Editorial

Engaging the Emotional Dimensions of Environmental Education

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Fear. Guilt. Shame. Anger. Disgust. Frustration. Despair. Apathy. Desire. Compassion. Empathy. Wonder. Joy. Love. Hope. When we wrote the original call for papers for this volume of *CJEE*, we could imagine how each of these might influence environmental education, and we could add many other words to that list. Environmental educators have long known that knowledge alone is insufficient for cultivating flourishing natural and human communities; indeed, many of us seem very well aware of environmental problems yet continue to engage in destructive practices, as noted some time ago by Kollmuss and Agyeman (2002) who urged environmental education researchers to "mind the gap." For some, particularly those with little grounding in research, fostering love of "nature" is touted as a magical panacea for environmental woes; for critics, however, even those who advocate fiercely for pedagogical engagement with the more-than-human world (Fawcett, 2013), the linear model of nature experience leading automatically to caring then to commitment and then to action is far too simplistic (Russell, 1999; see also Fraser & Brandt, 2013). Clearly, we need more nuanced understandings of the emotional dimensions of environmental education.

Yet, as Kool and Kelsey (2006) reported 10 years ago, limited attention had been paid at that time to those emotional dimensions (see also Reis & Roth, 2009). Work in the field prior to 2000 included that of Sobel (1996) who worried about the traumatizing impact of sharing environmental horrors with young children and coined the now oft-repeated idea of "no tragedies before grade four," Selby (1995) who wrote about extending empathy beyond the human in his work in humane education, Chawla (1998) who discussed empathy in relation to research on "significant life experiences," Thomashow (1996) who explored the emotional dimensions of ecological identity work, C. Russell and Bell (1996) who discussed the pedagogical possibilities of a "politicized ethic of care," and Hicks (1998) who focused on hope.

Since 2000, engagement with emotional dimensions increased somewhat, at least in certain pockets of the field, most notably in work by feminist scholars and by those interested in our relationship with other animals or in climate change education. For example, a fascinating line of inquiry has opened up around loss and grief. In their discussion of the emotional lives of environmental educators, Fraser and Brandt (2013) write about the "the emotional anguish of working in what seems to be hopeless conditions of increasing environmental degradation" (p. 137) and reflect on the implications of solastalgia, "the

depression that results when witnessing rapid and destructive environmental change" (p. 137). Such feelings can lead to stress, cumulative grief, compassion fatigue, and burnout (Bai, 2009; Kelsey & Amstrong, 2012; Fraser & Brandt, 2013), which has led Lloro-Bidart and Semenko (2017) to suggest that a "feminist ethic of self-care for environmental educators" (p. 18) needs to be developed. In general, it is feminist scholars in the field who have been leading the way in investigating ethics and pedagogies of care in our field (e.g., Fawcett, 2000; Goralnik, Dobson, & Nelson, 2014; Lloro-Bidart & Semenko, 2017; McKenzie & Blenkinsop, 2006; Piersol & Timmerman, 2017; Russell & Bell, 1996; Schindel & Tolbert, 2017).

Another take on grief and loss comes from those exploring the educational implications of our various relationships with other animals. MacPherson (2011), Martucewicz (2014), Lloro-Bidart (2015), and J. Russell (2016, 2017) have each explored the impacts of witnessing animal suffering and death, ruminating on what can be learned from those experiences and the implications for the field. Fawcett and Dickinson (2013) discuss death more generally, wondering if many of us reject our "creatureliness" as an act of distancing ourselves from our own mortality. Those working on "common world pedagogies" (e.g., Atkinson, 2015; Nxumalo & Pacini-Ketchabaw, 2017; Pacini-Ketchabaw & Nxumalo, 2015; Taylor & Pacini-Ketchabaw, 2015) argue that it is indeed vital that we come to grips with the mutual vulnerabilities we humans, other animals, plants, and all members of the more-than-human world face in this moment in time. As Haraway (2016) suggests, "Grief is a path to understanding entangled shared living and dying; human beings must grieve *with*, because we are in and of this fabric of undoing" (p. 39).

