



Think Piece

Research in a Changing World: Normative questions and questions that matter

Bob Jickling, Lakehead University, Canada

Introduction

Happily this is a good time to reflect on research in environmental education. It is symbolically important, 30 years after the Tbilisi Declaration (UNESCO-UNEP, 1978). It is timely in leading up to two major world conferences, the 4th World Environmental Education Congress in Durban, South Africa, and the Tbilisi+30 Conference in Ahmadabad, India. And, importantly, it feels like a geopolitically opportune time to reflect on research directions in this field, as issues like climate change and socio-environmental justice shift from the periphery towards the centre of public interest.

Environmental education research has had periods of intense debate, and, to some extent, these have led to changes in direction – or, at least, widening of opportunities. To me, this has been a little reminiscent of Thomas Kuhn's (1970) reflections; when sufficient anomalies emerge, rapid change can occur. Deeply held assumptions are revealed, challenged, and replaced. In environmental education, the phenomenon isn't quite as tidy as this, and the story can be told in a number of ways. I don't think we can go as far as to say that old assumptions have been replaced. But, it does seem reasonable to trace the widening of research possibilities and some twists and shifts in research priorities.

The story developed in this paper draws on, what seem to me, to be three key clusters of ideas and events, presented as vignettes. They are chosen for their collective heuristic qualities. They celebrate some considerable successes in contesting once-dominant research traditions and reflecting on emergent methodologies in a context of transformation. They also point to what I think are urgent research priorities to engage in normative questions in environmental education. There are other ways to tell this research story; this is my interpretation of some of the many events of the past 30 years.

Contesting Paradigms¹ in Environmental Education Research

The title of this section takes its name from a research symposium held at the 1990 North American Association for Environmental Education Conference in San Antonio, Texas. During the period leading to this symposium, tensions had increased in the research community about the viability of much environmental education research, and what counted – or was counted – as research. An increasing number of researchers had been raising challenging questions (i.e., Robottom, 1987; 1993; Jickling, 1989; 1993; Gough, 1993; Hart, 1993; Wals, 1993a).

These questions were anomalies to ‘perceived wisdom’ at the time as reflected in, for example, the editorial policies of the *Journal of Environmental Education*. This perceived wisdom was summarised in the symposium proceedings by John Disinger (1993) who said, ‘Education is a behavioral science; as such, it is far behind the exact sciences in development of empirically demonstrable theories or in ability to exert control over observable events’ (p.22). Yet, as Arjen Wals (1993b) retorted, ‘What you can’t measure still exists’ (p.12).

In a systematic analysis of the situation, Ian Robottom (1993) argued that the positivist research most dominant in environmental education in 1990 was also strongly behaviourist. And, as an ideology of positivist environmental education research, ‘as expressed in the North American Association for Environmental Education’, behaviourism ‘prefigures our perceptions of the relationships between teachers, pupils, subject matters, and educational settings’ (p.134). For Robottom, an important step in broadening conceptions of research was to more critically reflect on the implications of adopting a behaviourist research orientation. First, he (and others) argued that the inherently deterministic nature of behaviouristic research is at odds with educational goals such as critical thinking. Second, it sustains a division of labour between researchers and practitioners. Third, it imposes the researchers’ environmental, educational and social values onto pupils in a way that is disempowering.

Robottom (1993) also argued that non-behaviourist research differs in its critical and self-conscious interest in explicating the interpretive categories of practitioners – or partners in the research. These include the aspirations, assumptions and values tacitly or consciously held by these research partners, and in terms of which their educational actions can be made intelligible.

There seem to have been a number of outcomes arising from this volatile, and sometimes painful, period in environmental education research. For many researchers, there was a greater critical awareness of methodological assumptions and their implications as reflected in dissertations and publications. There was a rapid increase in the number of available research journals, including *Environmental Education Research* (1995) and the *Canadian Journal of Environmental Education* (1996) in English, *Éducation Relative À L’Environnement – Regards, Recherches, Réflexions* (1998) in French, and *Tópicos en Educación Ambiental* (1999) in Spanish. Among them, the *Canadian Journal of Environmental Education* was explicit in its aim to broaden the conception of what counted as legitimate research in environmental education. There was also a notable book by Robottom and Hart (1993), *Research in Environmental Education: Engaging the Debate* that served to continue the conversations brought into focus at the 1990 symposium. Behind all of this, I think it is fair to say, was a need to find ways for researchers to pursue questions that mattered. This has been made difficult, methodologically, by a privileging of behaviourist research.

