

REVIEW



Environmental and sustainability education in teacher education: Canadian perspectives

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This book provides the first Canadian overview of the nuances and complexities within the implementation of Environmental and Sustainability Education (ESE) in Pre-service Teacher Education (PTE) across Canada. Some authors examine broader institutional, political, philosophical, and ontological underpinnings of ESE in PTE, while others write from micro perspectives to form a relational threading between policy and practice. While at times, authors comment on the contradictions and tensions within the policy/practice relationship, what this book does do, is open new and important lines of inquiry as to how ESE in PTE might become a more common and thoroughly-articulated practice in these times of socioecological precarity. The effort here recognizes that:

Future generations of teachers require the knowledge, skills, and dispositions necessary for providing the very best K-12 environmental and sustainability education for their students as they develop into active citizens who care for society's and Earth's health and well-being. (p. 15).

Tracing evolutions of ESE from its roots in progressive education in the 18th and 19th centuries through to nature study and conservation movements of the 20th century, this book insightfully explores modern day iterations of ESE as taken up through Education for Sustainable Development (ESD). As relevant within the broader scope of ESE, this book also explores the salient roles of Indigenous Knowledges (IKs), models of Place-based Education (PBE), Outdoor Environmental Education (OEE), experiential and inquiry-based learning, gardening, relational teaching and learning within the 'new' materialist turn in educational research, Christian perspectives on environmentalism, and the development of environmental literacy and pro-environmental behaviour to attend to global and local socioecological injustices and threats. However, this book is more than a depiction of responsive approaches to global socioecological issues; it also offers glimmers and shimmers of hope for living, learning, researching, and teaching with, and for, a vulnerable planet.

Part One explores the imperative for faculties of education in Canada to provide ESE for PTEs in response to burgeoning environmental degradation on a global scale and the (rather urgent) need to develop an environmentally literate public. Suggesting that faculties of education experience many challenges in providing high-quality and effective ESE in PTE, this section examines opportunities of ESD policy and associated Sustainable Development Goals (SDGs), in addition to the role of collaborative initiatives, programs, and organizations in Canada to coordinate discussions, debates, and analysis of key issues in ESE-PTE. Chapters in this section also take on a socio-cultural-material focus to explore the role of transversality, diversity, criticality, and activism

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through pedagogical situations that are set in socioecological realities of life; Anishinaabe (Indigenous) stories of living spirituality with respect, relationship, reciprocity, and responsibility through experiential, land and culture-based learning contexts; and 'Pedagogies of Place' (PoP) through decolonizing approaches and IKs to promote a 'shared ground' for Indigenous/non-Indigenous relations.

Part Two explores provincially based, grassroots examples of ESE-PTE programmes, pedagogies, and practices across Canada. Traversing faculty initiatives of ESE, this section spans theoretical development and integration, curricular and course design and implementation, opportunities for professional development in ESD, and methods of support for new teachers towards pathways of stewardship and kinship. While ESE programmes, pedagogies, and practices are often at the margins within the politics of highly individualistic, capitalist, anthropocentric, and increasingly neoliberal climates of the academy, Part Two emphasizes "that these 'small openings' can (and should) . . . stimulate and guide the development and implementation of specific and robust EE programmes everywhere" (p. 107).

Part Three connects Canadian ESE-PTE contributions with international developments already taking place; namely in Australia, the United Kingdom, and the United States, as discussed in literature by Evans, Stevenson, Lasen, Ferreira, and Davis (2017). Drawing on recent studies focused on the state of Canadian ESE-PTE, this section compares ESE in PTE in Canada through five different themes: programmatic approaches, rationales, pedagogical approaches, and problems and/or challenges faced by teacher educators. This comparative analysis brings forth common challenges for ESE in PTE that abound at institutional, faculty/school, and subject/course levels. As reiterated throughout this book, such challenges relate to inadequate funding, lack of professional development opportunities, and competing interests among disciplines. To close, this section highlights how these challenges might be addressed in efforts to mainstream ESE in PTE. Suggesting that Australia, the United Kingdom, and the United States are leading the way in ESE-PTE research, with some studies emerging from Latvia, Israel, and Spain, it is suggested that a more concerted research effort is needed on a national and international level; particularly regarding programmatic approaches, theoretical frameworks, curricular emphases and outcomes, and the lived stories and experiences of ESE-PTE students, instructors, administrators, and policy-makers.

Through a carefully curated blend of theory and practice, this book is accessible and applicable to a wide audience that includes ESE, and interdisciplinary, pre/in-service teachers, school and university administrators, higher education lecturers, researchers, and curriculum designers, policy-makers, and decision-makers in the higher education, high school, and primary/elementary school sectors. Further, given this book is relevant to one of the most pressing and pervasive issues that the Anthropos has faced throughout history relating to climate change, it is an invaluable resource for anyone wanting to promote more peaceful, just, and sustainable futures. This book is not a textbook but a comprehensive reference point that eloquently explores the constraints and pressures in ESE in PTE, while providing a tome of aspiration and action for the field of ESE and beyond.

As a Postdoctoral researcher focused on posthumanist perspectives and vitalist ethics to establish an ecological interconnectedness between all things, I have not necessarily championed sustainable development discourses within Sustainability Education (SE) or ESD within trajectories of Environmental Education (EE); particularly given scholarly critiques that suggest sustainable development discourses exacerbate the separation of humans from the environment (e.g., Kopnina, 2012). Through engagement with this book, however, I am convinced that sustainability is, indeed, a crucial piece to EE. In response to the unprecedented effects of climate change that includes ongoing species extinction, ocean acidification, and melting polar caps, I am interested in how approaches within sustainability might promote learning for 'action' rather than reductive and mechanistic stories concerned with learning 'about'. Whatever names are inevitably taken up, this book has certainly (re)ignited my advocacy for an education that necessitates and supports inquiry into our complex and dynamic relationships with the Earth and each other.

Acknowledgements. Writing from Treaty 6 Territory, the traditional Indigenous territory of the Cree, Dakota, Dené, Lakota, Métis and Saulteaux, I pay my deepest respect to the many First Nations, Métis and Inuit peoples whose footsteps have marked these lands for generations. I give thanks to the Elders and Knowledge Keepers, those with us today, and those who are no longer with us, for their stewardship and teachings. And may we all continue to walk together towards Truth and Reconciliation.

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