Others worry about the implications of "doom and gloom" and crisis discourse in the field (Kelsey & Armstrong, 2012; Russell, Cameron, Socha, & McNinch, 2013). This seems to be particularly so for those who have delved into the emotional dimensions of climate change education (e.g., Hufnagel, 2015; Kelsey & Armstrong, 2012; Ojala, 2012, 2013, 2015; Quigley, 2016; Siperstein, 2015), reflecting the surge in interest in the emotional responses to climate change generally (e.g., Norgaard, 2001). Certainly, discussions of loss and grief are decidedly not light fare and may reflect a "reluctant embrace" of "dark ecology," which Ginn, Beisel, and Barua (2014) argue is "a necessary corrective to an environmentalism too often caught between suppressing its apocalyptic despondency on the one hand and embracing a techno-managerialist optimism on the other" (p. 117).

What other "dark matters" (Blenkinsop, Fettes, & Kentel, 2014) have we been reluctant to touch in our field? Despite a broader "affective turn" in the social sciences and humanities that come out of diverse theoretical traditions and depart in various directions (e.g., Ahmed, 2015; Boler, 1999; Clough, 2007; Gregg & Seigworth, 2010; Zembylas, 2016), thus far there has been relatively limited engagement with much of this scholarship beyond some writing on, for example, pedagogies of discomfort, intersubjective learning, and abjection (e.g.,

Fraser & Brandt, 2013; McKenzie, 2009; McKenzie, Russell, Fawcett, & Timmerman, 2010; Newbery, 2003, 2012; Russell & Semenko, 2016). Interestingly, the challenges of embracing difficult knowledge may best be exemplified in work that focuses on decolonizing our field, perhaps because grappling with the painful legacies of colonialism can provoke fear, uncertainty, shame, guilt, anger, and frustration (e.g., Korteweg & Russell, 2012; Lowan-Trudeau, 2017; Newbery, 2012; Root, 2010; Simpson, 2014). Such decolonizing work evokes positive emotions as well, however. Simpson (2014) finds hope in work that honours Indigenous knowledge and ongoing acts of resistance, Ritchie (2013) reports that pedagogies of care that privilege Indigenous worldviews and focus on planetary wellbeing can offer a source of hope for both learners and educators, and Lowan-Trudeau (2017), in his study of "protest as pedagogy," shares moments of joy as well as the hope associated with revitalization of Indigenous practices.

Hope also features strongly in the work of other environmental educators (e.g., Evans & Greenwood, 2015; Hicks, 1998, 2014; Kelsey & Armstrong, 2012; Ojala, 2012, 2015; Williams, 2015) and was the focus of a special issue of the *Journal of Sustainability Education* (see Evans, 2015). That journal also devoted a special issue to the theme of love (see Clingan, D'Amore, & Wier, 2015). Both hope and love also feature in the emerging area of "sustainable happiness" (O'Brien, 2013, 2016).

As illustrated by the brief review above, many emotions are at play in environmental education and we are pleased to see increasing interest in the topic. The papers in this volume of *CJEE* will form part of what we anticipate will be a growing conversation in the field. We kick off this volume with a paper by **Elin Kelsey** who has long been interested in the emotional dimensions of environmental education. In her paper, "Propagating Collective Hope in the Midst of Environmental Doom and Gloom," Kelsey wonders how we environmental educators who are ourselves anxious about the fate of the planet can instill hope in others. Wary of both the "emotional contagion" of hopelessness and fear and the irresponsibility of inculcating false hope, she turned to literature on palliative care, illustrating the benefits of reading well beyond our borders. What she found was that with no promise of a better future for the dying person, a sense of a meaningful present nonetheless can be encouraged, which can provide motivation, agency, and a way of coping, a lesson she argues could be useful for environmental education.