Research Design in Contexts of Transformation

The next time period I find interesting is roughly framed by the late 1990s and early 2000s. Widening the scope for research (and continuing to do so in ongoing ways) was an important step. But, some methodologies were ‘out of the blocks’ a little faster than others, and with

good reason. They were very appealing in contexts of transformation such as South Africa. In particular, participatory action research provided a powerful counterpoint to the previously dominant (and still significant) positivist discourse. So powerful was this new narrative that I attended a PhD thesis proposal presentation in South Africa in 1999 that accepted it as a given – ‘of course I will be doing participatory action research’.

Heila Lotz-Sisitka (2002) has reflected on her own experiences during this period in South Africa. Her story begins as a PhD student in the early 1990s, just following the intense contestation described above and during the immediate proliferation of what she described as the “‘then powerful” international environmental education research paradigmatic frameworks’ (p.110), or ‘alternative paradigms’ (Mrazek, 1993; Robottom & Hart, 1993). She goes on to suggest that during this period these framings were often presented by research advisors as options to guide methodological choices.

For Lotz-Sisitka (2002) this was a time in South Africa where critical intellectual traditions won the space to argue for redress and social transformation and when participatory action research was viewed as transformative, emancipatory, and socially critical. Accordingly, she describes making decisions influenced by the ‘critical paradigm in environmental education research’ (p.110), and the power of this research paradigm within the academy. She also looks back to her thesis work of 1996 and reports that for the purposes of her study ‘a comparison or argumentation of these paradigms was not deemed necessary. A decision was made to *contextualise the choice to work within a socially critical framework, and to justify this choice*’ (p.111). In this wonderfully candid reflection, Lotz-Sisitka describes the all too common phenomenon of making research decisions first and justifying and contextualising them later.

Throughout this process, however, she was clearly concerned about imposing a large-scale, manufactured-elsewhere, framework on her research design (Lotz-Sisitka, 2002). Through the balance of this extraordinarily insightful paper, Lotz-Sisitka describes her ongoing reflections throughout the research process, and subsequently as a research advisor. She traces her dissonance with her chosen research process, and questions its transformative value. She also describes shifts in her research orientation during later stages of her study as she responded to her own questions. I recommend reading the paper in its entirety.

In my interpretation of this paper, I see some key points – maybe even lessons – that may help to inform research in our evolving field of environmental education. First, this story describes the power that the academy can bestow on favoured practices. Earlier, I described influences of a behaviourist research orientation. And now, this story describes the immediate (and in many ways important) response to a crack in the grip of this research orientation. While other research frameworks found new space to develop, participatory action research became a particularly powerful (and in many ways welcome) counterpoint to behaviourism. This story can also alert researchers to how easy it may be to succumb to trends, especially when methodologies are chosen first and justified later.

Encouragingly, Lotz-Sisitka (2002) describes growing breadth in methodological decisions within her own university’s programme. She reports a continued interest in participatory action research, but also in interpretive processes to reveal insights into educational processes and practices; post-structural inquiries that hope to reveal silences, textures, and insights

of indigenous knowledge in/as environmental education processes; and, examinations of epistemological tensions inherent in contextual practice. More recently, Lucie Sauvé (2005) describes a tentative framework of 15 extant currents in environmental education research. It seems to me that an early goal of broadening what counts as research in environmental education research has achieved some success.

The second important point that I take from the Lotz-Sisitka (2002) paper is her shift in emphasis from methodological choice to research decisions. By this she means that environmental education researchers have the task of developing contextually relevant research frames. As supervisors, their task may include reflexive and contextual co-construction of research frames. At the same time, she suggests they have a second responsibility to make sure that these frames are not adopted on an industrial scale, that is, as new paradigms to replace old, or Western, ones. Making research decisions means that methodologies grow out of contextual realities and burning questions. The horse is returned to its place in front of the cart.

