

## Nourishing Ourselves with/in Environmental Education

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Here's some food for thought: an amalgamated academic database reveals that between 2000 and the time of this publication, 169 peer-reviewed journal articles were published with the terms "food" and "environmental education" as indexed subject terms. Compare that to the two decades prior, from 1980-1999, when only 16 articles were published that met that same criteria, and it becomes evident that research interest in the linkages between food and environmental education is growing, and fast. These numbers alone give us something to, ahem, chew on – and several of the authors of this special issue, entitled "Environmental Education Bites," are contributing to a nourishing conversation about food as a pedagogical and environmental act.

We all play a part in food politics through the daily act of eating, and the educational possibilities emerging from this seem endless. We might start with an acknowledgement that food is a basic human right (United Nations General Assembly, 1948) and a fundamental requirement for life: it is, quite literally, part of who we are. Regardless of what is on our plates, food connects us profoundly to the natural world, because *all* food (however processed it may be) originates with plants, animals, or fungi (Pollan, 2006). So whether we are vegetarian, vegan, flexitarian, or omnivore, what we eat links us to the broader environment, along with the environmental issues associated with food production such as carbon emissions and climate change (Cassuto, 2010; Garnett, 2009). We are, of course, also connected to *each other* in the act of eating: as gardeners, farmers, foragers, hunters, producers, distributors, consumers or any combination thereof, we are all part of a web that links elements of the social, political, cultural, economic, and environmental. Clearly, there is much to consider in terms of food and environmental education.

This issue begins with an exploration of the social aspects of food. What do our dietary choices – what we choose to eat and what we refrain from eating – reveal about ourselves, our politics, our communities, our class affiliations, and our cultures, races, genders, and ethnicities? Far from a neutral act, what we eat can tell a story of who we are, and because of this, environmental educators must be careful not to proselytize or diminish identities in discussing sustainable food choices. This comes through in Sarah Stapleton's "**Food, Identity, and Environmental Education**," as she considers how eating can be an identity-laden practice. She explores this through a phenomenological autobiographical account of eating her family's traditional food – Eastern Carolina barbeque – and wrestling with the knowledge of consuming meat from factory-raised animals, knowing the deleterious environmental effects of this

industry including its enormous water footprint. Yet part of her identity involves maintaining connection to family; as she writes, “choosing to continue to eat a highly identity-salient food despite the contradiction that it held for me ethically indicates that being a part of my family is at least as important to me as my environmental concerns.”

Consuming the traditional foods of one’s culture is a way of staying connected to community and place. For diasporic individuals, it may also be a bridge between life “back home” and life in a new country or region. Stapleton explores this, as do Dilafruz Williams and Jennifer Anderson in their contribution: **“Tongue-Tied No More: Diversity Pedagogy and Sense of Place in the Learning Gardens.”** Their study captured the experiences of sixth-grade English Language Learners who participated in school gardening practices that helped them “cross the language barrier” and gain comfort and practice speaking English, while growing vegetables familiar to their culture and taste buds. The educational power of school gardening has been a topic of several articles published previously in this journal (see for example Breunig, 2013; Cutter-Mackenzie, 2009; Dymont & Reid, 2005); this paper adds to the conversation as the authors note the numerous benefits of school-based gardens, including “academic learning; community and parental involvement; environmental empathy and stewardship; food literacy and healthy eating habits; motivation and engagement; personal, social, and/or moral development; play and physical activity; and school bonding.”

Gardening can also help to foster resiliency: an essential characteristic in a world where we are faced with ongoing environmental crises attributed to climate change, including food shortages. In **“Community and School Gardens as Spaces for Learning Social Resilience,”** Kimberley Reis and Jo-Anne Ferreira ask whether gardens can build resilience to potential food shortages among youth. Their study, focused on the Australian context, examined the value of gardening in providing access to food and building the important skills of adaptation and social resilience. Empowerment through participating in gardening, they argue, helps build self-esteem and self-organization, while improving food literacy and making a contribution to community.

Participating in food production by growing and eating local foods has the added benefit of cutting down on “food miles.” Given that food transport is one of the fastest-growing sources of carbon emissions – the number of miles that food travels to market has been steadily increasing over the past five decades, along with the resulting pollution from this transport (Kissinger, 2012; NRDC, 2007) – a reduction in greenhouse gases can be achieved, in part, through the practice of “eating local” (among other consumer choices; importantly, such as eating less meat) (D’Silva & Webster, 2010). While the “locavore” diet is not a panacea (Stănescu, 2010), or even a practical possibility for everyone, efforts toward acquiring food from one’s region can be both environmental and, as various articles in this issue demonstrate, educational in nature. Yet the challenges that educators face in bringing this to fruition need to also be

addressed. For example, are spaces available to facilitate community gardening or local food production? What barriers exist, and what supports are needed?