Maria Ojala addresses similar themes in her paper, "Facing Anxiety in Climate Change Education: From Therapeutic Practice to Hopeful Transgressive Learning." In her previous studies, Ojala had observed the potential of climate change education to provoke anxiety and worry; while acknowledging the pedagogical challenges that provocation causes, she argues for the potential of a pedagogy of discomfort that acknowledges the dialectical relationship between hope and worry that, together, may motivate action. She argues for a transformative and transgressive approach to learning that disrupts the unsustainable status quo that focuses on consumption as a route to happiness

and that individualizes and privatizes hope. For her, fostering critical hope requires attention to both cognitive and emotional elements as well as working with learners to envision and move towards their preferred futures.

Also concerned with hope, **Gregory Lowan-Trudeau** offers an autoethnographic account of his experiences as an environmental and Indigenous activist, educator, and academic in his paper, "A Rose by any Other Name: Repressive Tolerance, Burnout, and Hope in the New West." Reflecting on the increasingly negative global perception of his home province with the continued development of the tar sands, he shares his feelings of not only burnout but also disorientation as the political sands shift and he moves from an "outsider" adversarial position to more of an "insider" with potential to influence policy development. He also grapples with the mixed feelings associated with trying to work *with* rather than *against* the new provincial and federal governments, given both have uneven records on environmental and Indigenous issues. Haunted by Marcuses's idea of repressive tolerance, whereby the state allows a certain amount of resistance in an effort to burnish its reputation while maintaining the status quo, Lowan-Trudeau is committed to continuing his work as an activist-educator-academic and to striving for hope, noting the importance of self-care in ensuring personal sustainability.

Jocelyn Burkhart also offers an autoethnographic account in her paper, "Singing the Spaces: Artful Approaches to Navigating the Emotional Landscape in Environmental Education." Based on the premise that environmental educators should not focus solely on the world "out there" but also on their "inner" world, she situates her efforts alongside others working in holistic and contemplative education. Sharing excerpts of her own "life writing" as well as three songs (that can be found and listened to on her website), she invites readers to engage with her "evocative approach" to arts-based and autoethnographic research. She asserts that engaging the emotions through the arts in embodied, contemplative, and creative practices can help learners explore and express their feelings and experiences of relationship with self, other humans, and the natural world.

The next paper also pays some attention to the arts, in this instance as a way to inspire students to make empathetic imaginative connections. In "Empathy and Imagination in Education for Sustainability," **Sally Jensen** argues that empathy is, in fact, an imaginative act that can be vital to both broadening and deepening environmental knowledge. She argues that imagining other places, times, and perspectives is vital to building empathy for more distant "others." Grounded in experiences with a class of primary students and their teacher, as well as that of other experienced teachers, she shares a number of ways teachers helped spark imagination and empathy, including through evocative photographs, animations, music, fiction, stories, and drawing activities.

Similarly concerned with pedagogical efforts with elementary-aged children, **Astrid Steele and Jeff Scott** describe a three-year university-school partnership in their paper, "Emotionality and Learning Stories: Documenting How

We Learn What We Feel." They describe the "learning story" approach that has been used in primary grades, but which they argue can also be useful in junior and intermediate ones as well, including in outdoor and environmental education. Steele and Scott are frank in sharing the lessons they learned over the three years of the project. For example, at the end of both their first and second year, they realized that that they had not yet been able to document the emotional dimensions of students' or teachers' learning but by the third year were better able to do so. While they argue that learning story pedagogy has potential for environmental education, they also recognize that to become proficient in such an approach takes time and practice and recommend teacher professional development in that realm.

Carie Green also comments on the skills teachers need if they are going to support their students in navigating emotional responses. In her paper, "Monsters or Good Guys: The Mediating Role of Emotions in Transforming a Young Child's Encounter with Nature," she focuses on early childhood education. Concerned about the tendency in environmental education to simplistically associate nature with joy, Green seeks to document the various emotional states that experiences in natural areas can provoke, whether awe, wonder, fear, or anxiety. Using a critical incident with one four-year old and his teacher as a catalyst for discussion, she describes the child's experience climbing a tree that he had imagined as a "monster castle" and the role the educator had in supporting his affective responses. Green argues that this is a vital role for early childhood educators because learning to regulate emotions in natural areas can increase children's sense of comfort, trust, autonomy, self-awareness, self-confidence, and environmental competency, all important to environmental identity formation.