Finally, Lotz-Sisitka (2002) offers additional thoughts that are, I think, harbingers of emerging themes that may develop into another important story in environmental education research. Drawing on work from Gough and Popkewitz, she reminds us that educational inquiry needs to move beyond reflection and reflexivity towards actually making a difference in the world – towards liberating the consciousness of people considering their human conditions within their environmental and social contexts.

In 1990 it seemed impossible, to me at least, to address many important questions when research respectability was defined so narrowly. Since then, there has been much methodological liberation. I hope this continues. But, I wonder if environmental education research also will need to engage more fully with normative questions to realise its potential to make a difference.

Some Thoughts on Normative Questions

It is getting hot here on Earth. Forget images of tomatoes and cucumbers being nurtured in cosy greenhouses, things are really heating up (Lake, 2001). Climates are changing. While there is never absolute certainty in science, there is plenty of evidence to suggest that individuals, communities, nations and international organisations should be responding to this issue, as a measure of precaution and as a normative issue of justice – for current and future generations. Many are, but not enough. Recent mainstream media sources such as Al Gore's film *An Inconvenient Truth* identify this as a moral issue. Put another way, the venerable Norwegian Philosopher Arne Næss has said that we have more than enough science to know what to do (Næss & Jickling, 2000). The same can be said of many, if not all, environmental issues.

I agree that responding to environmental issues is necessarily a normative affair involving moral concern and hence environmental ethics.² In a context of heightened awareness and concern for environmental issues in Northern and Southern contexts [and the hybrid spaces in-between], I suggest that it is timely for mainstream inclusion of environmental ethics in education and educational research. However, education is itself a normative idea, and formulating an educational response to environmental ethics necessarily links these two concepts.

Education

The Earth Charter (Earth Charter Commission, 2000) provides one response to contemporary environmental concerns. David Gruenewald (2004) suggests that it provides a vision that ‘can serve as a challenge to all educators, environmental or otherwise, to reexamine the purpose, context, and scope of their work’ (p.95). However, educational responses to the Earth Charter are also contested (Corcoran, 2003; van Harmelen, 2003); I recall one southern African scholar responding to a presentation on the Charter with the suggestion that it sounded like another ‘salvation narrative’. I find this example particularly interesting in that it seems to ask for understanding of both ‘education’ and ‘ethics’.

Despite postmodern concerns about attempting to clarify conceptual understanding of normative terms (Hart, Jickling & Kool, 1999; Le Grange, 2004), the Earth Charter dissonance seems to invite such conceptual work. And, there are no political vacuums. A relative absence of dialogue about ‘education’, leaves the terrain open to other concepts. For example, Le Grange (2004) suggests that the rise of the language of learning now enables the re-description of the process of education in terms more like that of an economic transaction – with the learner as consumer and the educational institute as provider. Alternatively, he suggests, the language of education opens more space for complex understandings of the nature of environmental issues and for recognising that ‘environmental knowledge is produced in interdependent and interactive relationships between teachers and learners who engage critically with information, issues, and problems often resulting in unintended outcomes’ (p.139). His appeal to environmental educators is to re-engage with the language of education. Whether the Earth Charter provides a challenging vision or a salvation narrative for environmental educators will be dependent on individual and collective interpretations of education, and how the Charter is presented in educational contexts. That is, will it be presented as a transaction or as a complex phenomenon with uncertain and unintended outcomes?

It has long been acknowledged that education (and environmental education) is an essentially contested concept that has developed and changed over time and that suggests a fluidity of meaning that shifts across a range of contexts (Peters, 1973; Williams, 1976; Walsh, 1993; Jickling, 1997; Hart *et al.*, 1999; Gruenewald, 2004). There is a sense, in which the concept of education has been continually re-created, to work with an idea from Deleuze and Guattari (1994). And this may be a good time to re-invigorate that process. Before going on with this work, I will provide my own reading of possible relationships between analytic traditions (of many educational philosophers) and Deleuze and Guattari’s meta-philosophy.

