced

by ideas from ecocriticism, autobiography, fiction, poetry, the arts, psychoanalysis, critical ethnography, anthropological poetics, First Nations thought, human/animal relations, ecotheology, environmental ethics, or “hybrid” or “post-paradigmatic” approaches, to name a few that come quickly to mind. There thus remains much to say (or to sing, dance, embody, co-create . . .). For now, we hope that readers of *Volume 8* will find these articles informative and stimulating in their continued efforts to become more knowledgeable about their own work and the work of others, and also find them useful in improving their own thought and practice within environmental education research.

Notes on Contributors

Connie Russell is Assistant Professor in the Faculty of Education at Lakehead University in Thunder Bay, Ontario and is interested in critical pedagogies and environmental education, human/animal relations, ecotourism, and academic/activist collaboration.

Paul Hart is a professor of science and environmental education at the University of Regina, and he has been a regular contributor to journals in these fields. His current research interests are in the areas of teacher thinking and practice in environmental education, children’s ideas about the environment, and in the relationship between theory and practice within environmental education research.