Similarly interested in identity development, Nicholas Stanger delves into the role of place in his paper, "When Despair Grows in Us: Emotional Learning in (Trans)Formative Places." Taking a phenomenological and participatory approach, he filmed four individuals revisiting places that they reported as transformative in their identity development. (Readers can see videos from his research on his website.) Seeking to move beyond a binary of hope and despair, he found that the return to place evoked a range of emotions in the participants, including anxiety, grief, yearning, nostalgia, bliss, appreciation, pride, hope, and love. While such returns are not always possible for a variety of reasons, when there is an opportunity to revisit places, visceral and emotional connections can be unlocked and rejuvenatory possibilities abound. Further, he noted that because the interviews were conducted *in situ*, the places themselves became present and agential in his research.

Timothy Leduc is also very interested in the power of place, particularly the urban spaces most people live in. In his paper, "Renewing Awe in the Urban Experience: Historic Changes in Land-Based Education," he notes the importance land experience has had in much environmental education, but is concerned by how often that has led educators to the "wilderness" and the development

of programs and experiences situated in distant places. Seeking historic depth and interdisciplinary breadth, he traces the development of two programs in Ontario, one at York University in Toronto and one at Trent University in Peterborough. Further, he reflects on his experience of teaching in Toronto ravines, which he found useful not only for facilitating awe of the urban environment but also for requiring the examination of colonialism, technologies, and the complex history of human/nature relationships.

The legacies of colonialism, in this case setter-colonialism, are at the heart of **Lisa Korteweg and Emily Root**'s paper, "Witnessing Kitchenuhmaykoosib Inninuwug's Strength and Struggle: The Affective Education of Reconciliation in Environmental Education." They share their own journey towards reconciliation, focusing on their affective processing as they engaged with the issues facing the remote northern Ontario community of Kitchenuhmaykoosib Inninuwug, which included the Chief and council members being jailed for their resistance to mineral exploration on their territory and the community's environmental and Indigenous rights campaign. Korteweg and Root describe a range of emotions they felt in the process, including guilt, discomfort, frustration, anger, despair, embarrassment, envy, hope, empathy, sadness, anxiety, humility, appreciation, admiration, and gratitude. While they are clear that their own settler affective learning is not comparable to Indigenous people's struggles, they nonetheless argue that engaging with the disturbing emotional dimensions of decolonizing work is part of their responsibilities as settlers and as environmental educators who must attend to the complexities of Land.

The last paper resonates with a number of other papers in this year's volume, particularly those concerned with colonialism and human/nature relationships. In "The Natural World as Colonized Other(s): Educational Implications," **Sean Blenkinsop, Laura Piersol, Michael Sitka-Sage, and Yi Chien Jade Ho** draw on Memmi's ideas about anti-colonialism to help them grapple with others' responses to their attempts to juxtapose the story of a Congolese man, Ota Benga, who was caged in the United States for entertainment and a concrete-enclosed Red Maple tree on their university campus. Applying the language of colonization to other-than-human beings is seen by some as going "too far" for a range of reasons, which they analyze in turn in their paper. They also note a variety of emotional responses people had to the juxtaposition, including pain, anger, guilt, and empathy. They end their paper with a discussion of the pedagogical implications of their efforts, making clear the importance of dealing with the emotional aspects of such work, which brings us full circle.