Eugenia Iskos and Stella Karakosta identify some of these challenges in their article, **“Not Just a Walk in the Park: Case Study of a Greek Preschool Located on an Educational Farm.”** The authors present a case study in which preschool teachers in Greece had access to an enviable range of food-production facilities on their school grounds, including greenhouses, gardens, vineyards, olive groves, a dairy operation, barns, fields, and woods. Despite this, their ability to enact a flourishing environmental education curriculum was hampered by factors including their own limited training, narrow and scientific-oriented conceptions of environmental education, and a lack of time and space allocated in the curriculum. Over the three-year study, however, the teachers (and school as a whole) undertook a significant learning journey. Gradually, they implemented a curriculum that worked in tandem with the natural environment, giving their young students opportunities to develop personal relationships with nature and interact with the plants, animals, and operations of the educational farm.

Foraging, another way of procuring food in the natural environs, may be an under-represented area of study in environmental education. Clare Nugent and Simon Beames report on foraging in forest-based classrooms in Finland and Scotland in their article, **“Cultural Transmission at Nature Kindergartens: Foraging as a Key Ingredient.”** They demonstrate how children’s foraging practices, under the guidance of “conduit” adults, provide a means for culture (and nature) to be passed on to the next generation. Drawing on Bourdieu’s (1977) concept of *habitus*, Nugent and Beames consider how practices, skills, and dispositions are shared as children hunt for, gather, and eat the foods they find. The two sites of their study demonstrate key differences in cultural relationships toward foraging, including, for example, the perceived level of risk. They suggest that while foraging remains a peripheral part of environmental education, educators should not overlook the potential of the practice for disseminating cultural knowledge and ritual, and learning the natural history of one’s place.

From these five articles it is evident that topics surrounding food and environmental education are diverse, multiple, intersecting and rhizomatic (Deleuze & Guattari, 1987). While the first half of this journal relates specifically to the theme of food, the latter half branches in other directions, addressing alternative frameworks to anthropocentrism and ideas for educational practice.

## Rethinking Anthropocentrism

The next three papers speak to the importance of challenging anthropocentric humanism, or the privileging of the human figure, in environmental education. Within academic contexts we have seen a broad turn in the past decades toward the “animal question,” defined by Cavalieri (2001) as the moment that has

arisen as a result of “more than 20 centuries of philosophical tradition aiming at excluding from the ethical domain members of species other than our own” (p. 3). It is not surprising that environmental educators, too, are grappling with the animal question and the notion of respecting the radical “otherness” of nonhuman nature (see for example the 2011 issue of this journal, with its theme of “Animality and Environmental Education.”) The ongoing commitment in the field to challenge human domination over the Earth, and replace humanistic paradigms with ecological, interspecies ones, is evident in the papers in this section.

Blending disability studies and ecofeminist perspectives, Teresa Lloro-Bidart’s article, “**Culture as Ability: Organizing Enabling Educational Spaces for Humans and Animals,**” discusses pedagogical moments inspired by her meeting, and temporarily giving care to Whiskey, a kitten with *hypoplasia* (a severe twisting of soft bones, evident in three of the kitten’s legs). After initially characterizing Whiskey as having a “disability,” Lloro-Bidart went on to consider the production of disability and how it “counts,” and has consequences, in cultural and educational spaces. Considering how the nonhuman world is already framed in educational curricula as a resource to be sustainably managed, she turns to ecofeminism and disability studies to challenge ableist and speciesist paradigms. She writes that her journey with Whiskey “served as a dialogical moment of praxis as I worked to understand [his] embodied experiences in the world as ‘beyond suffering’ ... and reflect on the ways in which the educational spaces I inhabit reproduce problematic dualisms [e.g., of human/animal and able-bodied/disabled].”

In the article that follows, Helen Kopnina and Mickey Gjerris consider how nonhuman animals are erased in hegemonic thought, as “the dominant ideologies of neoliberal industrial capitalism seem to have succeeded in propagating the illusion that humans are superior to other species.” Considering perspectives that challenge anthropocentrism and deepen respect for the more-than-human world, their contribution is entitled “**Are Some Animals More Equal than Others? Animal Rights and Deep Ecology in Environmental Education.**” They suggest the ethical discourses of animal rights and deep ecology have much to offer environmental education practice, but what is also needed is a means of “giving voice” to nonhuman beings to include them in the moral community. Who will speak for nature?, they ask – and then proceed, drawing on O’Neill (2006), to outline an intriguing concept of a pluralistic conversation in which human eco-advocates serve as animal or plant “voices” in decision-making processes.