I think it is unfortunate that Deleuze and Guattari’s (1994) description of philosophy as ‘the discipline that involves creating concepts’ (p.5) has been contrasted with work of many analytic and linguistic philosophers who have been described as more concerned with the clarification of concepts (Peters, 2004). While there can be multiple readings of this sentiment, at least one of these could be an ‘othering’ of the analytic traditions. At the least, it doesn’t seem very rhizomatic. However, my own reading of Deleuze and Guattari suggests much more resonance with conceptual analysis (i.e., Wilson, 1963) than this contrast encourages, while at the same time, enabling expansive possibilities.

To begin, Deleuze and Guattari (1994) seem, in their wonderfully enigmatic way, to use the term 'create' in a number of ways. In the first and perhaps most literal sense, this involves the creation of previously unspoken concepts; 'Plato said that Ideas must be contemplated, but first of all he had to create the concept of Idea' (p.6). As they point out, philosophers have always done this. An example from contemporary environmental thinking is David Abram's (1996) term 'more-than-human', created in response to anthropocentric tendencies in the term 'non-human'.

In a second sense, Deleuze and Guattari (1994) speak about concepts remaining 'subject to constraints of renewal, replacement, and mutation that give philosophy a history as well as a turbulent geography' (p.8). In my reading, this strikes me as a welcome (and resonant) historical and geopolitical expansion of Wilson's (1963) methodology of testing an analysis against new information and hard cases. And, it is akin to what Le Grange (2004) is doing when he introduces, in the context of contemporary South African education, 'risk' together with 'unintended outcomes' as important components of education. Making this case, as he has, can be seen as an act of renewal (particularly when juxtaposed against possible replacement with the language of learning) and an act of creation.

In another sense of creation, Deleuze and Guattari (1994) talk about constructivism; 'Constructivism requires every creation to be a construction on a plane that gives it autonomous existence' (p.7). And, they say, 'you will know nothing through concepts unless you first create them – that is, constructed them in an intuition specific to them: a field, a plane, and a ground that must not be confused with them but that shelters their seeds and the personae who cultivate them' (p.7). They warn that philosophers have not been sufficiently concerned with the nature of the concept, preferring to think of it as a given. But, for Deleuze and Guattari, concept and creation are related; a concept is something that is to be created. This, I read, implies ongoing engagement, analysis, and creation of concepts as requisites to knowing through them.

Returning to Le Grange's (2004) example, I read his creation (analysis, or re-creation) of education, inclusive of 'risk' and 'unintended outcomes', as the kind of work that can help environmental educators engage with normative issues, and employ devices such as the Earth Charter, in ways that enable them to re-examine the purpose, context and scope of their work. It is also the kind of work that challenges environmental educators to make creation of central concepts a vital part of the philosophical reality of their field.

Ethics: Beyond the radical reduction of normative questions to relations of power

Critical theory remains a powerful influence in environmental education, so it is welcome to find concerns about normative issues being raised from *within* this body of literature. I read these like anomalies. For example, in commenting on poststructuralism, Delanty (1999) is of the view that 'this movement is now at an end, having largely accomplished its objective – the relativisation of identity and knowledge and the demonstration of the limits of the intellectual categories of the nineteenth century.' He adds that for the 21st century, 'it is no longer a question of attacking false universalisms but of overcoming relativism and the fragmentation of the social' (p.3).

Sayer (2000) argues that, 'The massive imbalance between sophistication of positive social science and the poverty, at least outside political theory, of normative thinking is intolerable ...' (p.186). A key problem for Sayer comes from Nietzschean poststructuralism that reduces problems of justice and morality to simple problems of interest. He argues:

Such a radical reduction is not sustainable: those who sneer at values and morality get as upset as anyone else when someone treats them improperly. Moral discourse is indeed sometimes little more than a camouflage or legitimization of power, often hypocritical; but again, a bad use of such discourse need not drive out a good use. (p.177)

For Sayer, considering ethical issues – concerning the nature of good and how people should treat one another – is essential to the examination of social sciences' critical standpoints and implicit normative stances.