We anticipate that this volume of *CJEE* will be evocative and provocative for readers. We also hope that this volume signals increasing interest in the emotional dimensions of environmental education. In revisiting our call for papers, we see a number of suggested paper topics that were not touched, including: gendered emotions in environmental education, ableism and discourses of healing in environmental education, empathy and compassion discourse in humane and other animal-focused education, the role of humour in environmental

education, and sustainable happiness and education. And there are many, many more possible directions for research in our field that could add nuance and depth to our understandings and activities. While engaging the affective is inherently complex, in our view it is worth "staying with the trouble" (Haraway, 2016). We concur with Haraway (2016) who writes, "I want to make a critical and joyful fuss about these matters. I want to stay with the trouble, and the only way I know to do that is in generative joy, terror, and collective thinking" (p. 31).

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References

Ahmed, S. (2015). *The cultural politics of emotion*. New York, NY: Routledge.

Atkinson, K. (2015). Wasps-bees-mushrooms-children: Reimagining multispecies relations in early childhood pedagogies. *Canadian Children, 40*(2), 67–79.

Bai, H. (2009). Reanimating the universe: Environmental education and philosophical animism. In M. McKenzie, P. Hart, H. Bai, & B. Jickling (Eds.), *Fields of green: Re-storying culture, environment and education* (pp. 135-151). Cresskill, NJ: Hampton Press.

Blenkinsop, S., Fettes, M., & Kentel, J. (2015). Dark matters: Turning toward the untouched, the unheard, and the unseen in environmental education. *Canadian Journal of Environmental Education*, *19*, 5-17.

Boler, M. (1999). *Feeling power: Emotions and education*. New York, NY: Routledge.

Chawla, L. (1998). Significant life experiences revisited: A review of research on sources of environmental sensitivity. *Journal of Environmental Education*, *29*(3), 11-21.

Clingan, J., D'Amore, C., & Wier, B. (2015). Sustainability: What's love got to do with it? *Journal of Sustainability Education, 9*.

Clough, P. (2007). *The affective turn*. Durham, NC: Duke University Press.

Evans, T. (2015). Hope and agency as ontological imperatives for sustainability education: An introduction to the special issue of the *Journal of Sustainability Education* focused on hope and agency. *Journal of Sustainability Education, 10*.

Evans, T., & Greenwood, D. (2015). Speaking our truth: A dialog on hope and agency in education and life. *Journal of Sustainability Education, 10*.

Fawcett, L. (2000). Ethical imagining: Ecofeminist possibilities and environmental learning. *Canadian Journal of Environmental Education, 5*, 134-149.

Fawcett, L. (2013). Three degrees of separation: Accounting for naturecultures in environmental education research. In R. Stevenson, M. Brody, J. Dillon, & A. Wals (Eds.), *International handbook of research on environmental education* (pp. 409-417). New York, NY: Routledge.

Fawcett, L., & Dickinson, J. (2013). Psychological resilience, uncertainty, and biological conservation: Junctures between emotional knowledges, nature experiences, and

environmental education. In M. E. Krasny & J. Dillon (Eds.), *Trading zones in environmental education* (pp. 159-184). New York, NY: Peter Lang.

Fraser, J., & Brandt, C. (2013). The emotional life of the environmental educator. In M. E. Krasny & J. Dillon (Eds.), *Trading zones in environmental education* (pp. 133-158). New York, NY: Peter Lang.

Ginn, F., Beisel, U., & Barua, M. (2014). Flourishing with awkward creatures: Togetherness, vulnerability, killing. *Environmental Humanities, 4*(1), 113–123.

Goralnik, L., Dobson, T., & Nelson, M. P. (2014). Place-based care ethics: A field philosophy pedagogy. *Canadian Journal of Environmental Education, 19*, 180–196.

Gregg, M. & Seigworth, G. J. (2010). *The affect theory reader*. Durham, NC: Duke University Press.

Haraway, D. (2016). *Staying with the trouble: Making kin in the Chthulucene*. Durham, NC: Duke University Press.

Hicks, D. (1998). Stories of hope: A response to the "psychology of despair." *Environmental Education Research*, *4*(2), 165-176.

Hicks, D. (2014). *Educating for hope in troubled times: Climate change and the transition to a post-carbon future*. London, UK: Trentham.