The third article in this section engages the work of influential authors Paulo Freire and Hans-Georg Gadamer to consider how their ideas can work together to influence the field toward an ecological paradigm that is less anthropocentric. Valéria Ghislotti Iared, Ariane Di Tullio, Phillip G. Payne, and Haydée Torres de Oliveira begin by considering the deep diversity and complexity of varying

interpretations, representations, and perspectives in environmental education, then aim to (re)interpret the field in the context of Brazil and its histories of colonization. Their article, **“Philosophical Hermeneutics and Critical Pedagogy in Environmental Education Research and Practice”** outlines the two main political currents of environmental education in Brazil: the conservative and the critical. Gadamer’s contributions to philosophical hermeneutics, they argue, broaden the concept of interpretation “beyond the search for the meaning of words, and into the question of understanding in itself,” while Freire’s devotion to dialogue offers a route toward overcoming hegemonic rationalities to produce an awareness of an ecocentric world-in-relation.

### Putting it into Practice: In-Depth Learning and Climate Change Pedagogy

The final two articles in this journal offer reflections on practice, considering both pedagogical content and approach. We see in this section a call for a “slowing down” and a “catching up” in terms of taking on critical environmental issues through pedagogies that are experiential, engaging, and effective.

In **“Supporting Ecological Understanding through In-Depth and Imaginative Study of a Place-Based Topic or Issue,”** Gillian Judson explores the value of in-depth study to cultivate environmental thoughtfulness and ecological understanding. Pressure to “get through” dense curricula can leave teachers with little time to dwell deeply on topics, and students’ ability to learn holistically and to forge emotional connections to the content suffers. She draws on the “Learning in-Depth/Imaginative Ecological Education Model” in response, which sees students working independently on the creative study of a topic throughout their *entire* school career. She writes that “through in-depth study, students experience a slower pace and are afforded the opportunity to develop thinking skills (analytical, critical, based on depth of knowledge) and a particular kind of “mindset” (environmental thoughtfulness) necessary to address ecological issues.”

The final article addresses the pedagogy of what is arguably the most pressing issue of our time: climate change. In **“‘Roll Up Your Sleeves and Get At It!’ Climate Change Education in Teacher Education,”** authors Paul Berger, Natalie Gerum, and Martha Moon discuss their research on the elective course *Climate Change Pedagogy*, taught in the Bachelor of Education program at Lakehead University. Noting that the inclusion of this topic in teacher education programs is still in its infancy, they share successful and challenging aspects of teaching about climate change, along with descriptions of specific pedagogical strategies used and student responses to them. Teaching this subject matter is challenging, they explain, because of the prominence of neoliberal ideologies of individualism and consumerism; the efforts of climate change-denying industries; and students’ emotional responses (such as feeling overwhelmed, uninformed, or powerless to make a difference). Having an open, welcoming

environment, and making explicit the deep relevance of the subject matter to future teachers, are discussed as strategies to help counter these challenges.

To wrap up the editorial for this year's volume, we want to take a moment to thank a number of outgoing and incoming members of the *CJEE* team. First, Lisa Korteweg is stepping down from her role as Associate Editor to instead serve as one of our Advisory Editors; she has contributed much to the journal, most notably in her role as the guest editor of Volume 17 that was devoted to theme of decolonizing and Indigenizing environmental education. We are tickled to welcome four new Associate Editors: Gregory Lowan-Trudeau, Pat Maher, Blair Niblett, and Emily Root. They each bring a wealth of knowledge and experience with them and we are very much looking forward to their future contributions. This is also a year of substantial turnover in the Advisory Editor ranks. The following individuals are leaving us after years of service to the journal for which we are exceedingly grateful: Andrew Brookes, Anne Camozzi, Darlene Clover, Victor Elderton, Grant Gardner, Edgar Gonzalez-Gaudiano, Budd Hall, David Hutchison, David Kirby, Richard Kool, Henry Lickers, Pat O'Riley, Ian Robottom, Joe Sheridan, Scott Slocombe, and Sandra Wolf. In their stead, we welcome five new Advisory Editors to the team: Mary Breunig, Jo-Anne Ferreira, Teresa Lloro-Bidart, Sarah Pashagumskum, and Joshua Russell. Each have been providing exemplary service to the journal as occasional reviewers and we are very pleased that they have agreed to become even more involved with *CJEE*. We also want to thank the authors who contributed to this issue, all the reviewers of this volume, M.J. Ankenman for allowing us to use the photographs on the cover, Rusty Brown for his fabulous work in design and layout, Diana Mason for her administrative assistance, and Lakehead University for its financial and logistical support.

Now onto the main course! The articles throughout this issue present diverse ideas that serve as critical food for thought – and for action! – in the environmental education field. We invite you to dig in, and take a bite!

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