Delanty (1999) does offer a way forward through the work of Bauman (1993) who brings a normative or moral approach to postmodernism. A key point for Delanty is that Bauman's work, rooted in a moral sensibility named an 'ethics of proximity', does not require universality, and does accept that we live in a world of uncertainty. Alternatively, Sayer (2000) looks to what he terms the 'newer feminist and green or environmentalist critical social sciences' where he perceives 'less of a gulf between the normative and the positive' (p.173).

Sayer's point is well taken, and provides a reminder that work on normative dimensions of environmental issues, or ethics, is proceeding in parallel on many fronts. For example, as Bauman (1993) was theorising about postmodern ethics in Europe, Cheney (1989) was working on a similar project, 'Postmodern environmental ethics: Ethics as bioregional narrative', within the context of North American environmental ethics. Likewise, scholars such as Warren (1990) and Plumwood (1991) were developing ecofeminist thinking around similar issues. In South Africa, Hattingh (1999) was also seeking 'creativity in the diversity of environmental ethics'.

Creativity has often been a feature in Weston's (1992) work around 'enabling environmental practice'. And Cheney and Weston's (1999) 'ethics-based epistemology' provides another potentially productive point of engagement. Dunlop (2002) brings an artistic and poetic dimension to normative inquiry. And, Noddings's (1992, 2002) 'ethics of care' has also provided inspiration for ethics research in environmental education (i.e., Mortari, 2004).

This brief appraisal of the changing thinking around normative issues, particularly in the fields of ethics and environmental ethics, is neither exhaustive nor free of my own geopolitical biases. Its aim is to be generative while, at the same time, demonstrating a growing and productive diversity of approaches.

A Few More Thoughts ...

Critical theory remains a powerful and useful influence in environmental education. But, as Sayer (2000) points out, critical social scientists have been, at best, coy about talking about values. Yet, early in the 21st century normative questions are important, especially in the context of

urgent socio-environmental issues such as global climate change and growing inequity between geopolitical regions of the world. And, these are questions that matter.

I suggest that making progress in normative dimensions of environmental education will be aided by some congruency in thinking about both education and ethics, and particularly environmental ethics. How educators approach ethics will be shaped by how they conceptualise, or create for themselves, the concept of education and *vice versa*; they are in relationship.

If Lotz-Sisitka's (2002) reflections offer lessons from the past, they might include predilections for contextually developed approaches to normative questions in environmental education and research decisions that are responsive and diverse – and possibly outside of, and/or broadening of the influential critical theory discourse (see Jickling, 2005; Lotz-Sisitka & Schudel, 2007). Indeed, Sayer (2000) points researchers towards fertile ground in environmental ethics, eco-feminism, and associated fields of inquiry. I anticipate such diversity to be generative within environmental education, especially if we tell our stories with the kind of clarity that enables reflection and resonance across bodies of literature and practice.³ And, I expect this may be one route towards questions that matter.

Notes on the Contributor

Bob Jickling is an associate professor in the Faculty of Education at Lakehead University, Canada. His recent work includes 'Ethics research in environmental education' published in Volume 22 of this journal and, with Heila Lotz-Sisitka, Rob O'Donoghue and Akpezi Ogbuigwe, *Environmental Education, Ethics, and Action: A Workbook to Get Started* published by UNEP in 2006. Email: bob.jickling@lakeheadu.ca.

Endnotes

- 1 There was some discussion about whether 'paradigm' was the correct word. Some readers of Kuhn thought not, while others believed that this could usefully be used synonymously with 'pattern, example, or model' (Disinger, 1993; Jickling, 1993). I have chosen to use 'paradigm' only where it was used by other researchers to avoid the possibility of overstating the nature of shifts and changes in environmental education.
- 2 Here I use environmental ethics in a broad way that is inclusive, for me at least, of environmental philosophy and environmental thought.
- 3 Some readers may liken this to rhizomatic thinking.

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