Hufnagel, E. (2015). Preservice elementary teachers' emotional connections and disconnections to climate change in a science course. *Journal of Research in Science Teaching*, *52*, 1296–1324.

Kelsey, E., & Armstrong, C. (2012). Finding hope in a world of environmental catastrophe. In A. Wals & P. Corcoran (Eds.), *Learning for sustainability in times of accelerating change* (pp. 187-200). Wageningen, The Netherlands: Wageningin Academic Publishing.

Kollmuss, A., & Agyeman, J. (2002). Mind the gap: Why do people act environmentally and what are the barriers to pro-environmental behavior? *Environmental Education Research*, *8*(3), 239-260.

Kool, R., & Kelsey, E. (2006). Dealing with despair: The psychological implications of environmental issues. In W. L. Filho & M. Salomone (Eds.), *Innovative approaches to education for sustainable development* (pp. 120-129). New York, NY: Peter Lang.

Korteweg, L., & Russell, C. (2012). Editorial: Decolonizing + Indigenizing = moving environmental education towards reconciliation. *Canadian Journal of Environmental Education, 17*, 5-14.

Lloro-Bidart, T. (2015). Culture as ability: Organizing enabling educative spaces for humans and animals. *Canadian Journal of Environmental Education*, *20*, 92-107.

Lloro-Bidart, T., & Semenko, K. (2017). Toward a feminist ethic of self-care for environmental educators. *Journal of Environmental Education, 48*(1), 18-25.

Lowan-Trudeau, G. (2017). Protest as pedagogy: Exploring teaching and learning in Indigenous environmental movements. *Journal of Environmental Education*, *48*(2), 96-108.

MacPherson, S. (2011). What Tashi taught me: "Petagogy" and the education of emotions. *Canadian Journal of Environmental Education, 16*, 76-92.

Martusewicz, R. A. (2015). Letting our hearts break: On facing the "hidden wound" of human supremacy. *Canadian Journal of Environmental Education*, *19*, 31-46.

McKenzie, M. (2009). Pedagogical transgression: Intersubjective agency and action. In M. McKenzie, P. Hart, H. Bai, & B. Jickling (Eds.), *Fields of green: Re-storying culture,*

environment and education (pp. 211-226). Cresskill, NJ: Hampton Press.

McKenzie, M., & Blenkinsop, S. (2006). An ethic of care and educational practice. *Journal of Adventure Education and Outdoor Learning, 6*(2), 91-105.

McKenzie, M., Russell, C., Fawcett, L., & Timmerman, N. (2010). Popular media, intersubjective learning, and cultural production. In R. Stevenson & J. Dillon (Eds.), *Environmental education: Learning, culture and agency* (pp. 147-164). Rotterdam, The Netherlands: Sense.

Newbery, L. (2003). Will any/body carry that canoe? A geography of the body, ability, and gender. *Canadian Journal of Environmental Education, 8,* 204-216.

Newbery, L. (2012). Canoe pedagogy and colonial history: Exploring contested spaces of outdoor environmental education. *Canadian Journal of Environmental Education, 17,* 30-45.

Norgaard, K. M. (2011). *Living in denial: Climate change, emotions, and everyday life.* Cambridge, MA: The MIT Press.

Nxumalo, F., & Pacini-Ketchabaw, V. (2017). "Staying with the trouble" in child-insect-educator common worlds. *Environmental Education Research*. DOI:10.1080/13504622.2017. 1325447

O'Brien, C. (2013). Happiness and sustainability together at last! Sustainable happiness. *Canadian Journal of Education*, *36*(4), 228-256.

O'Brien, C. (2016). *Education for sustainable happiness and well-being*. New York, NY: Routledge.

Ojala, M. (2012). Hope and climate change: The importance of hope for environmental engagement among young people. *Environmental Education Research, 18*(5), 625-642.

Ojala, M. (2013). Emotional awareness: On the importance of including emotional aspects in education for sustainable development (ESD). *Journal of Education for Sustainable Development, 7*(2), 162-182.

Ojala, M. (2015). Hope in the face of climate change: Associations with environmental engagement and student perceptions of teachers' emotion communication style and future orientation. *Journal of Environmental Education, 46*(3), 133-148.

Pacini-Ketchabaw, V., & Nxumalo, F. (2015). Unruly raccoons and troubled educators: Nature/ culture divides in a childcare centre. *Environmental Humanities*, *7*, 151-168.

Piersol, L., & Timmerman, N. (2017). Reimagining environmental education within academia: Storytelling and dialogue as lived ecofeminist politics. *Journal of Environmental Education, 48*(1), 10-17.

Quigley, C. (2016). Emotions in teaching environmental science. *Cultural Studies of Science Education, 11*(3), 817-822.

Reis, G., & Roth, W-M. (2009). A feeling for the environment: Emotion talk in/for the pedagogy of public environmental education. *Journal of Environmental Education, 41*(2), 71-87.

Ritchie, J. (2013). Indigenous onto-epistemologies and pedagogies of care and affect in Aotearoa. *Global Studies of Childhood, 3*(4), 395-406.

Root, E. (2010). This land is our land? This land is your land: The decolonizing journeys of White outdoor environmental educators. *Canadian Journal of Environmental Education*, *15,* 103-119.

Russell, C. (1999). Problematizing nature experience in environmental education: The interrelationship of experience and story. *Journal of Experiential Education*, *22*(3), 123-128, 137.

Russell, C., & Bell, A. (1996). A politicized ethic of care: Environmental education from an ecofeminist perspective. In K. Warren (Ed.), *Women's voices in experiential education* (pp. 172-181). Dubuque, IA: Kendall Hunt.

Russell, C., Cameron, E., Socha, T., & McNinch, H. (2013). "Fatties cause global warming": Fat pedagogy and environmental education. *Canadian Journal of Environmental Education, 18*, 27-45.

Russell, C., & Semenko, K. (2016). We take "cow" as a compliment: Fattening humane, environmental, and social justice education. In E. Cameron & C. Russell (Eds.), *The fat pedagogy reader: Challenging weight-based oppression through critical education* (pp. 211-220). New York, NY: Peter Lang.

Russell, J. (2016). "I remember everything": Children, companion animals, and a relational pedagogy of remembrance. In M. DeMello (Ed.), *Mourning animals: Rituals and practices surrounding animal death* (pp. 81-90). East Lansing, MI: Michigan State University Press.

Russell, J. (2017). "Everything has to die one day": Children's explorations of the meanings of death in human-animal-nature relationships. *Environmental Education Research*, *23*(1), 75-90.

Selby, D. (1995). *Earthkind: A teacher's handbook on humane education*. London, UK: Trentham.

Simpson, L. B. (2014). Land as pedagogy: Nishnaabeg intelligence and rebellious transformation. *Decolonization: Indigeneity, Education & Society*, *3*(3), 1-25.

Siperstein, J. (2015). Finding hope and gratitude in the climate change classroom. *Journal of Sustainability Education, 10*.

Sobel, D. (1996). *Beyond ecophobia: Reclaiming the heart in nature education*. Great Barrington, MA: Orion Society.

Schindel, A., & Tolbert, S. (2017). Critical caring for people and place. *Journal of Environmental Education, 48*(1), 26-34.

Taylor, A., & Pacini-Ketchabaw, V. (2015). Learning with children, ants, and worms in the Anthropocene: Toward a common world pedagogy of multispecies vulnerability. *Pedagogy, Culture, and Society, 23*(4), 507-529.

Thomashow, M. (1996). *Ecological identity: Becoming a reflective environmentalist*. Cambridge, MA: MIT Press.

Williams, D. (2015). Regenerative hope: Pedagogy of action and agency in the learning gardens. *Journal of Sustainability Education, 10*.

Zembylas, M. (2016). Making sense of the complex entanglement between emotion and pedagogy: Contributions of the affective turn. *Cultural Studies of Science Education, 11*(3), 539-550.